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**LA THÈSE A ÉTÉ  
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**Development and Formative Evaluation of a Simulation-Game Designed to  
Help Prepare Occupational Therapy Students for Clinical Work**

**Anne-Marie Poirier**

**A Thesis  
in  
The Department  
of  
Education**

**Presented in Partial Fulfillment of the Requirements  
for the Degree of Master of Arts at  
Concordia University  
Montréal, Québec, Canada**

**May 1987**

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## ABSTRACT

### Development and Formative Evaluation of a Simulation-Game Designed to Help Prepare Occupational Therapy Students for Clinical Work

Anne-Marie Poirier

This thesis concerns the development and formative evaluation of a prototype simulation-game designed to help prepare Occupational Therapy (OT) students for clinical work. The game simulates the actions an Occupational Therapist would engage in when planning a treatment program for a patient. Development and evaluation of the simulation-game involved a pilot study using three OT students, a subject matter expert (SME) study and a large scale field test involving two research designs: a pretest-posttest design and an equivalent materials design. Two non-equivalent groups were used, namely second and third year students, each group representing a replication of each design. Data were collected via questionnaires including pre and posttest measurements of cognitive objectives, biographical information, attitudes, group dynamics, and attitudes toward the OT program. Game performance was assessed by information sheets which recorded moves and decisions groups made during game play, and OT reports generated by each group.

Significant changes were made to the simulation-game as a result of the pilot and SME study. Second year subjects significantly improved their report writing skills over the three sessions. In addition, subjects from both years rated the game as a valuable learning experience and felt it should be incorporated into their curriculum.



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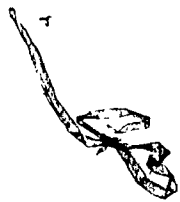
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## CHAPTER ONE

### Rationale

Health educators have long grappled with the dilemma of properly preparing students to address the actual situations they will face in their future practice. On the one hand, a strictly apprenticing approach poses the risk of inexperience leading to critical errors, and creates potential gaps in theoretical knowledge. On the other hand, the purely classroom approach imparts theory but does little to tie it into actual situations. The traditional approach to resolving this dilemma has combined these two instructional strategies by requiring a period of practical experience during and after traditional classroom instruction of theoretical knowledge.

#### Gap Between Theory and Practice

Although ideal in theory, the combination of traditional classroom instruction and field work still results in a serious shortfall in the student's educational experience. In analyzing the classroom situation one often finds that the student is relegated to a passive role far removed from reality. The connection between information received and action required is often unclear, such that there is little ensuing motivation to learn. Thus, extrinsic and often artificial motivation must be supplied, such as school grades (Center for Social Organization of Schools, 1974). Conversely, when in the field, the student is often hurtled into situations where s/he is expected to have skills far above those learned in the classroom. Thus, the student feels ill-prepared and often does poorly.

The education of Occupational Therapists also combines traditional classroom instruction with practical experience with the result that it

too faces these problems. Occupational Therapy is the branch of medicine concerned with the rehabilitation of the individual.

"Occupational Therapy is the art and science of assessment and treatment through the specific use of selected activity to maintain or promote health, to evaluate performance and to obtain maximum functional capacity" (McGill University, 1986). The role of the Occupational Therapist involves performing physical and psychological evaluations, establishing overall aims of rehabilitation in conjunction with other health disciplines, implementing an Occupational Therapy program designed to meet the defined needs of the individual client, acting as consultant to community and government agencies, and participating in basic or applied research (McGill University, 1985).

The classroom instruction which Occupational Therapy (OT) students receive consists of basic knowledge and skills needed to be an Occupational Therapist. Students generally attend university full-time for a period of three years (four outside Quebec) receiving a Bachelor of Science in Occupational Therapy upon graduation. While in school, students must complete approximately 600 hours of field work as part of their program. After graduation students must complete four months of interning, two months in physical medicine and two months in psychiatry (Canadian Association of Occupational Therapists, 1985).

Within the context of Occupational Therapy the purpose of the field work placement is to enable the student to:

- 1) apply theoretical concepts to and gain experience in:
  - a) evaluating clients;
  - b) establishing treatment goals;
  - c) planning and implementing treatment;

- d) modifying treatment;
  - e) presenting reports - written or oral;
- 2) a) demonstrate the use of initiative;
- b) establish interpersonal relationships with patients, OT staff, and other team members;
  - c) accept responsibility for patient care;
  - d) fulfill the role of a member of a multi-disciplinary team;
- 3) become familiar with and participate in the routine administration involved in the delivery of OT service.

(Canadian Association of Occupational Therapists, 1985, section 3.3.1-e)

Given these goals, it is common knowledge that one of the most difficult educational problems in Occupational Therapy is helping the student to link theory with practice. A condition which contributes to this problem is the necessity for the student to learn a huge body of knowledge encompassing the many components of psychiatry and physical medicine with populations ranging from premature infants to senior citizens. Thus, theory is presented in many distinctive chunks creating difficulties for the student to tie in knowledge from one course to that of another. Given the large amount of basic knowledge as well as skills which the student must acquire, there is often not adequate time in class to cover the many possible case histories and provide students with opportunities to plan treatment programs, one of an OT's primary functions. In fact, this is a common complaint among students. Another condition which contributes to the problem of linking theory and practice is the fact that placements can not always be ideal. This is particularly true in terms of timing, where the student may not be able

to follow patients from onset of treatment to completion because the placement is of short duration and/or the students attendance is not scheduled on a daily basis. In addition, timing problems can restrict the students opportunity to collect information and plan treatment programs. During field work students are often under pressure to perform in that they must quickly amalgamate knowledge and skills. Under these conditions many do not perform well. Another problem is that of ethics. Students lack of experience can pose serious threats to patient safety; thus educators are faced with the dilemma of providing opportunities for student learning without risking patient safety (Zelmer, 1980). This problem can be compounded by clinicians who over-react to this threat by severely restricting the student's activities.

The problems discussed so far are peculiar to the student. However, there are a set of related problems which can be experienced by therapist and student alike. These problems are due to lack of knowledge and experience which contributes to poor or decreased performance in the field. These problems can be divided into four areas: scheduling, information management, communication, and treatment planning. Those with scheduling problems generally have difficulty organizing their time. Thus, they usually perform at a lower capacity, increasing the work load for others. Under information management there are a number of potential problem areas. These include performing unnecessary assessments, neglecting to record observations, being unaware of how and where to find information, difficulty discriminating between useful and useless information, and not always following up information received or collected. Communication problems are generally

attributable to a lack of awareness of the problems and the consequent lack of strategies to overcome them. They include the limitations of phone use, difficulty contacting hospital staff, possibility of misinformation, and presentation of conflicting information. Treatment planning problems include difficulty analysing the data collected in order to generate a treatment plan and writing clear, concise yet complete reports.

In order to increase the chance for students to gain the most out of their placements as well as become effective therapists, the conditions and problems outlined above must be addressed. The best place for these problems to be addressed is in the schools via instruction. By placing responsibility on the schools to bridge the gap between theory and practice all students can receive the same instruction. With instruction occurring in the schools students are placed in a risk free environment where there is reduced pressure to perform, such that they can explore in fuller detail possible problem situations and develop problem solving strategies. At present there is no consistent instruction which specifically addresses the problems outlined.

#### Instructional Strategy

In order to become a good Occupational Therapist it is not sufficient that students acquire a large amount of information; they must also be able to solve problems, make decisions, and find information. Therefore, the instructional strategy chosen to aid students in bridging the gap between theory and practice should in some way promote the skills needed to become a good therapist. An instructional strategy is a translation of a philosophical or

theoretical position regarding instruction into a statement of the way in which instruction should be carried out in specific types of circumstances (Romiszowski, 1984). There are basically two different positions concerning the process of learning and instruction; these are reception (information-processing) learning and experiential (discovery) learning. Reception and experiential learning represent two extreme positions on a continuum. These two contrasting strategies are summarized in a report of the Centre for Social Organization of Schools of John Hopkins University (1974). Reception learning (which they refer to as information-processing) characterizes most school learning activities. Its main steps are:

1. Reception of information, concerning a general principle.
2. Understanding the general principle.
3. Particularizing; that is inferring a particular application from the general principle.
4. Acting; that is moving from the cognitive and symbol processing sphere to that of action. This involves using the information received in step 1, and applying it to real problems.

Experiential learning proceeds in a sequence which is almost the reverse of reception learning. In contrast to reception learning it does not use a symbolic medium for transmitting information, and in fact information is generated only via the sequence of steps themselves. Its main steps are:

1. Acting in a particular instance. One carries out the action and sees the effects. These effects of the action provide information about cause-effect relationships that exist.
2. Understanding the particular case, so that if the same set of



circumstances reappeared, one could anticipate the effects.

- 3. Generalizing from the particular instance; that is, developing an understanding of the general principle under which the particular instance falls.
- 4. Acting in a new circumstance, to which the principle applies and anticipating the effects of the action.

Romiszowski (1984) has outlined the main steps of the instructional strategies that spring from these processes of learning.

Expositive strategy (reception learning):

- 1. Present information either symbolically through explanation, or practically through demonstration.
- 2. Test for reception, recall, and understanding.
- 3. Present opportunities to practice applying the general principle. Test for correct application.
- 4. Present opportunities for the application of the newly learned information to real situations and problems.

Discovery strategy (experiential learning):

- 1. Present opportunities to act as well as observe the consequences of one's actions.
- 2. Test for understanding of the cause-effect relationship. This may be done by questioning or simply observing the learner's reactions.
- 3. Test for the formation of the general principle underlying the cases presented, either by questioning or observing further activity.
- 4. Present opportunities to practice applying the general principle. Test for correct application.

The learning processes outlined above possess their own characteristic properties. Reception learning depends on a symbolic medium which can greatly reduce the time and effort necessary to learn something new, since it is the embodiment of the experiences of others. However, there can be a high cost to learning if the language is poorly understood. Typically the weak points in this chain of learning are steps three and four: particularizing and acting (Center for Social Organization of Schools, 1974). The major complaint of students is that they can not apply what they have learned. It would appear that the major hurdle in this process of learning is the "translation from a symbolic framework of understanding and thinking to a framework involving concrete sequences of action" (Center for Social Organization of Schools, 1974, p. 30). Another property of this process is its reliance on extrinsic motivation such as grades; this is because there is no incentive to learn until a connection can be made between information and action.

The properties of experiential learning are quite different. It is time consuming because it relies on repeated actions to allow the development of a generalization from experience. It is not effective when the consequence of action is separated in time or space from the action itself. However, when the consequence is perceptibly connected to action then such learning provides a direct guide to future action (Center for Social Organization of Schools, 1974). As contrasted with reception learning, motivation is intrinsic, because action occurs at the beginning of the sequence. The weakest link in this process is step three, generalizing from particular experiences to a general principle applicable in other circumstances. A final property of the experiential

process is that students are less likely to forget than if they learned via reception.

Given the advantages and disadvantages of these two learning processes it would appear that an instructional strategy which encourages experiential learning would be more appropriate in aiding Occupational Therapy students to bridge the gap between theory and practice. The main reason for this decision is that in order to bridge the gap it is imperative that students be able to apply their knowledge, which is more likely to be achieved via experiential learning. The use of structured experiential strategies provides an arena for experiencing in which students either as individuals or in groups, must make decisions and take actions. Behavior and feelings are provoked and elicited. In addition, if structured debriefing questions are incorporated, then reflection and generalization about the experience is facilitated (Sanders & Yasnouzas, 1985). Other reasons include its intrinsic motivational character, and the fact that students are more likely to remember what they have learned. Examples of structured experiential exercises include the use of simulations and games, role playing, group decision-making exercises, and self-assessment exercises (Sanders & Yasnouzas, 1985). The strategy which has been chosen in this thesis for purposes of aiding Occupational Therapy students is a simulation-game.

This proposal concerns the development and formative evaluation of a prototype simulation-game which has been designed by the author to help prepare Occupational Therapy students for clinical work. The game simulates the actions an Occupational Therapist would engage in for purposes of planning a treatment program for a patient.

The target population for this simulation-game is second and third year undergraduate Occupational Therapy students. The formative evaluation of the simulation-game is based on the Dick and Carey model (1985) and consists of three different components. The first is a pilot study in which three naive subjects from the target population have been presented with all the materials and questionnaires to be used in the main study. The second is an evaluation of the gaming materials by subjects matter experts. Finally, two research designs have been integrated into the overall evaluation procedure: a pretest-posttest design and an equivalent materials design. Two non-equivalent groups have been used, namely second and third year OT students, each group representing a replication of each design. Data have been collected via a pretest and posttest to assess achievement; a group dynamics inventory which evaluates how effective the group play strategy of the game works (as opposed to individual play); and an attitude questionnaire which measures subjects' attitude towards the simulation game and the McGill OT program. Data have also been collected from the gaming materials; namely, information sheets which provide a record of the behaviour groups engaged in during game play; and Occupational Therapy reports generated by each group concerning the particular case history under study and used to assess achievement.

## CHAPTER TWO

### Literature Used in Simulation-Game Development:

The existing body of knowledge about instructional simulations and games is in a state of disorganization (Cruickshank & Mager, 1976). One of the reasons for this state is that much of the work has been done with reference to specific disciplines only, with limited interdisciplinary communication (Wiener & Vazquez-Abad, 1981). There is also a dearth of information on the design of simulations and games and appropriate evaluation methods (Mitchell, 1982). Finally, the majority of research in the field is restricted to descriptive case histories. Therefore, this chapter will focus on how the literature in this area was used to develop the simulation-game in this study rather than a traditional review of the literature. Special emphasis will be placed on the general principles and features of simulation-games.

### Simulations and Games Used in Health Education

Simulations and games are not new to the field of health education. They have been and are being used in many areas of student education. They have been used for a variety of reasons, some of these are:

1. to provide opportunities for student learning without risking patient safety; e.g., "Clinical Simulations" is a game which contains 20 common patient problems where the student assumes the role of attending physician and provides diagnostic and treatment actions (Lecavalier, 1980).
2. to aid retention of knowledge and crucial skills; e.g., "Resusci-Anne" is a sophisticated life-sized doll with a feedback light system and recording tape used for training of cardiopulmonary resuscitation.

3. to provide learning experiences which aid transition to the field; e.g., "Nets and Links" is a teaching simulation developed for the purpose of teaching human services students to recognize, analyse, and utilize community natural helping networks without destroying them (Morris & Cicero, 1980).
4. to encourage development of empathy and appropriate affective responses; e.g., "Help Nurse, Help Patient!" is a simulation which offers students the opportunity of experiencing the frustrations of both nurses and patients (Joos, 1980).
5. to increase awareness and opportunity for exercising judgement regarding ethical issues and patient rights; e.g., "Court-Sim" deals with the legal problems nurses are faced with in their work (Lecavalier, 1980).

The field of Occupational Therapy has also recognized the value of simulations in the education of Occupational Therapy students. One such simulation is a book called Case Simulations in Psychosocial Occupational Therapy (Briggs, Duncombe, Howe, & Schwartzberg, 1979). The purpose of this book is to provide the student with preclinical experience and feedback in psychosocial treatment planning in OT. The case simulations presented involve the reader in a problem-solving process based on a specified conceptual model (a total of four different conceptual models are presented).

Simulations have also been used in teaching and evaluating interview skills and techniques with OT students. At Queen's University in Kingston, Ontario (Burton & Bride, 1975) volunteer patients have been used in a controlled interview setting with first and second year students. These patients are volunteers from the community who have

some medical, physical, or psychological problem which they are prepared to demonstrate as a contribution to the education of health personnel. At the University of Western Ontario in London, Ontario (Posthuma, 1979) volunteers have been trained to simulate patients with psychosocial disorders.

### Definition

Basically a game is any contest among adversaries (the adversaries could be player(s) versus game itself) operating under constraints (rules) for an objective (Abt, 1971). This definition encompasses both competitive and cooperative games. One should realize that this definition can be used to describe most real-life activities. A simulation, on the other hand, is a representation of a real situation but with some elements removed. Frequently it is used for purposes of training (Mitchell, 1982). These two terms are not mutually exclusive, one can have a simulation-game (possessing features of both gaming and simulation). Stadslev (1974, p.9) provides the following definition of a simulation game: "A comparatively complex social model of an actual or hypothetical social process involving the use of role taking fused with a gaming component. It presents a selective representation of reality and contains only those elements which the designer deems relevant to this purpose."

Taylor (1972) provides an outline of the core features of simulation games. Although he restricts his description to simulation games used in urban planning education and related fields, many of these features can be said to be shared by all simulation games.

In summary, simulation games are gross operational replicas that endeavour to provide insights into the dynamics of an ongoing

system. The participants are provided with decision-making experience over an extended period of simulated time, within a controlled risk-free environment. The game replaces the complexity of the real world with a simplified abstraction which allows certain representative features to be easily understood and readily manipulated. [In addition] there is quick feedback [given] on all decisions. (p. 106)

#### Benefits

Simulation-games are effective teaching and training devices which appeal to all age groups. Their highly motivational characteristics enable them to communicate very efficiently the facts and concepts of many subjects (Abt, 1974; Cruikshank, 1971; Blachford, 1975; & Stadskev, 1974). They offer participants a rich field for a risk-free active exploration of serious intellectual and social problems. Players are given opportunities to assume realistic roles, face problems, formulate strategies, make decisions, and receive feedback regarding the consequences of their action (Abt, 1971). Thus, the nature of a simulation-game allows one to evaluate student performance without risking the cost of making errors in the real world and without some of the distortions inherent in direct testing (Abt, 1971; Stadskev, 1974).

#### Arguments Against their Use

The main thrust of the argument put forward against the use of games in education is based on the assumption that all games are trivial and are solely for the purpose of amusement, thus they have no place in the serious business of education (Stadskev, 1974). However, although they may be entertaining, games may be played seriously. Educators can



use serious games with an explicit and carefully thought out educational purpose. However, one should not preclude such games from being entertaining; for a successful game is one which is able to capture and maintain interest, as well as to challenge the player to continually improve his performance. Granted that other strategies can perform this function, one should keep in mind that boredom sets in much sooner in the average lecture than in the average game and that a prerequisite to successful learning is sufficient involvement with the subject matter to pay attention and respond (Mitchell, 1982). Thus, well designed games and simulations can often involve participants more deeply than can conventional teaching methods (Teather, 1973).

#### Process

The process involved in a simulation-game has two important components. The first component involves having the subjects play the game. The purpose of this phase is to generate experience. The second component, which is conducted by the game director, is known as debriefing. During this phase the information gained from the experience is consolidated so that subjects can generalize from the experience. If this phase is omitted learning generally does not occur (Stadsklev, 1974).

The role of the game director is very important in the process of the simulation-game. His/her duties include setting up the environment, explaining the objective of the simulation-game, explaining the rules, answering questions about the game, monitoring action and interfering where necessary, and most importantly leading the debriefing session.

The debriefing session "should be a structured, directed discussion of the limitations and insights offered by the game, and of the

performance of the players in both representing and solving their problems effectively" (Abel, 1970, p. 31). Thus, for the players it "involves talking about the experiences, analyzing them, evaluating them, and integrating them into one's cognitive and conscious data base" (Lederman, 1984, p. 417).

### Production

#### Purpose

The main purpose of simulation-games is to establish settings wherein theory and practice can be joined (Cruickshank, 1971). In this study, the purpose of the simulation-game is to prepare Occupational Therapy students for clinical work by demanding that they apply the theory they have learned in the classroom. No instructional method or educational tool can replace the experience gained from clinical work; however, certain aspects of the clinical setting can be simulated to better prepare the student for clinical work.

#### Design Methods

Approaches to simulation-game design appear to offer two methods existing on opposite ends of a philosophic continuum; namely the "systems" versus "artistic" approach (Easterly, 1978). Those embracing the systems approach to game design advocate the need for clear objectives and careful attention to model building as preliminary steps (Atkinson, 1977; Gillespie, 1973; Gordon, 1972; Taylor & Walford, 1972). Those opposed to this process view game design as an artistic endeavour that should not be restricted by the rigidity of the systems approach. Game designers using the artistic approach do not consciously employ models at the beginning, instead they "discover" the model once the simulation-game has been developed (Shirts, 1976).

Easterly (1978) contends that "In actual practice the process of designing a simulation-game does not always fall neatly at one end or another of the continuum. Instead, it is more likely that game designers dive into the middle of the continuum and alternate continually as they glean bits of information from the real world and intuitively sense meanings in relationship to models implicitly held" (pp. 26-27).

Easterly warns the potential designer not to embrace one approach or the other. He argues that the systems approach tends to limit ones "reading" of the real world, thereby restricting creativity; while, the artistic approach may be totally inadequate for any game designer who doesn't possess corresponding models at the explicit or implicit levels. He thus urges all potential game designers to employ both approaches. Therefore, with respect to the simulation-game designed for this study the approach taken involved alternating between these two methods.

#### Representation of Reality

As stated earlier, a simulation-game "presents a selective representation of reality and contains only those elements which a designer deems relevant to this purpose" (Stadsklev, 1974, p. 9). The danger of educational simulations which are too realistic and complex are that they may not permit the players to identify the underlying learning objective. As a result, what should be a learning exercise instead becomes an effort to understand or administer a complex exercise (Cunningham, 1984).

Given that it is neither possible nor desirable to replicate reality in its entirety, certain decisions were made regarding the design of the simulation-game used in this study. The first decision

was that the setting should be in a hospital; the reasons for this choice were:

(1) the majority of student placements occur in traditional hospital settings;

(2) the majority of Occupational Therapists work in hospitals.

Within a hospital setting Occupational Therapists can work in psychiatry or physical medicine. Within psychiatry and physical medicine therapists can work solely with children, adults, and in some cases geriatrics. A further complication is that hospitals are usually divided in terms of the type of patient they serve. The three main classifications which affect Occupational Therapists are acute, chronic, and rehabilitation centers. Since it was unrealistic to design a simulation-game which represents all of these different components at once, it was decided that a prototype would be developed reflecting one type of hospital. The type of hospital chosen was an acute-care general hospital for adults. The reasons for this choice were as follows: an acute-care hospital treats a huge variety of cases, patients are aged 18 and up, most health professions and specializations are represented, and generally one will have a mixed case load of both acute and chronic conditions. The prototype-game focuses on physical medicine for the following reasons: most acute-care hospitals have a physical medicine orientation (although there is generally a psychiatric unit in the hospital), there is generally a psychological component to physical disability such that the therapist must incorporate skills and knowledge from both areas in planning treatment programs (this is rarely the case when working in psychiatry), generally a larger number of staff from various disciplines are involved in the treatment of the physically

disabled, and standard treatment of the physically disabled is usually less subject to controversy than treatment of psychiatric patients.

In addition to helping students bridge the gap between theory and practice, simulation-games provide players with opportunities for active exploration of serious problems without ensuing risk. Therefore, the design of the simulation-game for this study had to overcome the negative conditions students face, as well as expose them to typical problems that occur in the field, which are due to lack of knowledge and experience. With respect to conditions which impede performance, the design had to allow opportunities to study a variety of case histories in depth and plan treatment programs. In this way the students must amalgamate their knowledge and develop their skills in treatment planning. Students can make decisions and plan treatment programs without fear of harming patients because no real patient is involved in the game. However, the instructor can still judge if problems would have arisen which could threaten patient safety in an actual treatment situation. In addition, students are under reduced pressure to perform and therefore can carefully consider their decisions and treatment plan:

One constraint of this game is that students can not follow a patient from onset of treatment to completion; this is because it is impossible to receive feedback about the effectiveness of a treatment plan without actually implementing it and observing the patient.

Therefore a compromise was reached in that the students would perform the role of the OT up to the point of devising an initial treatment plan.

The typical problems which arise due to lack of experience or

knowledge are scheduling, information management, communication, and treatment planning. Since scheduling is basically a problem of organization it was felt that it could not be properly tackled without sacrificing other more important concerns such as in depth study of case histories. In addition such a problem is usually best tackled by observing the person on the job. However, the other problems were incorporated into the game. At this point a description of the actual simulation-game is necessary before discussing how these problems have been incorporated.

#### Format

The format chosen for this particular simulation-game was a board game. The term board game refers to a manual game which is played on a board or surface (Ellington, Addinall, Percival; 1982). There were a number of reasons for employing this format as opposed to others such as a card or computer game. These were as follows:

- 1) Board games are generally completely self contained requiring no special facilities (such as microcomputers) other than those provided in the game package.
- 2) The structure of board games are particularly suitable for reinforcing understanding of principles, and interactions. They can be used to simulate fairly complicated systems of a wide variety of types (Ellington, Addinall, & Percival; 1982).
- 3) Movement can be built into board games.

#### Description

The simulation-game employed in this study was designed to simulate the actions an Occupational Therapist is likely to engage in when planning a treatment program for a particular patient over a two to four

day span. In this game, players select a referral, which is typical of OT referrals received in a hospital setting. Thus, the referral contains information such as the patient's name, location, diagnosis as well as reason for referral. The game's referrals are graded according to three levels of difficulty; elementary, intermediate, and advanced. Level of difficulty is determined by the complexity of the case. Factors which affect complexity include: patient compliance, secondary illnesses or conditions, social situation, financial situation, and medical complications. Players are expected to study the referral and determine what additional information they require in order to plan a treatment program, as well as how and where they can obtain the necessary information. Players are provided with a game board which represents a map of the hospital and the outlying community. This map contains a variety of numbered locations where specific information about the patient can be obtained, for example results of a patient's x-rays from the x-ray department. In addition, there are two locations where students can "perform" different assessments, that is, they can decide what assessments should be performed and obtain the information they would have found if they had actually performed them on the patient themselves. Information on all the patients is specially coded according to case, and location on the board; it is available in the patient information booklet. The information contained in the booklet is scrambled in order to discourage cheating. Action cards are used to collect information. These allow the player to perform assessments, make phone calls, and travel to various locations.

### Individual versus Group Play

The game can be played either individually or cooperatively in small groups of not more than four players (since it is difficult to seat more than four players around the game board). It is felt that having players work in groups is invaluable in that it allows players to share ideas and learn from each other. In reality, although only one therapist is generally assigned to a patient, s/he will often consult with other therapists regarding treatment; particularly if problems are encountered.

The advantage of small group versus individual play is that students can often learn faster and better from each other (Orlich, Harder, Callahan, Kravas, Kauchak, Pendergrass, Keogh, & Hellene; 1978). In addition, small groups can explore new ideas or ways to solve problems (Olmstead, 1970; Orlich et al; 1978); and motivation to learn is enhanced (Olmstead, 1970).

If the game is played in a group each player takes a turn being the therapist, thus only one mover is used for the game. During his or her turn the player must decide what action to execute using an action card. The player is allowed to consult with the group; however s/he is responsible for making the decision whether or not the group agrees. Thus, the player must be prepared to defend the decision taken.

### Structure

The structure of simulation-games can be cooperative, competitive, or a mixture of both, in which case cooperative teams compete against each other. Olmstead (1970) submits that in situations where group members are cooperating the quality and quantity of learning are often amazingly high. Conversely, when group members compete with each other



both the quantity and quality of learning sometimes decrease. Johnson and Johnson (1975) strongly favor a cooperative group structure for most types of learning, namely: retention, application, and transfer of factual information, concepts, and principles; verbal abilities, problem-solving; cooperative skills; creative ability; divergent and risk taking thinking; productive controversy; awareness and utilization of one's capabilities; and role-play. The only types of learning favored by a competitive structure were: simple drill activities; and competitive skills.

In this study the structure adopted was a cooperative game since the game wished to encourage application of theory, and problem solving. In addition, it was felt that cooperation among players was a better reflection of reality; since practice generally encourages a team approach towards treatment of patients.

#### Game Play

Concerning the simulation-game developed in this study, game play commences with the display and organization of action cards. Action cards are shared among all players. Using information sheets players are expected to note all the locations visited and people contacted recording any information obtained. If played in a group each player notes his/her own reason for the move and information obtained on the information sheet which is passed around from player to player. The game is designed such that players must exercise discrimination in order to obtain all the pertinent information available on a patient.

Once all the action cards have been used, players are expected to write an OT report using the the Problem Oriented Record. The process for recording the problem oriented record is called SOAP. SOAP stands

for subjective, objective, assessment, plan (Hopkins & Smith, 1978). This is a method of report writing used in a large number of Occupational Therapy departments in Canada. Whether played in a group or individually only one report is generated. Once the report has been written players compare it to a "model" report.

#### Use of Reference Materials

The game is designed such that players are expected to have information about the various case histories in their repertoire. Thus, they are expected to tax themselves when playing the simulation-game. The implications of this constraint is that players may have great difficulty completing a case history because they have forgotten the necessary knowledge required. They may argue that Occupational Therapists frequently refer to external resources particularly when they are inexperienced in a certain area. However, if players are allowed to refer to outside sources of information they can easily just copy the solutions provided without applying themselves. Keeping this constraint in mind the following decisions have been made concerning group versus individual play. It is apparent that those who play in a group are not taxed to the same extent that individuals are in the simulation-game. That is, group players can use each other as resources when making decisions and writing the report. Given this scenario those playing in a group under the direction of game director, who is an expert on the content of the case histories, should not use external resources such as print material. It should be noted that as part of the formative evaluation of this simulation-game subjects were asked whether or not they felt that players should be allowed to refer to reference materials during game play. Thus; this decision is re-examined below to ascertain

its correctness.

With respect to individual play, it is imperative that the learner have access to an expert for debriefing. An attempt should be made by the individual to play the game without using external resources.

However, if at some point s/he can not continue the game due to a lack of knowledge, then s/he should be allowed to make infrequent references in order to retain continuity.

#### Incorporation of Problems

As was mentioned earlier, an attempt has been made to incorporate problems of information management, communication, and treatment planning. With respect to information management, players are penalized for performing unnecessary assessments. Should they omit vital assessments this will adversely affect their treatment plan and result in a poor report. Players are given a limited number of moves they can make; thus, they must plan carefully where they wish to go. Players may find useful or useless information (based on logic) and therefore must develop strategies for locating useful information. Hints may be present in a message which suggest that certain information should be pursued further. Should players neglect to record their observations they will not be able to write their report, since students can not refer back to the booklet for information they failed to record unless they play an action card.

Regarding communication problems, phone calls are limited in that there is only a 50 percent chance of successfully completing a call (based on the roll of a die) this is to reflect reality. In some cases information obtained on the phone will be the same as that received by visiting the location. Thus, players must discern when they should

phone first. Generally, information received on the phone is not as useful as meeting with that person since hospital staff are often too busy to talk on the phone. In addition, confidential information can not always be given over the phone. Information may be missing from a certain location, e.g., patient's medical chart has not been updated, thus players must learn to compensate. Conflicting information may be received so players must consider the source of their information and check for verification.

Success in writing treatment plans will depend on performing the correct assessments and obtaining the necessary information. Within a group, consultation among members will aid in analysis of data collected. Feedback obtained from the solution file and the game director on performance will aid both individual and group players in analysing data and writing treatment plans. Skill in writing clear, concise reports should increase by playing the game a number of times.

Within the play of the simulation-game, players may receive feedback on their decisions from the patient information booklet (e.g., if a student calls the neurology department and the patient is an amputee, s/he will be told that the department has never treated that patient). In a group context members receive feedback from their group.

During the debriefing phase the game director conducts a discussion with the individual or group players concerning each of their results. Given that Occupational Therapy reports vary from therapist to therapist, the solution report represents a "model" incorporating the most important considerations and therefore is not absolute in itself. Therefore, it is likely that players may challenge aspects of the report. Thus, it is necessary for the game director to discuss this

with the players. During the debriefing players can receive feedback from other players and from the game director. Using the information sheets, routes can be retraced and the action of the game can be recreated. Thus, players and the game director can see where information was not followed up or incorrect decisions made.

Having described the game in general terms, it may be useful to provide the entry skills and objectives from an instructional design standpoint. These are listed below.

### Specific Entry Skills

In order to play this game OT students must have the following entry skills:

- 1) good knowledge of the English language;
- 2) knowledge of OT treatment methods and techniques pertaining to cases presented in the simulation-game;
- 3) understanding of the diagnosis (for the case presented) and its implications;
- 4) knowledge of the various roles of the hospital staff directly involved in patient treatment;
- 5) knowledge of the SOAP method for writing OT reports.

### Objectives

The overall aim of this thesis was to develop and evaluate the simulation-game. Part of the evaluation involved assessing whether or not the cognitive and attitudinal objectives of the simulation-game as well as of the thesis itself were met. Listed below are the objectives of the simulation-game and thesis.

Cognitive objectives. The cognitive objectives apply to individual subjects regardless of whether the game is being played individually or

in a group. Students will be able to:

- distinguish between useful and useless information and know the procedures for obtaining useful information for a given case;
- discriminate between those assessments which will provide the most useful information and those which will not for a given patient;
- cite and act upon the following potential communication problems:
  - difficulty contacting people via the telephone;
  - difficulty locating people;
  - medical reports often not updated,
  - presence of conflicting information;
  - incomplete information;
  - misinformation;
  - patient or family unwilling to disclose information;
- score satisfactorily on the three treatment plans which they write for the game.

Attitudinal objectives. Individual students will:

- have a positive feeling towards the simulation-game experience;
- feel that interaction with the simulation-game provides a useful introduction to hospital work in an adult physical medicine setting;
- feel that use of the simulation-game should be incorporated into the University program.

Game objectives. The students will be provided with opportunities:

- to analyse information;
- to problem solve;
- to study a variety of case histories;
- to plan a variety of treatment programs;

- to practice writing occupational therapy reports, either individually or as a group.

Group objectives. The following objectives are applicable only to players working in groups. Students will be provided with opportunities:

- to cooperate and make decisions as a group regarding all aspects of the above;
- for self evaluation via the reaction of peers.

The assumption is that the game will be played a number of times. Thus, the learner/group will be exposed to a number of different cases involving the above objectives. The quality of interaction with objectives will, hopefully, undergo qualitative and quantitative change (improvement) over successive games.

Course-based objectives. Whether or not this simulation-game can meet some of the objectives of an OT program is determined by instructors likely to employ it in their course. What differentiates this game from an instructor presenting a case history to a classroom is its generalizable and specific aspects.

In order to play this game students are required to employ procedures that an OT engages in on a daily basis. Thus, they receive a patient referral, collect information, plan a treatment program, and write a report that actual practice demands. Therefore, an instructor's objectives in employing this game might include familiarizing students with the various procedures OT's engage in, as well as familiarizing them with hospital organizations (personnel and services).

Specific objectives that an instructor might have would include providing students with opportunities to analyse and plan treatment

programs for a variety of specific case histories.

In summary, the overall objective of this simulation-game is to familiarize Occupational Therapy students with the procedures involved in planning an Occupational Therapy treatment program for adult patients encountered in a general hospital setting in physical medicine. More specifically, students are provided with multiple opportunities to gather and analyse information for the purpose of planning individual OT treatment programs (using a variety of realistic case histories), and to write an OT report for each case based on the SOAP method of report writing.



## CHAPTER THREE

### Formative Evaluation of Materials

In order to determine the efficiency and effectiveness of the questionnaires and gaming materials, two short studies were carried out. The first was a pilot study in which all the instruments and gaming materials were tested on a small group of subjects taken from the target population. The second study involved 36 subject matter experts (in the field of Occupational Therapy) who were presented with the gaming materials only, and solicited for their attitudes and recommendations for change.

#### Method of Pilot Study

##### Subjects

The pilot study was comprised of three naive subjects in their second year of undergraduate studies in Occupational Therapy at McGill University. Subjects were approached individually by the researcher to volunteer for the study. Selection was based on three factors: ability to criticize, language, and academic performance.

In order to gain valuable information on the materials, all three subjects needed to be comfortable asking questions and providing criticism. This characteristic was determined via observation and input from OT faculty and students. In order to provide a broad representation of their year, subjects were chosen according to their maternal language and academic performance. Thus, one subject was predominantly francophone, one predominantly anglophone, and one fluently bilingual. In addition, one was "weak", one "average", and one "strong" in terms of academic performance. All three subjects were female (94% of the class was female).

### Design

The pilot study involved a single session conducted outside of class time. Subjects were presented with all the questionnaires and gaming materials to be used in the final study. With a few minor exceptions (see Procedure) the materials were presented in the order intended for in the final study. Subjects played the simulation-game in a group as this was how it was to be used in the study.

### Materials

All materials for the study were developed by the author. The materials used in the pilot study are presented in Appendix A.

Questionnaires. The questionnaires presented to the subjects included a pretest, and a group dynamics and attitude questionnaire. The pretest was designed to reflect some of the cognitive objectives of the simulation-game. It consisted of multiple choice, fill in the blank, and problem solving questions. The group dynamics questionnaire consisted of multiple choice, semantic differential, and open ended questions used to gain information about the group dynamics which individual subjects experienced. The attitude questionnaire consisted of three distinct sections: attitudes towards the gaming experience, perception of the simulation-game in the McGill OT program, and solicitation of biographical data. The questionnaire consisted of Likert scale, semantic differential, multiple choice, open ended, and fill in the blank questions. Four copies of each questionnaire were used, three for the subjects and one for the researcher.

Gaming materials. The gaming materials included one complete simulation-game, and 4 sets of rules. The simulation-game consisted of: a game board, a token, a die, 42 action cards (18 assessment, 14

consultation, 7 telephone, and 3 taxi), one referral, one Patient Information Booklet (PIB), one sample observation sheet, six blank observation sheets, one blank OT report, one Solution report, and one pencil. The case history used was a traumatic left below elbow amputee.

The materials used to collect data were a taperecorder, six cassettes, note pad, and watch. The game was conducted in a small classroom, with a large table in which both the subjects and researcher could be seated.

### Procedure

The author used the Dick and Carey model (1985) for conducting a formative evaluation as a guideline. The format of the pilot study employed a combination of one-to-one and small-group evaluation. This was done for two reasons: first, the target population for this study was very small (only 32 second year students); and second, the simulation-game was to be played in groups of three in the final study.

The format of the pilot study was similar to a one-to-one evaluation in that the researcher sat with the subjects as they studied the materials. It was similar to a small-group evaluation since for the most part the materials were administered in the manner they were intended. The few exceptions were as a result of time constraints. These differences were as follows: subjects were not required to write an OT report, they received the group dynamics questionnaire after instead of before the attitude questionnaire, they did not answer all the questions for the questionnaires, and they were not given a posttest.

Using the Dick and Carey model, a combination of questions from

these two stages of formative evaluation were used. A list of these questions were generated on a form and dealt with sequentially in the pilot study (see Appendix A, pp. 229-230). Subjects were timed with respect to each aspect of the procedure, total length of time was five hours and ten minutes.

The section below describes the problems encountered with respect to each questionnaire and gaming material; as well as, the revisions made to the materials as a result of this study. Revisions made to the gaming materials were presented in the Subject Matter Experts Study. While revisions made to the questionnaires were applicable to the final study only. Please note that all the materials and questionnaires used in the Pilot Study are presented in Appendix A.

#### Pretest

Problems. The most apparent problem was that the pretest was too long. Subjects took approximately one hour to complete sections C through F, and read the case history. In addition, subjects did not have sufficient time to complete sections A and B. However, all questions were reviewed and discussed with the subjects.

Study of the questions revealed that the format of questions 1-10 enabled subjects to guess the correct answer. In addition, the inclusion of a list of assessments for questions 11 and 12 helped students to answer the question, in that it alerted them to assessments they may not have considered otherwise.

Concerning questions 13-17, subjects had great difficulty answering them. The reasons were as follows: answering questions 14 and 16 was dependent on having very specific clinical experience; question 13 and 17 had more than one answer; and question 15 was difficult to

understand. Upon review, it was decided that these questions were too specific and did not reflect upon the process occurring in the simulation-game. Finally, subjects found questions 24 and 26 to be somewhat unclear.

Changes. The pretest needed to be shortened so that it would only take subjects 30 minutes to complete (refer to Appendix C for final version). Therefore those questions which were too easy were deleted namely questions 18-23, and 28. In addition questions 13-17 were replaced with one question felt to more closely simulate the gaming process (see Appendix C, p. 259, question 4). Also, subjects were encouraged to answer in point form, in order to reduce time spent on each question.

Other changes made to the pretest concerned format of presentation and clarification. The format of questions 1-10 was altered so that it would be more challenging. Thus, instead of having multiple choice questions, subjects were asked to categorize all the information presented in the case history. With respect to questions 11 and 12 the list of assessments was removed, thereby increasing difficulty. Finally, both questions 24 and 26 were reworded slightly for purposes of clarification.

#### Attitude Questionnaire

Some of the questions presented in the pilot study were also asked in the Subject Matter Experts study (namely questions 15-18 in the first section, and questions 17-18 under Game in Context of Program). Thus, a question may have undergone more than one revision (in the Pilot Study, and Subject Matter Experts Study).

There were a few problems in the format and wording of certain

questions. Question 17 in the first section was found to lack specificity. Therefore, the questions was expanded such that subjects were asked to specify what year students should be allowed to refer to reference materials (Appendix B, p. 232). Question 18 was reworded to eliminate ambiguity.

With respect to the section titled Game in Context of program the format and directions for questions 17-19 was found to be confusing (Appendix A, p. 211). Since these questions were all based on one's answer to question 17, questions 18 and 19 were renumbered 17a and 17b, respectively. In addition, the directions were reworded, and clearer examples provided (Appendix B, p. 232).

It was discovered that no directions were given to answer the questions posed under Biographical data. Therefore, these were included. Also it was unclear how to answer the questions concerning previous education (questions 4a-4e) as no choice was given. Therefore, subjects were asked to check off yes or no to each question (Appendix C, p. 272). In addition, question 4c neglected to ask the name of the discipline in which subjects had completed part of a university degree. Therefore, this question was added.

#### Group Dynamics Questionnaire

Only one problem was noted for the group dynamics questionnaire. Directions on how to answer semantic differential questions (1-21) were missing. Therefore, these were added (Appendix C, p. 273)

#### Game Board

Subjects had some difficulty in orienting themselves to the game board. Therefore, a number of changes were made to the board itself. The hospital and community area were given titles in large print.

Certain locations were moved, these included the (OT) Mailbox, OT assessments area, and Independent Living Unit. Most importantly the different areas of the hospital were color coded. Thus, assessment areas were colored pink, the community yellow, and the hospital in two shades of blue.

The titles of certain locations were considered to be confusing. Therefore, the OT treatment area was retitled OT desks, PJ office became PT staff desks, and Mailbox became OT mailbox. Also, a telephone was added to OT desks as this was considered realistic.

A major problem encountered was the allowance of assessments in the Patient's room, in that this location was also coded to allow for consultation to the patient. Therefore, it was decided to restrict all assessments to a special area in which subjects could only gain information concerning assessments.

#### Action Cards

It was discovered that the instructions written on some of the Action cards were unclear (Appendix A, p. 216). The telephone card neglected to state that subjects should not move their token when playing a telephone card; therefore, this was added. The taxi card did not allow subjects to return to the hospital. Therefore, instructions were added to return to the OT mailbox (a neutral starting point) upon completion.

Changes in the game board resulted in changes to the action cards. Since assessments became limited to two assessment areas (OT Assessment Room, and Independent Living Room) some of the assessment cards needed to be reworded. Therefore, all the assessments carried out in the Patient's Room (assessments 16-18) were moved to the Independent Living

Unit.

In order to help orient players and ease identification of cards, it was decided that the cards should be color coded to match the game board (originally all cards were blue). Thus, Consultation cards were made blue, Telephone cards grey, Taxi cards yellow, and Assessment cards pink. In addition, drawings were included in the Assessment cards to provide a pictorial representation of the Assessment (e.g., a picture of a plate and cutlery to represent the Eating Assessment card).

Finally it was discovered that subjects had too many Consultation and Telephone cards. Therefore, the number of Consultation cards was reduced from 14 to 12, and the number of Telephone cards was reduced from 7 to 6. Thus, the total number of playing cards was reduced from 42 to 39.

#### Patient Information Booklet

Other than a few typographical errors and improper coding of a few pieces of information, the only problem was the awkwardness of handling the booklet. Originally the booklet was a few stapled papers on 8 1/2 by 11 inch paper. Therefore, subjects often had difficulty locating it among the other papers as well as manipulating it. In order to circumvent these problems the booklet was reduced in size to 6 1/4 by 8 1/2 inches and given a stiff red cover.

#### Referral

As with the PIB, one of the major problems with the referral was ease of identification and handling. Originally only one referral was provided on a piece of 8 1/2 by 11 inch paper (see Appendix A, p. 217). Thus, subjects had to constantly find it among the other papers. It was decided to reduce the size of the referral to 5 3/4 by 7 1/2 inches and



place it on stiff blue cardboard, thus making it easier to refer to. In addition, it was decided that all subjects should have a copy of the referral for ease of reference.

The format of the referral was altered slightly so that the Information Codes were presented in columns rather than rows. This was done in order to increase speed and ease in locating the necessary numbers. Finally, it was decided that the referral should state if the patient was an inpatient or outpatient (see Appendix B, p. 238).

#### Observation (Information) Sheets

The name of the sheet (i.e. Observation Sheet) was considered somewhat misleading in that players were not observing so much as collecting information on a patient. Therefore, the name was changed to Information sheets. Other changes made for purposes of clarification were: case history # was replaced with referral #, observation sheet # was replaced by page #, observations was replaced with information, and a title for the page was provided. In observing the subjects it became apparent that the reasons for their actions (moves) were very important as well as enlightening to the instructor. Therefore, it was decided that players should record their reason for a move. This change illuminated the fact that the order in which subjects were recording information and disagreements was illogical, in that they were asked to record their disagreements after they had obtained the information (Appendix A, p. 219). Therefore, the sequence in which they were asked to record information and disagreements was altered. Thus, in the final draft, subjects were first asked to record their reason for a move, then any disagreements which may have arisen, and finally the information obtained (Appendix B, p. 240).

### Sample Observation (Information) Sheet

The new Sample Information Sheet conformed to the new design as outlined above; thus it included samples of reasons. However a few additional changes were made. In the original version (Appendix A, p. 218) both the number and name of the location or assessment was given. This was considered too time consuming for the players. Therefore, only the name of the location or assessment was given in the new version (Appendix B, p. 239). In addition, for purposes of continuity all the examples were changed so that it would appear that they were referring to the same case history.

### Reports

No changes were made with respect to the blank and "Model" OT report (see Appendix A, pp. 220-225).

### Game Workbook

In observing the play of the subjects it became obvious that manipulation of written materials was awkward due to their size and uniformity (all the same size and on white paper). Therefore, it was decided that a Game workbook was required. This workbook took the shape of a colored duotang. Envelopes were glued to the inside front and back covers. The front envelope was shaped into a pocket to contain the referrals. The back envelope was used to hold the "Model" report along with instructions on it's use. This envelope was kept closed and a warning put on it not to open the envelope until after they had written their OT report. The duotang itself contained the Sample Information Sheet, six blank Information Sheets, and a blank OT Report.

### Rules

The rules were altered to reflect all the changes made to the

gaming materials. In general the rules were considered to lack organization, clarity, and adequate examples. Thus, the rules underwent considerable revision (see Appendix A, pp. 226-228 for old version, and Appendix B, pp. 247-251 for new version).

The rules were completely reorganized and additions were made to the content. The object of the game was stated first and it was emphasized that the purpose of the game was to plan a physical medicine treatment program as opposed to another type. In addition, emphasis was placed on the fact that the game was not competitive, as initially subjects were confused about this. A general overview of the three phases of the game (game play, writing the report, and debriefing) was presented at the beginning of the rules in order to orient players to the process.

Directions for the set up and preparation of the game were provided in greater detail, and emphasis was placed on orienting players to the game board. Detailed explanations were given on the purpose of action cards, and information sheets. In addition, players were given precise examples of how to use these materials along with the PIB and encouraged to carry out the examples provided.

The final suggestion made and adopted was that the rules be read aloud more slowly (by the game director) as francophone students were likely to experience difficulty following.

#### SOAP

The subjects stated that all players should be given a short synopsis of the SOAP method of report writing in order to refresh their memories. Therefore, a one-page summary taken from Willard and Spackman (1978) was given to all subjects in the final study immediately after

the pretest. Subjects were not allowed to refer to this synopsis during the gaming sessions.

### Method of Subject Matter Experts Study

#### Subjects

The subject matter experts study was conducted during an annual conference held at McGill University. The conference was attended by 36 certified Occupational Therapists from the Montreal area.

At the time of the study 83% of the subjects were practicing clinicians and 17% academics. Of those subjects, 67% had had five or more years experience in the field, 8% 3-5 years, 22% 1-3 years, and 3% less than one year of experience. Furthermore, 47% were working in the field of physical medicine with adults and/or geriatrics. However, a total of 61% had had experience in this field.

#### Design

Subject matter experts (SME) were presented with a playable draft of the simulation-game. Twelve subjects were asked to volunteer to play the simulation-game. These twelve were divided up into groups of three, thus a total of four games were played. The rest of the subjects were divided up among the four games and were asked to observe the gaming process. Gaming materials were presented in the order intended for the final study. At the end of the study all SMEs were asked to answer an attitude questionnaire.

#### Materials

The simulation-game contained the revisions adopted from the pilot study with the exception of the color coding of the game board (see Appendix B for the materials used in this study).

Attitude questionnaire. The attitude questionnaire consisted of

three sections: attitudes towards the game, biographical data, and ratings of case histories (see Appendix B, pp. 232). The first section was comprised of six open ended questions and a checklist. The questions asked the following: what did they like most and least about the simulation-game, how would they change the game, should players be allowed to refer to reference materials, could the simulation-game be used to help prepare students for clinical work and if so when should it be used, and given the appropriate modifications could the game be used to prepare students for work in other areas of OT. Biographical data solicited included the following: history of work experience, years of experience, and how long they had been working at their present job. Finally subjects were asked to rate eight different case histories with respect to their level of difficulty as well as provide any suggestions. Subjects were also invited to record any additional comments they might have.

Gaming materials. The gaming materials included four copies of the simulation-game and 37 copies of the rules. The simulation game consisted of: a game board, a token, a die, 39 action cards (18 assessment, 12 consultation, 6 telephone, and 3 taxi), one PIB, 4 pencils, and game workbook. The game workbook consisted of: three referrals, one sample information sheet, six blank information sheets, one blank OT report, and one solution report. The case history used was a traumatic left below elbow amputee (same as in the Pilot study).

The materials used to collect data were a taperecorder, one cassette, and four notepads. The games were conducted in two adjoining classrooms, with two tables in each room (total of four), and chairs for all the players.

### Procedure

Initially subjects were assembled into one classroom and the author presented a brief (five minute) introduction to the simulation-game (see Appendix B, p. 252 for protocol). The introduction included a definition of the term simulation-game, the general purpose of the game, and a short description of the production and development phase of the game. The author then asked for twelve volunteers with mixed experience to take part in the game, the rest of the audience was asked to observe. One observer from each group was asked to note all the comments made by the different players and observers during game play.

The rules of the game were distributed to all the subjects once they had been positioned. The author and an assistant (familiar with the game) read the rules aloud (in two different classrooms) while the subjects read along silently. Players had thirty minutes in which to play the game, at the end of the thirty minutes game play was stopped and all subjects were asked to resume their seats.

Subjects were presented with the blank OT report, the solution report, and informed about the debriefing session. Subjects were asked to present what they thought were the objectives of the game and were then presented with the authors version of the objectives. A discussion ensued concerning the objectives of the game and the simulation-game itself. The discussion was recorded on tape. At the end of the discussion all subjects were asked to fill out the attitude questionnaire. Once the questionnaires were collected, subjects were presented with a brief description of the results of the Pilot study, with respect to the behavior and attitudes of the students concerning the simulation-game. The study lasted a total of one hour and

forty-five minutes.

## Results and Discussion

### Scoring

The first section of the questionnaire was comprised of 6 open ended questions, 1 closed form item, and a checklist. The section on case history ratings was comprised of eight scaled items, and an open ended question. Additional comments were also invited. Table 1 provides a description of each question and outlines the scoring procedure employed.

### Results

Attitudes towards the simulation-game. Concerning the open ended questions (1, 2, 4-6, and additional comments) only the most frequent comments (2 or more subjects) are presented in this section. It should be kept in mind that subjects were not forced to make a choice. Thus, the comments made represent what most impressed individuals about the simulation-game. Appendix D contains all the individual comments made by subjects for each question.

Question 1 asked subjects what they liked most about the simulation game. The comments concerning the game fell into three general areas: its realism, value as a teaching tool, and perceived characteristics. With respect to realism, 19% stated that the game simulated reality, 8% felt it simulated the daily activities an OT engages in, and 6% stated that the responses in the PIB were fairly realistic. As a teaching tool 11% felt it was good. More specifically; 19% stated it aided students in developing organizational skills, 19% said it aided students in learning how and where to obtain relevant information, 17% said it familiarizes one with hospital personnel and services, 14% felt

Table 1

Scoring Procedure for Subject Matter Expert Attitude Questionnaire

<u>SECTION 1 Opinions Regarding Simulation Game</u>	
<u>Type</u>	<u>Description</u>
Open-Ended	Questions 1,2, 3b, and 4-6 are open ended questions. The percentage of subjects who made similar comments from one session to the next was calculated. <u>Comment categories were created as they emerged, and were identified by the author.</u>
Closed	Part of question 3 was of the closed form type in which the choice of answers is discrete. Subjects were asked to answer yes or no to the question. Percentage of respondents <u>answering yes or no was calculated.</u>
Checklist	If subjects answered yes to the first part of question 3 they were then expected to proceed to the checklist. They were permitted to check off more than one category. Percentage of respondents was calculated for each category checked off.
<u>SECTION 2 Case Histories</u>	
<u>Type</u>	<u>Description</u>
Scaled	For questions 1 through 8 subjects were asked to indicate whether the Case History was elementary, intermediate, or advanced with respect to level of difficulty. The frequency and percentage of different ratings was calculated for each <u>case.</u>



Table 1 (cont.)

Type	Description
Open Ended	Question 9 was open ended. Percentage of respondents making similar comments was calculated. Comment categories were created as they emerged, and were identified by the author.
Additional Comments	Additional comments were invited. Percentage of respondents making similar comments was calculated. Comment categories were created as they emerged, and were identified by the author.

it encouraged problem solving, 11% said it was a good introduction to a hospital organization, 8% felt it encouraged treatment planning and synthesis of information, 6% felt it allowed students to synthesize and apply knowledge acquired, and 6% felt it could teach students the necessary consults/assessments for a given case. The rest of the comments concerned what was perceived as the inherent characteristics of the game. Twenty-two percent thought the game was fun/motivating, 19% enjoyed the fact that it was a cooperative game, 6% felt it provided immediate feedback, and 6% felt it was non-threatening.

Question 2 asked subjects what they liked least about the simulation-game. The comments concerning the game fell into five general categories: rules, understanding of the game, action cards, information available, and realism. Comments concerning the rules were as follows: 19% stated that initially the rules were difficult to understand, and 17% felt that the rules were lengthy and time consuming. With respect to understanding the game, 6% felt it took a long time. More specifically, 6% stated it took a long time to become familiar with the different areas on the gameboard. A number of comments were made concerning the action cards. Nineteen percent did not like being restricted to cards dealt, 14% did not like the fact that one could not perform an initial interview, and 6% stated the number of assessment cards was limited. Concerning the amount of information available, 22% felt it was limited, 8% stated there was scarce information in the patient's chart, and 6% said there was scarce information from physiotherapy. The final comments made concerned the realism of the game. Six percent felt that the game gave a false impression that OT's were constantly running around to different departments, and 6% did not

like the fact that you could not ask the game questions.

When subjects were asked if students should be allowed to refer to reference materials when playing the game the majority said no (58%). Those who responded yes to the question (31%) were asked to state what type of references should be used and for which years. Six percent stated it reflected reality, 6% felt second years should have access to basic reference materials in medicine and OT, and 6% stated that students should be allowed access to a medical dictionary.

Question 5 asked subjects how they would change the simulation-game. The majority of comments fell into two general areas: action cards and information. With respect to action cards, 44% stated they should be shared among all players, 11% felt an initial patient interview card should be included, 6% felt there should be an increased incentive to use the phone cards, and 6% wanted the cards displayed on a central display board. Concerning information, 11% wanted more information when consulting the medical chart, 8% wanted more concise initial interview information, and 8% felt some answers needed to be more detailed. Other comments included the following: 8% wanted shorter, less complicated instructions, 6% felt the game should emphasize selection of pertinent data for treatment planning/report writing, and 6% wanted a location labelled psychiatry added to the game board.

Eighty-nine percent of subjects (4 abstentions) felt that the simulation-game could be used to help prepare OT students for work in other areas (other than adult physical medicine). Subjects were asked to specify which areas of OT. However, only 21 out of the 32 subjects who responded yes specified which areas. Of those who responded,

25% (calculated out of 36 subjects) felt it could be used in the area of psychiatry, 19% in any area of OT, 8% in paediatrics, and 6% in a community centre.

Question 3 asked subjects if they thought the simulation-game could be used to help prepare students for clinical work in a physical medicine setting. Ninety-seven percent responded yes to this question (one abstention). They were then asked to indicate how and when the simulation-game should be used in the program. Table 2 outlines the type and frequency of responses to this question. The majority of subjects felt that the game should be used with second years in class in groups (83%), the second most frequent answer was that they should play the game outside of class in groups (56%). Very few felt that the second years should play the game individually. With respect to first years, 56% felt that they should play the game in class in groups, with the second most frequent answer being outside of class in groups (22%). Very few felt that first years should be allowed to play the game individually. Concerning third years, the majority felt they should play the game individually (50% outside of class, 42% in class), although there were a significant number who felt they should play in groups (39% outside of class, 36% in class). Very few subjects felt that interns should use the simulation-game.

All subjects were encouraged to write any additional comments (see Appendix D). Thus, subjects were given an opportunity to present those aspects of the game that stood out most strongly in their mind. A total of eighteen out of 36 subjects included additional comments. The majority of independent comments were congratulatory or well wishing (i.e., good luck) in nature (31%). Otherwise, 11% independently

Table 2

How and When Game Should be Used with OT Students

Where	How	Year	*SME f/%
<b>In Class</b>			
	<b>Group</b>		
		U1	19/53
		U2	30/83
		U3	13/36
	<b>Individual</b>		
		U1	02/06
		U2	07/19
		U3	15/42
<b>Outside Class</b>			
	<b>Group</b>		
		U1	08/22
		U2	20/56
		U3	14/39
		Intern	03/08
	<b>Individual</b>		
		U1	03/08
		U2	07/19
		U3	18/50
		Intern	05/14

\*SME = Subject matter experts

commented that the game was a good teaching tool, and 8% felt it should incorporate other OT areas (not just adult physical medicine).

Case histories. Subjects were presented with eight case histories which were being developed for the simulation-game; and asked to rate them according to the level of difficulty they felt they would present to OT students (Please note, one subject did not answer this question; therefore, percentages have been calculated out of 35). Three levels of difficulty were identified; namely, elementary, intermediate, and advanced. Table 3 outlines the frequency and percentage of subjects who assigned a given rating for each case. As can be seen from the results, subjects were divided in their responses with respect to three of the cases: numbers 4, 6, and 8. Concerning the five cases in which there was a clear indication of the rating which should be assigned to the case, the ratings were as follows: 80% rated case 1 as advanced, 77% rated case 2 as elementary, 61% rated case 3 as intermediate, 56% rated case 5 as elementary, and 88% rated case 7 as advanced.

In order to gain a clearer understanding of how cases 4, 6, and 8 should be rated. The author calculated the ratings assigned to these cases by subjects with experience in the field of adult/geriatric physical medicine. Table 4 provides the frequencies and percentages of these subjects who assigned a given rating for cases 4, 6, and 8. As can be seen from the results, subjects continued to be divided in their rating of case 4. However, the majority rated cases 6 and 8 as intermediate (50% and 43%, respectively).

Subjects were also invited to provide suggestions regarding the case histories. Very few comments were made. Eight percent felt there was a good variety of cases being developed, and 6% felt that the

Table 3

Ratings of Case Histories by Subject Matter Experts

Case	Ratings		
	Elementary f/%	Intermediate f/%	Advanced f/%
1	0000/00	7.0/20	28.0/80
2	27.0/77	8.0/23	0000/00
3	8.5/24	21.5/61	5.0/14
4	15.0/43	13.0/37	6.0/17
5	19.5/56	13.5/39	2.0/06
6	14.0/40	17.0/49	3.0/09
7	0000/00	3.0/09	31.0/88
8	5.0/14	14.5/41	15.5/44

Table 4

Ratings of Case Histories by SME in Physical Medicine

Case	Ratings		
	Elementary f/%	Intermediate f/%	Advanced f/%
4	8.0/36	9.0/41	5.0/23
*6	8.0/36	11.0/50	2.0/09
8	5.0/23	9.5/43	7.5/34

\*one abstention

hospital department in which patients were being treated should be indicated in the case history.

#### Discussion and Changes

The main purposes of this study were: to gain expert opinion concerning the value of the simulation-game as an educational tool for OT students, to subject the gaming materials to expert inspection for the purpose of revision, and to have the subjects rate the level of difficulty of the various case histories to be developed for the game. This section provides a brief discussion of the results of the attitude questionnaire and the revisions to the gaming materials which were adopted as a result of this study. Any revisions made to the gaming materials can be seen in Appendix C.

#### Attitude Questionnaire

Discussion of results. Given the results of the questionnaire along with the discussion which occurred during the study, the simulation-game was well received by subject matter experts. Since the majority of subjects (58%) felt that students should not be allowed to refer to reference materials during game play; it was decided that no reference materials would be employed in the main study. Although the majority of subjects (83%) felt that the simulation-game should be used in class in groups with second year students, this was not feasible. Therefore, the main study involved having second years play the game outside of class in groups (56% of SME felt this was appropriate). With respect to third years, subjects were divided on how the game should be implemented. However, a small preference was shown for having third years play the game individually. Since this was neither feasible nor desirable (due to time constraints and the desire to compare the



performance of second and third years) this suggestion was not adopted. Therefore, the game was employed with third years outside of class in groups (39% of SME indicated this was appropriate). With respect to question six in which 89% of subjects felt that (with the appropriate modifications) the simulation-game could be used to help prepare students for work in other areas, very few specified which areas. This question was considered to be too vague and needed to be reworded. Since it was to be used in the attitude questionnaire for the main study it was redesigned so that it included a checklist of different OT areas (see Appendix C, p. 270).

Case histories. The ratings attributed to the different case histories by the SME were adopted. However, no clear rating had been attributed to case number four (see Tables 3 and 4). Therefore it was decided that the case should be further simplified (patient would have RA in hands and wrists only) and classified as elementary since an additional case with that classification was required for the main study.

#### Game Board

Between the Pilot study and SME study there was not sufficient time in which to color the game boards. Therefore, SME played on black and white versions displayed on cardboard. For the main study the game boards were colored and in their final state.

#### Action Cards

At the suggestion of 44% of the subjects it was decided that use of the action cards would no longer be restricted. Instead all the action cards would be available to all the players within a group. This was considered to be a realistic reflection of reality. A patient interview

card was added to the number of assessment cards as suggested by 11% of the subjects (see Appendix C, p. 237). In order to encourage the use of phone cards as compared to consultation cards (as suggested by 6%) the number of consultation cards was reduced from 12 to 8. Given all these changes the total number of action cards was reduced from 39 to 36 (19 assessment, 8 consultation, 6 telephone, and 3 taxi).

#### Patient Information Booklet

Twenty-percent of the subjects criticized the game concerning the limited amount of information available. Particular reference was made to the patient's medical chart, and physiotherapy (for the case presented). Therefore, additional information was included in these two locations, along with the information made available under the new assessment card (patient interview). Although the criticisms made referred to the case history presented to them, these were kept in mind when the other case histories were developed. In addition, the author checked to make sure that information available when using the telephone or consultation action cards for a given location, either matched closely, or gave an indication that more information would be available if they used the other action card (e.g. could you call me back later).

#### Referral

A few changes were made to the referral to provide players with more information (see Appendix C, p. 278). These included the patient's date of admission to the hospital, and headings for the patient's address, next of kin, etc. Also, an information code was provided for the patient interview card under the assessment column.

#### Information Sheets

No changes were made to either the blank information sheets or the

sample information sheets.

### Blank Report

The only change made to the blank OT report was the addition of the patient interview assessment, under the heading "Assessments performed".

### Use of Model Report

A few minor changes were made to the directions and description of how the "Model" report should be used. These changes included an explanation of why the report has a separate section for the Case History and Social History; and a request for players to hand in their information sheets and OT report at the end of the debriefing (see Appendix C, p. 285).

### Model Report

The inclusion of additional information in the PIB affected the "Model" report, in that this information was also included in the report. As well, at the suggestion of a SME an additional short term goal (number 1) was incorporated into the report.

### Rules

Given the changes made to the play of the game and criticisms concerning the clarity of the rules (19%) a number of changes were made to the rules. These changes included the following: the introduction was reworded; new instructions on the use of the cards; specific examples provided on how to use the information sheets by referring to the sample information sheet; clearer instructions on how to use telephone action cards; introduction to writing the report; amount of time given to write the report increased from 20 to 30 minutes; and instructions at the end of the rules on which step to refer back to, to start game play.

## CHAPTER FOUR

## Method

Subjects

The subjects in this study included both second and third year undergraduate students studying Occupational Therapy at McGill University. All subjects volunteered for the study and signed an English or French consent form (see Appendix E, pp. 333-334).

Third years. The third year study was conducted by the author. Therefore, the students were approached by the author during one of their classes and asked to volunteer for the study. The students were asked to commit themselves to three sessions of approximately three hours duration outside of class time. A total of seventeen subjects volunteered for the study. However, eight withdrew prior to the commencement of the study, due to an unforeseen school assignment which was to be carried out during the weeks the study was to be conducted.

Of the nine subjects who participated in the first session, one had to withdraw as a result of a scheduling conflict with her placement. In addition, one of the volunteers was unable to participate in the final session due to another commitment. However, this subject completed all the questionnaires along with the other subjects, and thus was included in the study.

Of the eight subjects who participated in the study, two were male and six female. Five reported their mother tongue as being English, and three French. With respect to placements, three had had one in physical medicine, four had had two, and one three.

Subjects did not receive payment for participating in the study; however, at the end of the study they were provided with a lunch.

Second years. The second year study was carried out by the three pilot subjects (trained by the author). Therefore, they solicited volunteers from second year to take part in the study (see Appendix E, pp. 331-332 for protocol used to solicit subjects). Second years were asked to commit themselves to three sessions of approximately three hours duration outside of class time. A total of 27 subjects volunteered (out of a possible 29) for the study. However, two subjects were unable to attend the first session due to extensive homework. Although both subjects expressed a desire to attend the second and third sessions, it was felt that this would disrupt the study since they would require instruction to play the game. Therefore, these subjects did not take part in the study.

Of the 25 subjects who participated in the study, four attended only two sessions. Three missed the second session, and one missed the final session. Reasons given for their absence were extensive homework and preparation for midterm exams.

The sample consisted of 1 male and 24 females. Forty-four percent reported their mother tongue as English and 56% French. Concerning their placements, all had had only one observational placement. However, 56% had had their placement in physical medicine.

With respect to payment, subjects were provided with refreshments during the debriefing of the first and second session, and a small supper at the end of the final session. At the end of the study each subject was given a certificate which noted their participation in the study.

### Design

Two research designs were integrated into the overall evaluation

procedure of this study. The two non-equivalent groups used were second and third year undergraduate occupational therapy students. Each group represented a replication of each design. The first design was a one-group pretest-posttest design (Campbell & Stanley, 1963). The dependent variable assessed the game on cognitive objectives. The second design, embedded within the first was an equivalent materials design (Campbell & Stanley, 1963) in which each group received three applications of the treatment (simulation-game) using different content (case histories). It was felt that at least three interactions with the simulation-game were necessary in order for a beneficial level of learning to occur. The dependent measures were the information sheets and the three reports which each group generated, as well as the group dynamics questionnaires. In addition, subjects were asked to fill out an attitude questionnaire at the end of the study.

### Materials

Questionnaires, tests, and gaming materials were used for purposes of data collection as outlined in Table 5. The materials presented to the subjects included a pretest, posttest, group dynamics questionnaire, and attitude questionnaire. Each of these items was filled out by individual subjects. The gaming materials used to collect data were the information sheets and Occupational Therapy reports. Only one set of information sheets and one report was produced by each group for each session (total of three sessions for each year). All of the above materials were developed by the author.

Pretest and posttest. The pretest and posttest were composed of eight questions (see Appendix C, pp. 255-267) and took 30 minutes to complete. The first four questions although identical in form differed

Table 5

Questionnaires and Gaming Materials Used to Collect Data in Main Study

<u>Type</u>	<u>Title</u>	<u>Administered/Collected</u>
<b>Questionnaires</b>		
	Pretest	Prior to first session
	Posttest	End of study
	Group Dynamics	End of each session
	Attitude	End of study
<b>Gaming Materials</b>		
	Information Sheets	During each session
	Reports	During each Session

in content from pretest to posttest. This was done in order to eliminate the risk of learning from the pretest itself. For the first question subjects were asked to read a case history and indicate which information was a major factor, potentially significant, or unimportant when planning an OT treatment program. Subjects identified the particular type of information by circling, underlining, or leaving it blank. With respect to the second and third questions, subjects were asked to refer to the case history in question 1 and cite the necessary (question 2), or potentially significant (question 3) assessments an OT should perform in order to plan a treatment program for this patient. Subjects were asked to list each specific assessment along with a rationale for each choice. In question 4 subjects were given a patient referral and asked to cite the first three steps an OT should carry out; providing a rationale for each step. Questions 5-8 were open ended questions which asked subjects to: cite the advantages and disadvantages of using a phone versus visiting a person to gain information concerning a patient; describe the function and content of medical charts; as well as some of the problems and limitations of its use; cite three different factors that would result in an OT receiving unreliable information, providing examples of each; and outline strategies which an OT could use in order to evaluate the reliability of information received.

Group dynamics questionnaire. The group dynamics questionnaire was administered at the end of each gaming session, and took approximately 10 minutes to complete. The purpose of the questionnaire was to obtain information concerning the dynamics of each group, as well as each subject's reaction to the particular case used (see Appendix C,



pp. 273-274). Subjects answered the questionnaire anonymously, only identifying the group they belonged to during the session. This was done in order to encourage subjects to respond freely to the questions.

Questions 1-21 were semantic differential questions designed to gain information concerning each subject's opinion of his/her group (1-8), the group's report (9-11) and his/her participation in their group (12-21). Question 22 was scaled and asked subjects to indicate the amount of conflict within their group. Questions 23-25 were of the closed form type and asked subjects the following: who made the majority of decisions in the group, if they would have performed better without the group, and how they would have preferred to play the game. Question 26 was of the scaled type and asked subjects to rate the level of difficulty of the case presented. Questions 27 and 28 were open ended questions and asked subjects: if they felt they had the necessary knowledge and skills to play the game, and if they had learned anything from the experience. Additional comments were also invited.

Attitude questionnaire. The attitude questionnaire was administered at the end of the study and took approximately 10 minutes to complete. The purpose of this questionnaire was to solicit the reactions and opinions of each subject concerning the simulation-game and its use (see Appendix C, pp. 268-272). The questionnaire was composed of two parts. The first asked subjects their opinions concerning the simulation-game and its use. Questions 1-4 were scaled items and asked subjects the following: whether they thought the playing time of the game was too long, too short, or about right; how clear were the rules of the game; if they felt that game play was a valuable learning experience, as well as the debriefing. Questions 5-14

were semantic differential questions which asked subjects to indicate their view of the game experience. Questions 15-20 were open-ended questions and asked the following: what they liked most and least about the simulation-game, how would they change the game, should players be allowed to refer to reference materials, if the posttest measured the material presented in the game, and would they have preferred another medium to acquire the knowledge and skills presented in the game. Question 21 asked if given the appropriate modifications could the game be used to prepare students for work in other areas of OT. If subjects responded yes, they were provided with a checklist and asked to indicate which areas.

The second part of the attitude questionnaire asked subjects' opinions concerning the McGill OT program and the possible use of the simulation-game in the program. Questions 1-8 asked subject to indicate whether the McGill OT program was strong, weak, or average with respect to certain characteristics. Questions 9-16 were exactly the same as questions 1-8, except that subjects were asked to rate the simulation-game. Question 17 asked if they felt that the simulation-game should be incorporated into the McGill OT program. If subjects responded yes to this question they were asked to indicate when and how it should be used.

Biographical data was also solicited and included the following: sex, mother tongue, undergraduate year, previous education, language of education, and type and length of clinical placements.

Information sheets. The information sheets provided a recording of the behaviour that occurred during actual game play (see Appendix C, p. 283). Using the information sheets, players were expected to record

~~each move taken~~ (card played; and location phoned/visited, or assessment carried out), providing a reason for the move, recording any disagreements voiced concerning the move, and transcribing the information obtained after the move had been carried out.

Reports. At the end of each gaming session, each group was expected to produce one Occupational Therapy report concerning the particular case history under study (see Appendix C, pp. 284-295). The method of report writing was based on the SOAP model (see Appendix C p. 296) with a few modifications. For purposes of clarification, subjects were told to substitute the term Analysis for Assessment (the A in SOAP); since the term Assessment is somewhat misleading in that Canadian Occupational Therapists (as opposed to Americans) use it to refer to the tests they carry out on patients. In addition, subjects were asked to record separately the patient's case history and social history. This was done in order to draw subjects attention to the importance of acquiring this information. The final addition was the inclusion of a list of all the assessments that the player could perform along with a request to check off those that were performed. This was incorporated for the benefit of the researcher when scoring the reports.

Gaming materials. The gaming materials for third years included three complete copies of the simulation-game, and 9 sets of rules. For second years, the gaming materials included 8 complete copies of the simulation-game and twenty-five sets of rules. Each simulation-game consisted of: a game board, a token, a die, 36 action cards (19 assessment, 8 consultation, 6 telephone, and 3 taxi), one PIB, 1 pencil, and a game workbook. The game workbook consisted of 3 or 4 copies of

the referral, one sample information sheet, six blank information sheets, one blank OT report, and one solution (model) report. Appendix C contains all the gaming materials used in this study.

Case histories. The level of difficulty of the case histories presented to each year differed, since these two groups differed in level of knowledge, as well as in amount of clinical experience. Second year students had had no clinical experience other than a short observation period during first year; third year students had had a total of three different clinical rotations lasting from two to four weeks. Thus, third years were presented with two intermediate and then an advanced case; while second years progressed from two elementary to an intermediate case. Level of difficulty was determined by the subject matter experts, as described below.

The specific cases employed in order of presentation for third year subjects were as follows: 1) a traumatic left below elbow amputee with difficulty reconciling himself to the amputation; 2) a wheelchair bound female suffering from multiple sclerosis for a number of years; 3) a young comatose female suffering from severe head injuries. For second year subjects the cases were: 1) a middle-aged female who had recently underwent a second left hip replacement; 2) a 30 year old female who was suffering from a first episode of rheumatoid arthritis involving upper limbs; and 3) the same traumatic left below elbow amputee in 1) above. Using the same case for second and third year subjects was of special interest, though the fact that it was given during different sessions was considered an important difference.

All the case histories were developed by the author with the aid of a number of reference materials, as well as an OT with four years of

clinical experience in orthopaedics and arthritis. The reference materials used included: Occupational Therapy for Physical Dysfunction by Trombly and Scott (1977), Willard and Spackman's Occupational Therapy edited by Hopkins and Smith (1978), A Model of Human Occupation: Theory and Application edited by Gary Kielhofner (1985), and Levels of Cognitive Functioning, a paper presented at the Head Trauma Rehabilitation Seminar in Albany, New York (1979).

Environment. The third year study was conducted in one room, with three tables and chairs for all players. Due to the large number of second years participating in the study, the games were conducted in adjacent rooms. Therefore, players were divided between the rooms. A total of eight tables were required along with enough chairs to seat each player.

#### Procedure

Second and third year study. The third year study was conducted by the author. However, the author did not carry out the second year study as a result of a ruling made by the McGill Ethics committee. This committee felt that since the author was teaching the second years a course at the time of the study someone else should conduct the study. Therefore, the author trained the three pilot subjects and an OT teaching at McGill to run the study. The pilot subjects were responsible for the solicitation of volunteers, and the preparation and running of the gaming sessions. The OT conducted the debriefing for each session.

The first study conducted was with the third years. The second study commenced approximately four weeks after the completion of the first. An attempt was made to equate the procedures for both studies.

Pretest. The pretest was administered to both groups prior to the

first gaming session. Third years wrote the pretest two days prior to the first gaming session, and second years wrote it three weeks prior to the session. The protocol for administering the pretest was the same for both years (see Appendix E, pp. 335-336).

Group assignment. Subjects were randomly assigned to groups (of approximately three) for the first session. Thereafter, an effort was made to ensure that no two subjects were ever in the same group from one session to the next, this being the only constraining factor. This condition was met for second years, but was impossible to meet for third years due to the small number of subjects (see Appendix E, p. 337, for group membership). Thus, during the third session one third year group had some members who had played together in previous sessions.

There were a number of reasons why group membership was changed from one session to the next. These are listed below:

- 1) It was easier to deal with the problem of attrition. Since one did not need to keep groups intact.
  - 2) It was less likely to have subjects drop out as a result of not liking their group, since it would change in the next session.
  - 3) Changing groups forced individuals to contribute rather than assume a passive role within a group.
  - 4) By changing groups one was able to identify and follow strong personalities likely to influence group performance; e.g., troublemaker.
  - 5) It was felt that changing groups provided a better evaluation of the game. If group membership had remained the same then one would have been evaluating the group dynamics more than the game itself.
- The purpose of the study was to evaluate the simulation-game and not

the progress and function of each group, and this technique fulfilled this function. Note that subjects were asked directly about this procedure, in order to assess its potentially disruptive nature.

The total number of third years who participated in sessions 1 through 3 was 9, 8, and 7, respectively. Group composition for sessions 1 to 3 was: 3 groups of 3; 2 groups of 3 and 1 group of 2; and 1 group of 3 and 1 group of 4, respectively. The total number of second year subjects from sessions 1 through 3 was 25, 22, and 24, respectively. Group composition for sessions 1 to 3 was: 7 groups of 3 and 1 group of 4; 6 groups of 3 and 1 group of 4, and 8 groups of 3, respectively.

Schedule. The three gaming sessions for third years were conducted exactly one week apart from each other. For second years, there was one week between sessions 1 and 2. However, due to the scheduling of midterm exams, the third session was conducted 12 days after the second session.

Gaming sessions. The procedure for carrying out the gaming sessions for second and third years was identical (see Appendix E, pp. 338-351, for protocols for each session and year). During the first gaming session each group was seated at a table which contained a complete simulation game package. Each subject received a set of rules. The game director read the rules aloud; while subjects read along silently. Further clarification of the rules was provided on demand. There were two reasons for having the game director read the rules aloud. The first was that some of the rules were fairly complex and might require further clarification; this was of particular concern as 38% of third years and 56% of second years listed French as their mother tongue. The second reason was that this would speed up the process of

the game, which was an important consideration as time was at a premium. Once the rules had been read each group, working as a team, began. Subjects were given seventy-five minutes in which to play the game. They were then instructed to write their OT report (one per group). Third years were given thirty minutes to write their report, while second years were given thirty-five minutes. The reason for this change was that after the third year study it was determined that thirty minutes was not adequate time in which to write the report. Therefore, the time was increased by five minutes for second years. Once a group's report was written they were given 5 to 10 minutes to compare their report to the model report.

After the groups had compared their report to the model report the debriefer conducted the debriefing session. During this phase the debriefer conducted a discussion with the various groups concerning the gaming experience. A standard set of questions were asked by the debriefer in each session (see protocol for debriefing in Appendix E, pp. 352-353). In addition, questions put forth by the subjects were answered. A maximum of thirty minutes was allotted for the debriefing session.

After the debriefing session, each subject filled out a group dynamics questionnaire. This took approximately five to ten minutes to complete.

This procedure minus instructions was replicated three times for each year using three different case histories. Second year subjects only were provided with refreshments during the debriefing phase for the first two gaming sessions.

At the end of the final session subjects were given the posttest.



and had thirty minutes to complete it. They were then asked to answer the attitude questionnaire. After subjects had answered the attitude questionnaire they were provided with lunch. The third year subjects shared the lunch with the author. However, in order to abide by the ruling of the McGill ethics committee (author was not to have any contact with second years) the author did not attend the lunch provided by second years. Second years were also presented with a certificate acknowledging their participation in the study. The "need" for these rewards is commented on below (see Chapter Five, p. 175).

#### Development Costs

A total of approximately three person months was spent on the development of the game design. A draftsman spent approximately two weeks designing and producing the final game board and action cards. The total cost of game materials (including several rejected drafts) was approximately \$1000.

Thus, total development costs including labor and materials was about \$8000. Reproduction of each additional copy would be \$25 to \$30.

## CHAPTER FIVE

### Results and Discussion

The format of Chapter Five will include a report as well as discussion of the results of each dependent measure. The discussions will focus on what happened with respect to the results of the dependent measure and not on their implications concerning game revision. The reorganization of the game will be dealt with in the General Discussion (Chapter Six).

The dependent measures for this study consisted of a pretest, posttest, information sheet, Occupational Therapy report, group dynamics questionnaire, and an attitude questionnaire. Administration of the pretest took place at least two days prior to the first gaming session. The next two dependent measures were completed by each group, during each gaming session. The first was the information sheet which was filled out during actual play. The second was the Occupational Therapy report which was generated once game play had terminated. Only one set of information sheets and one report was produced by each group. After each debriefing session, all subjects individually filled out a group dynamics questionnaire. At the end of the third and final gaming session each subject answered the posttest. Upon completion of the posttest, the attitude questionnaire was administered. Thus, two of the dependent measures (i.e., the information sheet and report) were produced by a group (consisting of approximately three subjects); all other measures were answered by individual subjects.

#### Pretest and Posttest

##### Description

The pretest and posttest was composed of eight questions. The

first four although identical in form differed in content from pretest to posttest (see Appendix C). This was done in order to eliminate the risk of learning from the pretest itself. The forms were thus considered parallel, and scored by identical criteria (see details below).

### Scoring

The pretest and posttest were marked out of a score of 56. Table 6 outlines how each item was scored. Each item's raw score (points) is converted into a mark either directly (items 4, 5, 6, 7, 8) or using a conversion equation (items 1, 2, 3). Each mark represents the relative weight of the item to the total score (see Appendix F for answers).

The pre- and posttest were corrected by the author; however a second rater was asked to correct questions 4, 6, 7, and 8 (the potentially subjective items). Interrater reliability was found to be  $r = 0.88$ .

### Results

Both third and second year OT students did statistically significantly better on the posttest as compared to the pretest,  $t(7) = 13.84$ ,  $p < .01$  for OT U3; and  $t(24) = 13.18$ ,  $p < .01$  for OT U2. Table 7 outlines the means and standard deviations for both tests and years.

In order to determine more precisely what skills had improved, the performance change of each item was assessed (note that each "item" required an array of tasks, thus representing a type of "subtests"). Table 8 shows the means and standard deviations of each item, while Table 9 lists the t-test results. Both years scored significantly higher for questions 1 through 5; only second year subjects scored significantly better on question eight.

Table 6

Marking Scheme for Pretest-Posttest

Question	Mark
<p>1: A case history is presented in which subjects must decide which information, when planning an OT treatment program, is a major factor, potentially significant, or unimportant. Subjects identify the particular type of information by circling, underlining, or leaving it blank. A total of 41 pieces of information is contained in each case history. The number of pieces of information correctly identified are added up, and form the raw score. The raw score (denoted by X) is then converted into a mark using the following equation: <math>X \times 10/41</math>. The mark is then rounded to the first decimal point. For example, if a subject has a raw score of 31, the mark for this item is <math>31 \times 10/41 = 7.6</math>. A perfect score is 10.</p>	10
<p>2: Referring to the case history in question 1, subjects must cite the necessary assessments to perform on the patient for purposes of planning an OT treatment program. Subjects are asked to list each specific assessment along with a rationale for each choice. One point is given for each correct assessment, and one point is given for each good reason. For each incorrect assessment accompanied by an incorrect reason, 2 points are subtracted, one for the assessment and one for the reason. Total number of points equals the raw score. The highest possible score for the pretest item is 24, for the posttest is 32. The raw score (denoted by X) is then converted</p>	20

Table 6 (cont.)

Question	Mark
<p>into the mark for the item using the following equation:  <math>X \times 20/24</math> for the pretest; and <math>X \times 20/32</math> for the posttest. The mark is then rounded to the first decimal point. A perfect score is 20.</p>	
<p>3: Referring to the case history in question 1, subjects must cite the potentially important assessments that should be carried out on this patient for purposes of planning an OT treatment program. Subjects are asked to list the potentially important assessments along with a rationale for each choice. The same scoring procedure as outlined in question 2 is used to calculate the raw score. Highest possible raw score for both the pre- and posttest is 4. The raw score (denoted by <math>X</math>) is then converted into the mark for the item using the following equation: <math>X \times 3/4</math>. The mark is then rounded to the first decimal point. A perfect score is 3.</p>	03
<p>4: Subjects must cite the first three steps an OT should carry out given a particular patient referral; providing a rationale for each step. One point is given for each correct step and 1 point for each sound rationale. Raw score is calculated by adding up all the points. Highest possible mark is 6.</p>	06
<p>5: Subjects must cite two advantages and two disadvantages of using a phone. Half a point (0.5) is given for each correct advantage and disadvantage. Points are added up to form the mark. Highest possible score is 2.</p>	02
<p>6: Subjects must describe the overall function of medical charts</p>	05

Table 6 (cont.)

Question	Mark
<p>(worth one point), list four different types of information available within the chart (half a point for each type), and outline at least two of the problems and limitations of medical charts (one point for each problem). Points are added together, the highest possible score being 5.</p>	
<p>7: Subjects must cite three different factors which will result in an OT receiving unreliable information, providing examples of each. One point is given for each correct factor and each correct example. Points are added up; the highest possible score is 6.</p>	06
<p>8: Referring back to question 7, subjects must outline four different strategies which an OT can use to evaluate the reliability of information received from others. One point is given for each strategy; the highest possible score is 4.</p>	04

Table 7

Mean Pretest-Posttest Scores for Second and Third Year OT Students

Year	n	Pretest	Posttest
U3	08		
	<u>M</u>	20.7	30.9
	<u>SD</u>	2.0	3.9
U2	25		
	<u>M</u>	15.4	23.5
	<u>SD</u>	3.9	3.5

Table 8

Mean Scores for Each Question on the Pre and Posttest

Question	Year	Out of	Pretest		Posttest	
			M	SD	M	SD
1	U3	10	6.9	0.8	7.7	0.7
	U2		5.8	0.9	6.9	0.6
2	U3	20	4.1	0.8	9.3	2.4
	U2		2.8	1.5	6.5	1.7
3	U3	03	1.0	1.0	2.0	1.2
	U2		0.4	0.6	0.9	1.4
4	U3	06	2.9	1.6	4.8	1.4
	U2		1.4	1.4	3.4	1.3
5	U3	02	1.0	0.7	1.6	0.4
	U2		0.9	0.3	1.1	0.4
6	U3	05	2.6	1.1	2.8	1.1
	U2		1.9	1.2	2.0	1.1
7	U3	06	1.0	0.5	1.4	0.5
	U2		1.1	0.5	1.3	0.5
8	U3	04	1.3	0.5	1.4	0.5
	U2		1.1	0.9	1.5	0.7



Table 9

T Scores for Individual Questions from the Pre and Posttest

Year	DF	<u>t-Score</u>							
		Questions							
		1	2	3	4	5	6	7	8
U3	7	*1.90	**5.66	*2.51	**4.16	*2.76	0.23	1.43	1.00
U2	24	**5.60	**9.19	*1.74	**5.73	*2.68	0.08	0.54	**2.70

t crit = 1.895 for df = 7; t crit = 1.711 for df = 24.

\* p < .05.

\*\* p < .01.

## Discussion

Although subjects from both years scored statistically significantly higher from pretest to posttest, the scores remained low (37% to 55% for U3, and 28% to 42% for U2). In fact, scores were low for all questions except numbers 1, 4, and 5 (see Table 8). A careful study of the test revealed that questions seven and eight lacked clarity, such that all subjects scored consistently low on both the pre- and posttest; there being a significant difference only for second year subjects on question eight. No significant difference was found for question six; upon closer examination this question was found to be too specific. The game only addressed this question indirectly, as emphasis was placed on students considering a variety of sources of information rather than just one.

Significant differences were found for questions 1 through 5 for both years. However, one of the main difficulties in composing the pre- and posttest was developing questions which closely simulated the gaming process yet did not depend on prior knowledge of a particular medical condition. It was felt that only questions one and four most closely simulated the process which occurred in the game without depending to a great extent on requisite knowledge of a particular medical condition; for both these questions students had satisfactory scores. With respect to questions two and three, an argument could be made that improved performance was due to a better understanding of the particular medical condition. Question five showed improved performance; however it was only worth 2 points and did not have a strong bearing on the overall score.

The role of the pre- and posttest dependent measures must be placed

in perspective. The strength of this simulation was felt to be its ability to offer learners case histories in a dynamic, useful context. The information given, moves made, ensuing discussion, report generated, and debriefing constitute a simplified, localized replication of what they would encounter in the "real world". The pretest/posttest format does not lend itself well to the assessment of these experiences. Certain components of information acquisition and critical analysis were measured. However, the more accurate measure of the game's objectives was captured in the information sheets and reports - the former showing how the problem is solved, the latter requiring the completion of a form that actual practice demands. This problem was anticipated, and when students were asked the question "Do you think the posttest measured the material presented in this game?", only 50% of third year and 52% of second years said yes. The remaining subjects from both years either said no, or did not answer this question (50% of third years and 40% of second years) which would seem to indicate that they were either unsure or felt that the posttest measured only some of the material presented in the game.

Student comments (see Appendix K for individual comments) concerning this question provided some insight into the reason why so many students failed to answer yes or no to this question. Twenty-five percent of third year and twelve percent of second year students stated that that the posttest only tested some of the material presented in the game. One second year subject stated that s/he was unsure. Some subjects felt that certain questions asked in the posttest were not directly answered in the game. One third year subject stated that question five was inappropriate and 16% of second year students felt

that questions seven and eight were not addressed in the game. One second year student felt that the posttest failed to test treatment plans.

Given the results of the pre- and posttests, coupled with the attitudes of the subjects towards the test; it is felt that the pretest-posttest is not an adequate instrument for testing whether any learning occurred as a result of interaction with the simulation game. With respect to future use of the pretest or posttest in actual game use, a revised edition could be attempted; however, given the difficulty in designing questions which are not specific to a particular case, it is not recommended that this or a revised edition of the pretest and posttest be used. As stated above, the reports and information sheets produced during each gaming session are felt to be a much more sensitive and complete tool for testing any learning which may have occurred.

### Reports

#### Description

At the end of each gaming session, each group produced one Occupational Therapy report concerning the particular case history under study, using the SOAP method. These various reports were collected and compared to the appropriate "model" report.

#### Scoring Procedure

The overall score for the reports was 85 points. Each section of the report, namely the Case History, Social History, Subjective, Objective, Analysis, and Plan was given a particular mark. Table 10 outlines the score for each section as well as a rationale for a section having a particular score.

In general, scores for each section were calculated as follows:

Table 10

Rationale for Marking Scheme for Occupational Therapy Reports

Rationale	Mark
<p>Case History:</p> <p>Players must report the medical history of the patient. In general, all the information needed for this section is available from the referral and the patient's medical chart. Thus, players have little difficulty acquiring the necessary information.</p>	05
<p>Social History:</p> <p>Players must provide a brief report of the patient's social history; i.e., marital status, occupation, living arrangements, etc... This information is generally acquired from two or three sources, one being the social worker.</p>	10
<p>Subjective:</p> <p>Players must report what the patient has said. Information is usually acquired in two or three moves, one being the patient interview.</p>	10
<p>Objective:</p> <p>Players must report the assessments performed and any important observations which may have a bearing on patient treatment. Although players must decide which assessments are necessary, it is very simple to report them as all the group must do is copy the results. Some discrimination and decision making is required to report the observations.</p>	20

Table 10 (cont.)

Rationale	Mark
<p><b>Analysis:</b></p> <p>The group must analyze the information obtained and provide a concise (2 or 3 sentences), professional opinion concerning the patient, his/her treatment program, and his/her potential as a rehabilitation candidate.</p>	10
<p><b>Plan:</b></p> <p>The group must analyze the information obtained and develop an Occupational Therapy treatment plan outlining the goals of treatment. This is considered to be the most important aspect of the report. Generally, there were at least ten treatment goals for the cases used in this study.</p>	30

1) for each piece of correct information reported a group received one point. Please note that the number of correct pieces of information (CP) varied from section to section and case to case. These pieces of correct information have been identified for each "model" report (see Appendix G, p. 390).

2) for each piece of information which was irrelevant, inappropriate, or misplaced one point was subtracted from the group's score (lowest possible score is zero).

3) the raw score (RS) was then converted into a mark (X) using the following equation:  $X = RS \times SM/CP$ , where X equals the final mark a group is given for a section, RS equals the raw score for a group, SM equals the mark a particular section is worth, and CP equals the number of correct pieces of information for a particular section of a particular case.

The following example will help to clarify this scoring procedure. Referring to the Multiple Sclerosis case (see Appendix G) the total number of correct pieces of information for the Social History section is 7. If a group correctly reports 5 pieces of correct information and includes 2 pieces of irrelevant information then their raw score is  $5 - 2 = 3$ . In order to convert the raw score into a final mark the conversion equation,  $X = RS \times SM/CP$ , is used. In this particular case  $RS = 3$ ,  $SM = 10$  (see Table 10), and  $CP = 7$ ; thus the group's score for this section is:  $3 \times 10/7 = 4.3$ . All scores for each section are rounded off to the first decimal place.

In addition to the rules outlined above certain other factors contributed to the calculation of the raw scores. With respect to the section entitled Objective; if a group failed to carry out a necessary

assessment but included it in their plan they were given a point. The rationale for this decision is that students did not always have enough time to carry out all the moves they wished. As well, this is often the case in reality where a therapist may not have time to carry out all the necessary assessments, thus s/he reports those s/he plans to do at some point in the future.

A third factor was considered in scoring the analysis and plan sections. Since the "model" report is simply a best estimate by an expert there is the potential for it to change. Thus, in certain cases groups may have included insights and/or goals which although not mentioned in the "model" report were considered appropriate. Therefore, if a group included remarks which had the potential to change the "model" report then they were given an additional point for each remark.

An additional rating scheme was devised to assess the clarity and method of presentation of each section of the report. In no way did this scheme affect the marks each group received for their reports. Using the model report as a guide, the following rating scheme was employed:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method require improvement.
- 2 = Good. Only clarity or method of presentation requires improvement.
- 3 = Excellent. Well written. No improvement required.

Thus, the highest score a group could receive for a particular section was 3 points. Since there were a total of six different sections (Case History, Social History, Subjective, Objective, Analysis, and Plan), the highest possible score a group could receive, with



respect to the overall clarity and presentation of their report, was 18.

### Results

Overall scores. The mean overall scores (out of 85) for reports written by second year students from sessions 1 through 3 were 18.9, 29.0, and 49.9, respectively. A one-way analysis of variance was performed which indicated statistically significant sessional effects,  $F(2,20) = 31.3$ ,  $p < .01$ . No sessional effects were found for third year reports whose mean scores from sessions 1 to 3 were 33.7, 37.0, and 51.5, respectively.

Post hoc comparisons (using Tukey method) were carried out for second year students which revealed a significant effect between sessions 1 and 2, 1 and 3, and 2 and 3,  $F(1,20) = 3.45$ ,  $p < .05$ ;  $F(1,20) = 11.00$ ,  $p < .01$ ; and  $F(1,20) = 7.10$ ,  $p < .01$ ; respectively.

Subsections. The overall score was composed of scores from the six sections of the report (namely Case History, Social History, Subjective, Objective, Analysis, and Plan); therefore, each section was analyzed individually to pinpoint which skills showed the greatest improvement. For second year subjects, significant sessional effects were discovered for the sections entitled Social History, Objective, and Plan. In order, the  $F$ -scores for Social History, Objective, and Plan were  $F(2,20) = 20.50$ ,  $F(2,20) = 12.77$ ,  $F(2,20) = 17.21$ , all  $p < .01$ . For third year subjects, only the section entitled Objective had a statistically significant  $F$ -score,  $F(2,5) = 6.2$ ,  $p < .01$  (This effect is presented with caution due to differences in standard deviations).

Post hoc comparisons were carried out for each of the sections mentioned above. With respect to second year subjects, significant

sessional effects were found between sessions 1 and 2, and 1 and 3 for Social History, and between sessions 1 and 3, and 2 and 3 for Objective and Plan. With the third years there was a significant effect between sessions 1 and 3, and 2 and 3 for the Objective section. Table 11 outlines the significant F-scores for these two groups, while Table 12 outlines the means and standard deviations for all the sections from session to session and year to year.

Adjusted scores. As was described earlier, the scores for each section of the report (e.g. Case History, Social History, etc.) were based on the number of pieces of correct information minus the number of pieces of irrelevant or misplaced information (with the exception of Analysis and Plan which also included a third factor of insightful opinions or goals). Each factor was studied in order to determine which was influencing the change in scores (for a particular section) from session to session. Analysis revealed that the increase in scores from session to session was due to an increase in the amount of correct information reported; rather than a decrease in the amount of irrelevant or misplaced information. In all cases the number of irrelevant or misplaced pieces of information was negligible (see Appendix H, p. 401); the highest mean being 3.4 for third year students, and 2.1 for second years; both occurred during session 1 in the Analysis section.

Correct pieces of information. Given that the factor of correct pieces of information was influencing change in section scores, this factor was statistically analyzed. Since the number of correct pieces of information varied from section to section and case to case all scores were converted to percentages for purposes of comparisons.

There were significant sessional effects for the number of correct

Table 11

Post Hoc Comparisons for Sections of the Report

Year	Section	Between Sessions	F-Score
OT U2	Social History	1 and 2	**5.73
		1 and 3	**8.84
	Objective	1 and 3	**7.14
		2 and 3	**4.39
	Plan	1 and 3	**7.48
		2 and 3	**6.78
OT U3	Objective	1 and 3	*4.84
		2 and 3	*3.82

\*  $p < .05$ \*\*  $p < .01$

Table 12

Mean Score for Different Sections of the Report

Section	Out of		U3 Session			U2 Session		
			1	2	3	1	2	3
Case History	(5)	<u>M</u>	4.8	3.7	4.5	2.6	3.4	4.1
		<u>SD</u>	0.4	0.7	0.7	1.3	1.4	0.8
Social History	(10)	<u>M</u>	7.3	7.0	8.0	1.9	6.4	8.6
		<u>SD</u>	3.1	1.7	2.8	2.6	1.7	2.0
Subjective	(10)	<u>M</u>	3.7	2.0	5.0	3.9	4.1	5.8
		<u>SD</u>	4.0	3.5	7.1	1.0	2.3	2.7
Objective	(20)	<u>M</u>	4.7	7.3	17.0	3.6	6.4	11.3
		<u>SD</u>	5.7	1.5	2.8	2.1	3.3	3.5
Analysis	(10)	<u>M</u>	0.0	1.3	2.0	0.8	1.0	0.8
		<u>SD</u>	0.0	2.3	2.8	1.4	3.4	4.1
Plan	(30)	<u>M</u>	13.3	15.7	15.0	6.0	6.6	15.9
		<u>SD</u>	3.1	2.5	4.2	3.8	4.2	3.3

pieces of information for second year subjects in the following sections: Case History,  $F(2,20) = 6.01$ ; Social History,  $F(2,20) = 13.85$ ; Objective Assessments  $F(2,20) = 30.08$ ; Objective Information  $F(2,20) = 25.92$  (again, violation of homogeneity of variance makes this effect tentative); Analysis  $F(2,20) = 4.45$ ; Plan  $F(2,20) = 22.7$ ; all  $p < .01$ . No significant effects were discovered for third year students. Table 13 outlines the mean percentages (highest possible score = 100%) and standard deviations for correct pieces of information for both years across the three sessions.

Post hoc comparisons were carried out to reveal where these effects occurred. Significant sessional effects occurred between sessions 1 and 2, and 1 and 3 for Social History, and between sessions 1 and 3, and 2 and 3 for the rest of the sections. Table 14 outlines the significant  $F$ -scores for these sections.

Missing information. The nature of the missing information provided valuable clues with respect to the behaviour of the groups. There were three reasons why information could have been missing from a particular section: 1) the group had collected the information, but failed to report it; 2) the group had reported the information under another heading/section; 3) the group never obtained the information. Table 15 outlines the reason why information was missing from pertinent sections (all sections except Analysis and Plan) for both years for all three sessions. Please note that means were converted into percentages.

Insightful remarks or goals. With respect to the sections entitled Analysis and Plan, an additional factor which contributed to the overall score was the giving of bonus points for insightful remarks or goals.

Table 13

Mean Percentage Scores for Correct Pieces of Information

Section		U3			U2		
		Session			Session		
		1	2	3	1	2	3
Case History	<u>M</u>	100	72	93	51	65	89
	<u>SD</u>	0.0	21.1	10.6	21.1	26.8	17.4
Social History	<u>M</u>	81	91	93	33	83	88
	<u>SD</u>	27.3	8.1	9.9	31.2	14.3	20.7
Subjective	<u>M</u>	67	46	50	38	40	52
	<u>SD</u>	28.9	38.2	70.8	11.4	16.4	23.4
Objective- Assessments	<u>M</u>	38	63	70	44	55	87
	<u>SD</u>	26.7	23.6	14.1	8.2	11.2	13.9
Objective- Information	<u>M</u>	30	17	96	03	00	48
	<u>SD</u>	36.1	28.9	2.1	7.1	0.0	24.0
Analysis	<u>M</u>	17	13	21	10	14	41
	<u>SD</u>	28.9	21.9	30.4	15.1	17.6	29.7
Plan	<u>M</u>	40	52	44	21	29	46
	<u>SD</u>	7.0	9.1	7.8	10.5	5.0	6.4

Table 14

Post Hoc Comparisons for Correct Information

Year	Section	Between Sessions	F-Score
OT U2	Case History	1 and 3	**4.92
		2 and 3	*3.00
	Social History	1 and 2	**5.93
		1 and 3	**6.75
	Objective-Assessment	1 and 3	**10.73
		2 and 3	**7.71
	Objective-Information	1 and 3	**8.95
		2 and 3	**8.68
	Analysis	1 and 3	*3.99
		2 and 3	*3.36
	Plan	1 and 3	**9.02
		2 and 3	**5.93

\*  $p < .05$ \*\*  $p < .01$

Table 15

Reason for Missing Information for Various Sections of the Report

Section	*Reason	U3			U2		
		Session			Session		
		1	2	3	1	2	3
Case History	NR	00	100	100	87	52	100
	WH	00	00	00	00	02	00
	NO	00	00	00	13	47	00
Social History	NR	11	100	100	12	79	100
	WH	00	00	00	00	00	00
	NO	89	00	00	88	21	00
Subjective	NR	50	77	**NA	15	15	42
	WH	25	23	NA	25	14	19
	NO	25	00	NA	60	71	39
Objective- Assessment	NR	02	24	00	21	36	30
	WH	05	00	00	00	00	00
	NP	93	76	100	79	64	70
Objective- Information	NR	43	33	100	10	25	95
	WH	19	17	00	03	04	00
	NO	38	50	00	87	71	05

\* NR = not reported, WH = wrong heading, NO = not obtained, NP = not performed.

\*\* NA means not applicable. In this particular case the patient was unable to communicate in any way. Thus, the appropriate action was to leave this section blank.



There were very few insightful comments made, the highest mean for third year subjects being 1.0, and 1.3 for second year subjects (see Appendix H, pp. 413, 414, 432, and 434). Both high means were achieved on the third session in the Plan of the report.

Clarity and presentation. Concerning the clarity and presentation of the reports (see Appendix H for results), statistically significant effects were found for second year groups only. Their mean overall scores, out of 18, from sessions 1 through 3 were 9.4, 12.1, and 12.4, respectively. The overall  $F$ -score was  $F(2,20) = 3.78$ ,  $p < .05$ . Post hoc comparisons revealed significant sessional effects between sessions 1 and 2,  $F(1,20) = 3.06$ ; and 1 and 3,  $F(1,20) = 3.52$ ,  $p < .05$  for both. Further study revealed that the sections which had significant sessional effects were the Objective and Plan,  $F(2,20) = 6.70$  and  $F(2,20) = 6.50$ ,  $p < .01$ , respectively. The mean scores (total score equals 3) for these sections for each session were 1.8, 2.3, and 2.8 for Objective, and 1.3, 2.0, and 1.9 for Plan. Post hoc comparisons (Tukey) revealed a significant sessional effect between sessions 1 and 3,  $F(1,20) = 5.16$ ,  $p < .01$ ; for the Objective section. Significant effects were discovered between sessions 1 and 2,  $F(1,20) = 3.80$ ,  $p < .05$ ; and sessions 1 and 3,  $F(1,20) = 4.28$ ,  $p < .01$ ; for the Plan.

### Discussion

The reports produced by the various groups from session to session are an indicator of their achievement. In general, third year students scored higher than their second year counterparts on all sections. However, with respect to performance improvement, while overall means increased from session to session for both years, only second year groups scored significantly higher from session to session. The small

sample size of third year subjects made it difficult to achieve any statistically significant effects.

Although one of the objectives put forward was that groups would perform satisfactorily on all reports this in fact was not the case. Below are likely reasons for this condition, followed by a general discussion.

- 1) During the first session subjects were trying to learn the mechanics of the game and thus could not perform well. This was evidenced by the fewer number of moves during the first session for all groups as compared to later ones, and the incompleteness of many of the reports written during the first session. Further evidence to support this argument is the fact that when exposed to the same case (Amputee) second years performed better than third years (see Table 12). Second years received the case in their final session while third years received it during their first exposure to the game.
- 2) Groups were only given half an hour to write their reports, which turned out to be inadequate. This problem was voiced by a number of participants during the debriefing, and as observed by the game directors during the sessions.
- 3) Case histories changed from session to session and tended to increase in level of difficulty.
- 4) Group-generated reports were compared to reports written by Occupational Therapists with at least three years clinical experience.

Given these constraints, there did appear to be improvements in the quality of the group reports, particularly in the various sections. Mean scores of the various sections of the report tended to increase from session to session for second years and from first to third session

for third years. Referring to the section entitled Case History, third year subjects performed satisfactorily (70% or higher) during all three sessions, while second year mean scores improved from session to session from unsatisfactory to satisfactory. There was little irrelevant or misplaced information under this heading. Any missing information from third year groups was as a result of failure to report. The situation was somewhat different for second year groups, in that initially the majority of missing information was never reported, in the second session approximately half had never been reported and the other half not obtained, and by the third session all the missing information had been obtained yet not reported. These results would seem to indicate that third years had had a clear understanding of what was to be included in the Case History from the beginning while second year subjects achieved this understanding by the final session.

With respect to Social History, third years performed satisfactorily for all three sessions, the highest mean occurring during the final session. On the other hand, second years improved significantly between sessions 1 and 2, and 1 and 3, achieving a satisfactory score by the final session. This improvement appeared to be due to a significant increase in the amount of correct information reported. In addition there was a decline in the amount of irrelevant or misplaced information reported under this heading ( $M_s = 1.8, 1.1, 0.1$ , respectively). Interestingly, for both years the majority of missing information was initially due to a failure to obtain it; however, by the second session for third years and the final session for second years any missing information had been collected but not reported. These results indicate that by the final session, both years

had a fairly clear understanding of what type of information to include in this section.

Although there were no significant sessional effects for both years for the Subjective session, there appeared to be some interesting differences between the two years. Mean scores were unsatisfactory for all sessions for both years. However, third year students had lower scores from session to session as compared to second years. Third years appeared to have difficulty understanding the purpose of this section. They were more likely to include irrelevant or misplaced information ( $M_s = 2.0, 3.7, -2.0$  for U3;  $M_s = 0.1, 0.1, 0.0$  for U2). In addition, missing information was often not reported or reported under the wrong heading. On the other hand, second years rarely included irrelevant or misplaced information. In general, these students failed to collect the necessary information. The main reason for this is that second years as opposed to third years rarely visited the patient's room where much of the information was collected. This could be attributed to the fact that they had little clinical experience, in which it is a fairly common procedure to visit the patient in his/her room.

The Objective section involved two distinct parts, the first being a report of the OT assessments performed, and the second reporting any significant observations which could affect one's treatment plan. Overall the third years performed significantly better by the third session, finally achieving a satisfactory result. This was due to a combination of factors; a steady increase in the number of correct assessments, a low incidence of unnecessary assessments performed and inappropriate information reported, as well as an increase in the amount of correct information given during the third session. Interestingly,

third years reported during the debriefing that they found the third case (Head Injury) particularly difficult with respect to choosing the appropriate assessments and formulating a treatment plan. The group dynamics questionnaire also indicated that they found this case to be the most difficult. One might speculate that increased exposure to the game taught them how to get pertinent information for a variety of cases and thus allow more time to think out what necessary assessments to perform.

Overall, second year groups performed significantly better by the third session. This was due to a significant increase in the number of correct assessments and observations reported. However, scores continued to be unsatisfactory. For both years and all sessions the majority of missing assessments were as a result of failure to perform them. However, there was a tendency for second years to fail to report the results of the assessments in their entirety. With respect to missing observations for both years, a substantial proportion of the information was not obtained during the first two sessions. However, by the third session almost all the missing information was as a result of failure to report.

Study of the Analysis section revealed that both years did poorly during all sessions with no significant sessional effects. In general scores for third years were only slightly higher than those of second years. A closer investigation revealed that third years had difficulty formulating opinions that matched those of the "model" report. Second year groups showed a significant increase in the number of opinions corresponding to the "model" report during the third session. However, there was a tendency to include irrelevant or misplaced information

( $M_s = 2.1, 1.5, 1.0$ ). These results along with remarks made repeatedly during the debriefings (second year subjects in particular) indicated that subjects had difficulty understanding what they were supposed to write in this section, as well as how to analyze the information obtained and provide a professional opinion concerning the patient and his/her treatment. It is likely that this ability only emerges with experience in the field; thus providing a challenge for students who as a rule have little clinical experience. The implications of these results for the game will be discussed in Chapter Six.

In general, the Plan is considered to be the most important aspect of any Occupational Therapy report. A good Plan is dependent on two factors: how well one has gathered the necessary information, and how much knowledge one possesses concerning the particular medical condition. In general, the third year Plans matched approximately 50% of the "model" Plan. Additional, insightful goals were rare. Second year groups demonstrated a significant increase in their performance during the final session, which was due to a significant increase in the number of correct goals devised. Second years tended to have a greater number of inappropriate goals as compared to third years. Again, additional insightful goals were rare. Mean scores were low for both years, requiring improvement. One of the reasons why scores might have been low is the fact that many groups left this section to the end and did not have adequate time to finish. Many groups voiced this concern during debriefing sessions.

A final consideration regarding the reports was their clarity and method of presentation. Significant improvement was achieved by second

year groups by the second session. One could surmise that the "model" reports gave the subjects an idea of how to structure and present a report, given that they had little experience in this area. Third years would not be expected to improve significantly given their experience.

Given the results of the reports, it appeared that subjects were becoming more efficient at gathering information, but still had difficulty deciding what information should be incorporated into the report, although this appeared to be improving. The Subjective and Analysis sections appeared to have difficult concepts to understand, and it would seem that further emphasis needs to be placed on these areas during the debriefing.

In general, it is felt that a change in the administration of the game would have resulted in improved scores. The most limiting constraint was the lack of time in which to write the report. An ideal alternative would be to separate the game playing and debriefing session, such that groups could have a day in which to write the report (this would have to be done without the use of books or notes). Another alternative which could be employed is to forewarn the subjects as to the type of case they would receive (in some hospitals this occurs, particularly if there is a waiting list). This would allow them to prepare in advance and hopefully help in the report writing. A third alternative would be to provide instructor feedback on the individual reports.

#### Information Sheets

##### Description

The information sheets provided a recording of the behaviour that occurred within the groups during the actual play of the game. Using

the information sheets, players were expected to record each move taken, providing a reason for the move, recording any disagreements voiced concerning the move, and noting the information obtained after the move had been carried out. Thus, study of the information sheets allows one to recreate the action which took place.

### Scoring Procedure

There is no overall score for this section, because each group's play varies, thus the frequency and nature of each area varies from game to game. Rather, different areas were analyzed in order to ascertain whether or not there were any changes in behaviour from session to session. For example, did the number of disagreements differ significantly from group to group during a session, did their overall frequency change from session to session, etc. These data are both descriptive in that they represent the actual mode of play, and can be used on a comparative basis. Table 16 outlines the different areas analyzed, and a description of how each was scored and tabulated. Please note that the number of reasons, disagreements, and information recorded were dependent on the number of moves a particular group carried out in a given session.

### Results

Those data from the Information Sheets which underwent statistical comparisons were first converted to percentages (except for number of different moves). This was done in order to be able to compare results from session to session, since the number of moves carried out varied from group to group and session to session (see Appendix I for raw scores).

Reasons. Third year groups recorded reasons for their moves 100%



**Table 16.**  
**Scoring Procedure for Information Sheets**

<b>Section</b>	<b>Description</b>
<b>Reason</b>	<p>Count: the number of times a group recorded or failed to record a reason for their move.</p> <p>Type: rating of the type of reason put forward.</p> <p>0 = unsound, ridiculous, or missing;</p> <p>1 = somewhat appropriate requires clarification;</p> <p>2 = good, rational.</p>
<b>Disagree- ments</b>	<p>Count: the number of times a group recorded a disagreement. Type: rating of the type of disagreement put forward.</p> <p>0 = inappropriate, or unclear;</p> <p>1 = suggestion appropriate; however, original move appropriate as well;</p> <p>2 = appropriate, original move inappropriate.</p>
<b>Information</b>	<p>Count: number of times each group recorded or failed to record all the information acquired.</p>
<b>Moves</b>	<p>Count: the total number as well as the number of different moves/actions each group executed. In the case of "telephone calls" only those which were successful, i.e. resulted in access to information, were included.</p>
<b>Locations</b>	<p>Count: the number of necessary locations containing vital information which groups visited or missed (via use of a telephone, consultation, or taxi action card).</p>

Table 16 (cont.)

Section	Description
	<p>Type: the number of different types of moves (to gather information from others) carried out by each group. Rating as follows:</p> <p>0 = unnecessary, no reason to visit/phone location;</p> <p>1 = appropriate, but not a necessary move;</p> <p>2 = necessary move.</p>
Assessments	<p>Count: number of correct and missing assessments as determined by the model report.</p> <p>Unnecessary: number of unnecessary assessments conducted as determined by the model report.</p>
Follow-Up	<p>Often information obtained from the referral, locations, and assessments provided hints or suggestions as to the whereabouts of potentially valuable information concerning the case.</p> <p>Count: the number of times groups followed up or failed to follow up different hints or suggestions received.</p>
Order of Assessments	<p>The actual order in which groups carried out assessments was compared to an "ideal order", and a score was calculated for each group. For each case a chart was devised outlining the "ideal" order in which the necessary assessments should have been performed. There were two types of relationships between assessments: serial and parallel. In a serial relationship assessments have a hierarchical relationship. In a parallel relationship the order of assessments is not a consideration. The term</p>

Table 16 (cont.)

Section	Description
	<p>category 1 was used to denote serial relationships, and the term category 2 was used to denote parallel relationships. In order to assess the performance of each group the following scoring scheme was devised. For each assessment which indicated a:</p> <p>Category 1 relationship: 2 points were added to a group's score.</p> <p>Non-Category 1 relationship (i.e., a group reversed the order thus committing an error. For example, instead of performing a ROM assessment then a Muscle Strength assessment they did the reverse.): two points were subtracted from the group's score.</p> <p>Category 2: 1 point was added to the group's score.</p> <p>Scores started at zero, and were then converted into <u>percentages for comparison purposes between sessions.</u></p>
<p>Order of Information Moves</p>	<p>The actual order of information moves was compared to an "ideal" order and a score given. The Order of Assessments was calculated separately from the Order of Information Moves since in reality assessments are interspersed randomly between collecting information from various sources. One exception was the inclusion of the "Patient Interview" into the Order of Moves. The rationale for this was that the "Patient Interview" should be conducted early on in treatment planning. The same scoring scheme as <u>outlined for the "Order of Assessments" was employed.</u></p>

of the time for all three sessions. Second years recorded reasons 99, 99, and 95 percent of the time over the three sessions, respectively. Table 17 lists the frequencies and their conversion into percentages for the different types of reasons put forward by both years. As expected, analysis of variance indicated no significant sessional effects for either year. Type of reason was studied using Chi square; however, no significance was determined between sessions for each year. However, a statistically significant difference  $\chi^2(2, N = 619) = 22.85, p < .01$ , was found between second and third years by collapsing frequencies of different types of reasons across the three sessions. These results appeared to be due to a higher incidence of good reasons (type 2) for third years as compared to second years.

• Disagreements. The average percentages for the number of disagreements lodged out of the total number of moves made for sessions 1 through 3, in order, were 11, 11, and 18 for third years, and 13, 10, and 3 for second years. No significant sessional effects were found for either groups. Table 18 lists the frequencies and their conversion into percentages for the types of disagreements put forward by both years.

Information. An analysis of variance was carried out on the number of times groups recorded all the information obtained. No sessional effects were found for either year. In order, from sessions 1 through 3, average percentages were 83, 83, and 88 for third years, and 76, 76, and 89 for second years. In general, the majority of information was recorded in its entirety. Incomplete recordings generally lacked one or two points, the majority being recorded.

Moves. The number of moves carried out varied from group to group, session to session, and year to year. In addition the number of

Table 17

Frequency of Different Types of Reasons for Each Session and Year

Type	U3 Session			U2 Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
0	01/02	04/06	03/09	17/15	15/11	32/15
1	22/50	36/50	14/41	65/59	95/68	118/54
2	21/48	32/44	17/50	29/26	30/21	68/31

Table 18

Frequency of Different Types of Disagreements for Each Session and Year

Type	U3 Session			U2 Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
0	02/50	02/25	02/33	02/13	02/15	02/33
1	02/50	01/13	01/17	07/47	08/62	04/67
2	00/00	05/63	03/50	06/40	03/23	00/00

different types of moves, i.e. Assessment, Consultation, Telephone, and Taxi also varied. Table 19 outlines the mean score and standard deviations for the total number of moves executed, as well as the different types of moves executed during each session for each year (see Appendix I, pp, 440 and 454 for raw data).

For both years the least number of moves were executed during the first gaming sessions. In general, standard deviations for the different types of moves executed from session to session for both years were remarkably stable.

With respect to third years the number of correct assessments for sessions 1 to 3 was 12, 14, and 6, respectively. While the mean score was 5.3, 12.0, and 4.5. The majority of unnecessary assessments occurred during the second session. Also the second session had a large standard deviation (5.0) as compared to the other sessions. This was due to the fact that the three groups performed very differently. Group A carried out 7 assessments, group B carried out 12 assessments, and group C carried out 17 assessments (4 assessments were unnecessary).

The number of consultations increased during the second session and remained the same for the third session. In three instances groups failed to abide by the rules and used more consultations than they were allowed (Session 2: one group carried out one extra consultation, another three; Session 3: one group had one extra consultation).

The number of phone calls were approximately the same for the first and third session, being slightly lower during the second session. The number of Taxi moves was very low for each session, 0.0, 0.7, and 0.0, respectively. The mean scores for the number of moves carried out was 14.7, 24.0, and 17.0. In the final session the standard deviation was

Table 19

Mean Scores for Total Number of Moves and Different Types of Moves

Move		U3			U2		
		Session			Session		
		1	2	3	1	2	3
Assessments	<u>M</u>	5.3	12.0	4.5	7.3	10.3	13.3
	<u>SD</u>	2.3	5.0	0.7	1.1	1.8	2.3
Consultation	<u>M</u>	5.7	8.7	8.5	4.8	6.9	9.3
	<u>SD</u>	2.1	2.5	0.7	2.3	2.0	2.2
Telephone	<u>M</u>	3.7	2.7	4.0	1.0	2.3	4.4
	<u>SD</u>	1.5	1.5	0.0	1.2	1.5	1.8
Taxi	<u>M</u>	0.0	0.7	0.0	0.8	0.6	0.4
	<u>SD</u>	0.0	0.6	0.0	0.5	0.8	0.5
Total	<u>M</u>	14.7	24.0	17.0	13.9	17.7	27.3
	<u>SD</u>	4.0	4.0	0.0	2.6	6.6	3.0

0.0, due to the fact that only two groups participated, and both carried out the same total number of moves.

For second years, with the exception of Taxi moves, there was an increase from session to session in the different types of moves carried out. The correct number of assessments was 11, 14, and 12, respectively; while the mean scores were 7.3, 10.3, and 13.3. There was an increase (52-88%) in the number of correct assessments carried out from session to session. However, the majority of unnecessary assessments (18%) were carried out in the final session.

The number of consultations increased across the three sessions, 4.8, 6.9, and 9.3, respectively. As with the third years some groups failed to abide by the rules and carried out more consultations than they were allowed (Session 1: one group carried out one extra consultation; Session 2: two groups carried out one extra consultation; Session 3: one group carried out one extra consultation, two groups carried out three extra, and one group five). These results are discussed later.

The number of phone calls increased across the sessions, 1.0, 2.3, and 4.4, respectively (see p. 121 for a discussion of these results). The number of taxi moves was low for each session, 0.8, 0.6, and 0.4, respectively. The mean scores for total number of moves was 13.9, 17.7, and 27.3.

Necessary locations, Table 20 outlines the frequency and percentages of vital locations phoned or visited. The average percentages for vital locations phoned or visited by second years from sessions 1 through 3 were 28, 51, and 73, respectively. A one way analysis of variance was performed which indicated statistically



Table 20

Frequency of Necessary Locations Phoned or Visited

Locations	U3			U2		
	Session			Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
Correct	21/54	21/78	13/81	20/28	32/51	76/73
Missing	18/46	06/22	03/19	52/72	31/49	28/27
Total	39/100	27/100	16/100	72/100	63/100	104/100

significant sessional effects,  $F(2,20) = 16.18$ ,  $p < .01$ . No significant sessional effects were found for third years whose average percentages were 54, 78, and 81 from sessions 1 to 3.

Post hoc comparisons (using the Tukey method) were carried out for second years which revealed a significant effect between all sessions. F-scores were as follows:  $F(1,20) = 3.92$ ,  $p < .05$ , between sessions 1 and 2;  $F(1,20) = 7.94$ ,  $p < .01$ , between sessions 1 and 3; and  $F(1,20) = 3.75$ ,  $p < .05$ , between sessions 2 and 3.

Type of move. Table 21 outlines the raw frequencies and their conversion to percentages for the different types of moves carried out by both years. Type of move was analyzed using Chi square which revealed significant differences for both years. Third years had a score of  $\chi^2(4, N = 89) = 18.43$ ,  $p < .01$ . This significant difference appeared to be due to two factors: 1) a decrease in the percentage of necessary moves (type 2) from the first session; and 2) a gradual increase in the percentage of somewhat appropriate moves (type 1) from sessions 1 to 3. Second years had a score of  $\chi^2(4, N = 231) = 26.65$ ,  $p < .01$ . These results appeared to be due to a decrease in the percentage of somewhat appropriate moves (type 1) during the third session, and an increase in the percentage of necessary moves (type 2) from sessions 1 to 3.

Assessment. The average percentages for necessary assessments carried out from sessions 1 through 3 were 44, 74, 67 for third years; and 60, 73, and 92 for second years. A one-way analysis of variance revealed statistically significant improvement in sessional effects for second years only,  $F(2,20) = 15.92$ ,  $p < .01$ . Post hoc comparisons indicated significant effects between all sessions:  $F(1,20) = 3.18$ ,  $p$

Table 21

Frequency of Different Types of Moves During Each Session and Year

Type	U3 Session			U2 Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
0	00/00	03/08	01/04	06/12	02/03	05/04
1	07/25	12/33	11/44	27/52	34/50	31/28
2	21/75	21/58	13/52	19/36	32/47	76/68

$< .05$ ;  $F(1,20) = 8.10$ ,  $p < .01$ ; and  $F(1,20) = 4.55$ ,  $p < .01$ , respectively.

The incidence of unnecessary assessments was found to be low for both years. Table 22 outlines the frequency as well as percentage of unnecessary assessments as compared to necessary assessments carried out during each session by each year.

Follow-up. Overall percentages for information follow-up after the presentation of different hints or suggestions are outlined in Table 23. Raw data for this section is available in Appendix I (pp. 443 and 458).

In the first gaming session both years followed up approximately 50% of the hints or suggestions presented. Third years displayed an increase in information follow-up by the second session (74%); while second years showed an increase in information follow-up across all three sessions, 52%, 67%, and 93%. The discrepancy between the performance of second and third years in the final session may be attributable to the subjects familiarity with the particular case history presented. Third years were given a case history (head injury) which they found particularly challenging, since they had little knowledge of or experience with head injuries. In comparison, second years received a case history (amputee) for which they had had a number of lectures a few months prior to the study. The implications of case familiarity with respect to the use of the simulation-game will be dealt with in the General Discussion (Chapter Six).

Order of Assessments and Information Moves. With respect to the Order in which Assessments and Information Moves were carried out, negative scores were possible and did occur. However, in order to carry out statistical analyses, all needed to be converted to percentages, the

Table 22

Frequency of Unnecessary and Necessary Assessments for Each Year

Type	U3 Session			U2 Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
Unnecessary	00/00	05/14	01/10	07/12	00/00	18/17
Necessary	16/100	31/87	08/90	52/88	72/100	88/83
Total	16/100	36/100	09/100	59/100	72/100	106/100

Table 23

Frequency of Follow-up of Different Hints for Both Years

Follow-up	U3 Session			U2 Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
Yes	20/57	28/74	06/75	24/52	26/67	90/93
No	15/43	09/26	02/25	22/48	13/33	07/07
Total	35/100	37/100	08/100	46/100	39/100	97/100

lowest being zero. Thus, some information was lost. The occurrence of negative scores was infrequent and restricted to the category Order of Assessments. The occurrences were twice for third years ("-19" in session 2, and a "-01" in session 3), and once for second years ("-03" in session 1). The only negative score which could have had a profound effect on the amount of information lost was -19 (group A, session 2). This poor score was due to the fact that for the most part the assessments were performed in the reverse of the correct order, for example an assessment which should have been performed first (namely Patient Interview) was performed second to last. In addition, the group (A from session 2) performed only 43% of the necessary assessments.

Average percentages for Order of Assessments from sessions 1 to 3 were 4, 5, and 9 for third years and 18, 27, and 43 for second years. One way analysis of variance revealed statistically significant positive sessional effects for second years only,  $F(2,20) = 4.84$ ,  $p < .01$ . Post hoc comparisons indicated significant effects between sessions 1 and 3,  $F(1,20) = 4.37$ ,  $p < .01$ .

Average percentages for Order of Information Moves from sessions 1 through 3 were 17, 34, and 43 for third years; and 08, 23, and 27 for second years. One way analysis of variance revealed significantly better sessional effects for second years only,  $F(2,20) = 5.01$ ,  $p < .01$ . Post hoc comparisons indicated significant effects between sessions 1 and 2,  $F(1,20) = 3.34$ ,  $p < .05$ ; and sessions 1 and 3,  $F(1,20) = 4.15$ ,  $p < .01$ .

### Discussion

The format of the information sheets appeared to be effective, as evidenced by the general compliance of the groups in filling it out.

The behaviour of the groups in recording moves executed, reasons, disagreements, and information obtained did not vary significantly from session to session for either year.

Reasons. No group failed to record any of the moves executed. Third years always recorded the reason for their move, while second years recorded their reasons 95 to 99% of the time. No significant differences were found for the type of reasons given for each session. However, a significant difference (using Chi square) was found between the years. Third years were equally likely to provide a somewhat appropriate (type 1) or good reason (type 2), rarely providing an inappropriate one (type 0). Second years were most likely to give a somewhat appropriate reason, and had a higher incidence of inappropriate reasons as compared to third years. This difference between years was not surprising as third years were expected to provide sounder reasons for their actions given their clinical experience. The implications of these results with respect to the simulation-game will be discussed in Chapter Six.

Disagreements. Disagreements were rarely recorded by either year. Types of disagreements recorded appeared to differ significantly from first to second session for third years, in that the majority of disagreements were appropriate (type 2) for the second session while none were for the first. An opposite trend was discovered for the second years. During the first session a large percentage (40%) of disagreements were appropriate, but this decreased from session to session, such that by the third session no appropriate disagreements were given. However, caution must be exercised in interpreting these data, in that the total number of disagreements was very small and had

to be converted into percentages before being analyzed statistically. Thus, the likelihood of finding a significant difference was high, though its importance is low.

Format of information sheets. The format of the Information Sheets provides the instructor with a means of evaluating student logic. One difficulty with this method of recording is that one is unable to assess whether or not all disagreements voiced were recorded. One suggestion put forward by a third year subject to solve this problem was to have group members keep a private record of their disagreements. However, a number of problems can be foreseen with this suggestion. Firstly, it could interrupt the flow of the game as well as group cohesion in that individual members would withdraw to record their disagreements. Second there might be a tendency for subjects to refrain from voicing their disagreements to the group. By not assuming responsibility for bringing up disagreements a group's performance could suffer in that members would be unaware of other possibilities.

An alternative suggestion is to have the instructor increase the incentive of subjects to record their disagreements, by providing group feedback regarding disagreements lodged and stressing the importance of recording disagreements. However, this is rather time consuming for the instructor.

An important question to pose here is how desirable is it to have subjects record all their disagreements. To reiterate one of the objectives of the simulation-game is to provide students with opportunities to cooperate and make decisions as a group in analysing information, planning treatment programs, and writing reports. Thus in employing the simulation-game one wants groups to work out any



disagreements and solve their own problems. If individuals maintained a private record of their disagreements, groups would be less likely to be aware of, let alone work out any disagreements. Employing the second suggestion would likely encourage subjects to compete with one another to make sure that the instructor looked favourably on the disagreements they put forward, thus disrupting group cohesiveness.

The main reasons for having subjects record their disagreements is to promote discussion among group members concerning a particular move, to recreate the behaviour that occurred during the game, and to aid the instructor in evaluating group thinking. It is not meant to create dissension, or to interrupt the flow of the work, or to evaluate group cohesiveness. In fact the Group Dynamics questionnaire provides a much better indicator of group cohesiveness and the need to change group membership (please note that in this study group membership rotated from session to session). It should be noted that in general from session to session, group members were satisfied with their group and its performance. In fact there was no correlation between number of disagreements lodged and satisfaction with their group.

In summary, although it is difficult to assess whether or not all disagreements were recorded, it is felt that this method as opposed to other methods suggested does not interfere with group cohesiveness, and encourages members to discuss alternatives and work out any problems.

Incomplete recordings of information was likely due to the fact that subjects found this task time consuming. In fact, when asked in the Attitude questionnaire "What do you like least about the simulation-game?", 63% of third years and 20% of second years stated it was rewriting the information obtained. Unfortunately it is unclear,

whether subjects disliked recording the information onto the information sheet or from the information sheet to the report. When asked "How would you change the game?", 8% of second years said they would decrease the amount of writing required. One solution, as suggested by a subject matter expert, would be to place information from the PIB on separate removeable cards. This would decrease the amount of writing and increase the speed of the game. However, in reality Therapists are expected to record any information obtained. Thus, by giving the students the information, one runs the risk of not knowing whether or not subjects are likely to record all the information obtained. A suitable compromise would be to include removeable cards, but have the instructor decide whether or not students should record the information themselves or use the cards. Thus, if the instructor is under time constraints, the cards would be used. However, if s/he is more concerned with simulating reality and stressing the importance of recording information, then s/he would have the students record the information.

Moves. The number of moves executed during a session was directly dependent on the case history being studied. However, both years executed the least number of moves during the first gaming session. This was felt to be attributable to the fact that subjects were learning the game procedures.

With respect to third years the number of assessments carried out appeared to be a direct function of the case history for the second and third sessions. The number of correct assessments were 12, 14, and 6, respectively; while the mean scores were 5.3, 12.0, and 4.5.

The decrease in number of phone calls during the second session was

probably attributable to the fact that more assessments were required and carried out during the second session as opposed to the other sessions (note that time to play the game was often a constraint). The low incidence of Taxi moves for each session was a direct result of the case histories. The minimum number of moves for the three sessions in order, was 25, 23, and 14. The mean scores for the number of moves carried out was 14.7, 24.0, and 17.0. Thus, it is felt that with the exception of the first session (in which moves were sacrificed as a result of learning the game) the number of moves executed was as a result of the case history.

For second years, with the exception of Taxi moves, there was an increase from session to session in the different types of moves carried out. This appeared to be attributable to both increased efficiency and the particular case. An interesting phenomena concerned the carrying out of assessments. Although there was an increase (52-88%) in the number of correct assessments carried out from session to session; the majority of unnecessary assessments (18%) were carried out in the final session. There are two reasons why this could have happened: 1) as subjects became more efficient they had more time to carry out assessments and therefore did extra unnecessary ones; and/or 2) they had difficulty discerning whether or not certain assessments were necessary or not in this particular case. Interestingly, the number of phone calls increased across the sessions. In general, for each case approximately 4-6 phone calls could elicit important information. It is felt that the use of a chance factor (roll of the die) to allow for a telephone call initially discouraged subjects from using this action card. However, by the final session second years were making on average

4.4 phone calls, indicating that they had learned the value of making phone calls. The low number of Taxi cards used reflected directly on the case histories employed. The minimum number of moves required for each session was 20, 23, and 25, respectively. The mean scores for total number of moves was 13.9, 17.7, and 27.3. This increase appeared to reflect on increased efficiency as well as on requirements of the particular case under study.

An interesting phenomenon occurred with respect to the consultation action cards. In both years, groups were given eight consultation cards to use. However, it was discovered that in certain instances subjects recorded playing more than eight consultation cards. There are three possible explanations for this finding. First, subjects may have mistakenly recorded their move. That is, they may have played a telephone card but recorded the move as being executed using a consultation card. In fact, in nine instances the same information would have been obtained using a telephone card. The second explanation is that subjects may have neglected to discard their action cards, thereby replaying the same cards. Finally, subjects may have purposefully disobeyed the rules for one of two reasons: 1) play of a consultation card guaranteed success as opposed to a telephone card or 2) a desired location could only be accessed using a consultation card (this is true of nine locations), thus players wanting to access such a location after playing all their consultation cards might be tempted to disobey the rules. In fact in seven instances the extra consultations accessed such locations.

It is difficult to determine whether any particular group purposely disobeyed the rules or not. However, out of a total of 21 extra

consultations in nine instances the same information could have been accessed by telephone, in 10 instances the information obtained was not necessary, and in two instances the information was necessary however the group failed to incorporate it into their report. Therefore, although certain groups carried out extra consultations they did not have an advantage over those who abided by the rules with respect to the reports generated. Chapter Six discusses the implications of these findings on the use of the simulation-game.

Locations. Average percentages of correct locations phoned or visited increased for both years, with third years performing better than second years. Second years improved significantly from session to session, doing poorly in the first session but scoring satisfactorily (higher than 70%) by the third. Third years scored satisfactorily by the second session. With respect to type of move executed, significant differences were found for both years. Each year rarely executed any unnecessary moves. Interestingly, third years performed an increasing number of somewhat appropriate moves (type 1) from session to session. This result coupled with the observation that there was an increasing number of correct places visited/phoned suggests that as third years became more proficient at gaining necessary information, they began to explore more locations. On the other hand, second years showed an increase in the number of necessary moves coupled with a decrease in the number of somewhat appropriate moves across the three sessions. These results suggest that second years were becoming more proficient at locating necessary information but were not at the level of exploring.

Ideal Order of Assessments and Information Moves. With respect to the Ideal Order of Assessments and Information Moves, the scoring

procedure provided a good description of the strategies groups employed. Unfortunately this was not accurately reflected in the statistics due to conversion problems with negative scores (this only affected Order of Assessments). Keeping this in mind it was noted that third years scored very poorly for all sessions with respect to Order of Assessments. It is felt that third years did not take this into consideration when playing the game. On the other hand second years had higher scores than third years for each session and had improved significantly by the third session. One reason why this difference could be accounted for, is the fact that during the debriefing sessions second years voiced concerns about the order in which assessments should be performed, requesting that some sort of feedback be provided, whereas third year students did not discuss the order. Thus, an increased awareness of the order may have affected their actions and resulted in improved performance. Therefore, the game should stress the importance of the order in which assessments are performed, and the value of the debriefing in providing and reinforcing specific skill development.

The Ideal Order of Information Moves was not as case specific as that of the Order of Assessments; in that, certain general principles apply with respect to their order. For example, no matter what medical condition a patient may have, one of the first actions that a therapist will carry out upon receiving a referral is to read their medical chart. The reason for this is that much valuable information on the patient is contained in the chart. Average percentages for the Order of Information Moves increased for both years (17-43% U3, 8-26% U2). These results suggest that interaction with the simulation-game made subjects aware of where they were most likely to obtain valuable information.

The game does not and is not designed to teach subjects what order Assessments and Information Moves specific to a particular case should be carried out, but rather only that the order is important to consider. Although subjects may notice that certain locations (i.e., Medical Chart, Ward Meetings) are more likely to provide valuable information; much of this information is case specific and can only be learned after the fact. Groups should be given feedback regarding their performance in comparison to the Ideal Order by either providing each with a copy of the Ideal Order of Assessments and Information Moves, or having the instructor provide feedback either in the debriefing or later on to each group.

In summary it is felt that the Information Sheets provide the subjects with a means of clearly and effectively executing moves and recording information. While at the same time providing the instructor with a powerful tool for evaluating group performance. The Information Sheets allow the instructor to recreate the events that occurred within a group during a particular session. In addition the instructor is able to gain valuable insight into their reasoning abilities and logic in gathering information. By comparing the Information Sheets to the corresponding report the instructor can diagnose different groups' understanding of a particular case history as well as their general strengths and weaknesses. For example, a group may write good reports but execute their moves haphazardly, while another group may execute moves in a systematic, logical order but have no idea what information to include in a report. This insight is rarely available in the classroom setting and may not always be picked up in clinics. Thus, by using this method of evaluation instructors can quickly find out

weaknesses and work to remedy this; thus better preparing their students for field work.

### Group Dynamics Questionnaire

#### Description

The Group Dynamics Questionnaire was administered at the end of each gaming session. The purpose of this questionnaire was to obtain information concerning the dynamics of each group, as well as each subject's reaction to the particular case used. Each subject answered the questionnaire anonymously, indicating only group membership. Questionnaires were collected immediately upon completion.

#### Scoring Procedure

The questionnaire was comprised of 21 semantic differential questions, 2 scaled items, 3 closed form items, and 2 open ended questions. Additional comments were also invited. No composite score was calculated. Rather, individual items were scored separately. Table 24 provides a description of each question and outlines the scoring procedure employed.

#### Results

Statistical analysis of the semantic differential and scaled items proved to be challenging. The data collected are considered to be ordinal therefore demanding the use of nonparametric tests. However, this proved to be impossible to do. Initially an attempt was made to perform Chi square analyses. However n-sizes differed from one session to the next. Thus, frequencies were converted to percentages. Unfortunately n-sizes were so small and very few subjects gave extreme scores, so the expected frequencies dropped below the minimum required. The result was that most of the questions achieved statistical



Table 24

Scoring Procedure for Group Dynamics Questionnaire

Type	Description
Semantic Differential	<p>Questions 1 to 21 were designed to gain information concerning each subject's opinion of: his/her group (1-8); the group's performance (9-11), and his/her participation in the group (12-21). A 7 point scale was employed, and subjects received a score from 1 to 7 which corresponded to the place which they had checked off. The scores given in each position for each question were as follows:</p> <p>A. Your view of your group.</p> <p>1. superior <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : inferior</p> <p>2. good <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : bad</p> <p>3. successful <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : unsuccessful</p> <p>4. lazy <u>7 : 6 : 5 : 4 : 3 : 2 : 1</u> : hard working</p> <p>5. cooperative <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : uncooperative</p> <p>6. *bungling <u>7 : 6 : 5 : 4 : 3 : 2 : 1</u> : skillful</p> <p>7. cautious <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : **rash</p> <p>8. serious <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : silly</p> <p>* changed to clumsy when administered to OT U2</p> <p>** changed to impulsive when administered to OT U2</p> <p>B. Your view of your group's report.</p> <p>9. poor <u>7 : 6 : 5 : 4 : 3 : 2 : 1</u> : good</p> <p>10. successful <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : unsuccessful</p> <p>11. complete <u>1 : 2 : 3 : 4 : 5 : 6 : 7</u> : incomplete</p>

Table 24 (cont.)

Type	Description
	C. Your participation in your group's decision making.
12.	active <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : passive
13.	unwilling <u>7</u> : <u>6</u> : <u>5</u> : <u>4</u> : <u>3</u> : <u>2</u> : <u>1</u> : willing
14.	influential <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : noninfluential
15.	successful <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : unsuccessful
16.	meaningful <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : meaningless
17.	dominant <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : lax
18.	sufficient <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : insufficient
19.	leading <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : following
20.	critical <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : indiscriminate
21.	useful <u>1</u> : <u>2</u> : <u>3</u> : <u>4</u> : <u>5</u> : <u>6</u> : <u>7</u> : useless

## Scaled

Questions 22 and 26 were scaled items. Subjects were asked to check the place on the scale that best reflected their opinions about the statement. Below are the questions and how they were scored.

22. Was there conflict within your group?

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
a lot	some	not much	none

26. The case history was

<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>
too easy	fairly easy	not very easy	very difficult

Table 24 (cont.)

Type	Description																						
Closed	<p>Questions 23-25 are of the closed form type in which choice of answers is discrete. Listed below is the scoring procedure for each question.</p> <p>23. Who made the majority of decisions in the group?</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 25%;"><u>1</u></td> <td style="text-align: center; width: 25%;"><u>2</u></td> <td style="text-align: center; width: 25%;"><u>3</u></td> <td style="text-align: center; width: 25%;"><u>4</u></td> </tr> <tr> <td style="text-align: center;">one person</td> <td style="text-align: center;">two people</td> <td style="text-align: center;">each person took a turn</td> <td style="text-align: center;">the group as a whole</td> </tr> </table> <p>24. Would you have performed better without the group?</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 33%;"><u>1</u></td> <td style="text-align: center; width: 33%;"><u>2</u></td> <td style="text-align: center; width: 33%;"><u>3</u></td> </tr> <tr> <td style="text-align: center;">yes</td> <td style="text-align: center;">no</td> <td style="text-align: center;">the same</td> </tr> </table> <p>25. Would you have preferred to play the game</p> <table style="width: 100%; border: none;"> <tr> <td style="text-align: center; width: 25%;"><u>1</u></td> <td style="text-align: center; width: 25%;"><u>2</u></td> <td style="text-align: center; width: 25%;"><u>3</u></td> <td style="text-align: center; width: 25%;"><u>***4</u></td> </tr> <tr> <td style="text-align: center;">alone?</td> <td style="text-align: center;">with a different group?</td> <td style="text-align: center;">with the same group?</td> <td style="text-align: center;">in any group?</td> </tr> </table> <p>*** This choice added during the last session with third years, and used with second years.</p>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	one person	two people	each person took a turn	the group as a whole	<u>1</u>	<u>2</u>	<u>3</u>	yes	no	the same	<u>1</u>	<u>2</u>	<u>3</u>	<u>***4</u>	alone?	with a different group?	with the same group?	in any group?
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>																				
one person	two people	each person took a turn	the group as a whole																				
<u>1</u>	<u>2</u>	<u>3</u>																					
yes	no	the same																					
<u>1</u>	<u>2</u>	<u>3</u>	<u>***4</u>																				
alone?	with a different group?	with the same group?	in any group?																				
Open Ended	<p>Questions 27 and 28 are open ended questions. The percentage of subjects who made similar comments from one session to the next was calculated. Comment categories were created as they emerged, and were identified by the author.</p> <hr/> <p>Additional Comments Additional comments were invited. The percentage of subjects who made similar comments from one session to the next was calculated. Comment categories were created as they emerged, and were identified by the author.</p> <hr/>																						

significance, proving that in this particular circumstance the Chi square test had little discriminatory ability. The next step was to explore other nonparametric tests. The only appropriate one appeared to be the Kruskal-Wallis test. Unfortunately, the data violated the assumption of few or no tied ranks. The only feasible alternative was to employ a one way analysis of variance. Thus, the data were treated as interval data. However, an alpha of .01 was employed in order to restrict the likelihood of assuming significant sessional effects.

Concerning questions 1-21, one way analyses of variance revealed significant sessional effects for second years for questions 1 (superior/inferior), 3 (successful/ unsuccessful), 9 (good/poor), 10 (successful/unsuccessful), 11 (complete/incomplete), and 21 (useful/useless). F-scores for these scores were as follows:  $F(2,68) = 10.90$ ,  $F(2,68) = 17.08$ ,  $F(2,68) = 16.43$ ,  $F(2,68) = 9.14$ ,  $F(2,68) = 26.67$ ,  $F(2,68) = 7.14$ , respectively, all  $p < .01$  for all questions. All responses changed toward the more positive direction. There were no significant sessional effects for third years. Table 25 outlines the means and standard deviations for those questions which were significant (see Appendix J for raw data and means and standard deviations of the other questions).

Post hoc comparisons indicated significant sessional effects between sessions 1 and 2, and 1 and 3 for questions 3, 9, 10 and 11; and between sessions 1 and 3 for questions 1 and 21. Table 26 outlines the significant F-scores for these questions.

Table 27 outlines the frequency and percentages of scores for questions 22 to 26. For a review of these questions refer back to Table 24.

Table 25

Means and Standard Deviations for Significant Semantic DifferentialQuestions.

Question		U2		
		Session		
		1	2	3
1	<u>M</u>	3.3	2.7	2.3
	<u>SD</u>	0.9	0.7	0.7
3	<u>M</u>	2.7	2.5	1.6
	<u>SD</u>	0.7	0.8	0.5
9	<u>M</u>	3.1	2.8	1.7
	<u>SD</u>	1.0	1.1	0.6
10	<u>M</u>	3.0	2.8	1.8
	<u>SD</u>	1.0	0.9	1.2
11	<u>M</u>	3.9	3.7	1.9
	<u>SD</u>	1.2	1.1	0.7
21	<u>M</u>	2.3	2.2	1.7
	<u>SD</u>	0.7	0.6	0.6

Table 26

Post Hoc Comparisons for Semantic Differential Questions for U2 Subjects

Between Sessions	Questions					
	1	3	9	10	11	21
1 and 2	2.48	**6.44	**5.79	**4.70	**8.33	*3.69
1 and 3	**6.39	**8.12	**7.61	**5.83	**9.56	**4.58
2 and 3	*3.75	1.44	1.59	0.95	0.94	0.75

\*  $p < .05$ .\*\*  $p < .01$ .

Table 27

Frequency of Scores for Questions 22 to 26 for Both Years

Question	Score	U3			U2		
		Session			Session		
		1	2	3	1	2	3
		f/%	f/%	f/%	f/%	f/%	f/%
22	1	01/11	00/00	00/00	00/00	00/00	00/00
	2	03/33	00/00	02/29	01/04	01/05	02/08
	3	05/56	05/63	05/71	16/64	11/50	09/38
	4	00/00	03/38	00/00	08/32	10/45	13/54
23	1	01/11	00/00	00/00	00/00	00/00	00/00
	2	01/11	02/25	00/00	04/15	00/00	02/08
	3	01/11	01/13	03/43	*03/12	04/18	06/25
	4	06/67	05/63	04/57	*19/73	18/82	16/67
24	1	01/11	00/00	01/14	00/00	00/00	00/00
	2	08/89	06/75	04/57	21/84	15/68	*16/64
	3	00/00	02/25	02/29	04/16	07/32	*09/36
25	1	00/00	00/00	00/00	00/00	00/00	00/00
	2	01/11	00/00	00/00	00/00	00/00	00/00
	3	08/89	07/88	05/71	04/16	06/27	01/04
	**4	00/00	01/13	02/29	21/84	16/73	23/96

Table 27 (cont.)

26	1	00/00	00/00	00/00	00/00	00/00	00/00
	2	04/44	03/38	01/14	14/56	*12/52	17/79
	3	05/56	05/63	06/86	11/44	*11/48	07/29
	4	00/00	00/00	00/00	00/00	00/00	00/00

\* One subject gave two different responses to the same question.

\*\* This category was added during the last session for third years, and was incorporated into the second year questionnaire. Please note that one third year subject in the second session suggested this category giving this response.



Questions 22 and 26 were scaled items, therefore mean scores could be calculated. For question 22, mean scores from sessions 1 to 3 were 2.4, 3.4, and 2.7, respectively, for third years; indicating that there was little conflict within groups. For second years the mean scores from sessions 1 to 3 were 3.3, 3.4, and 3.5, respectively, indicating that there was very little conflict within groups. With respect to question 26, mean scores from sessions 1 to 3 were 2.6, 2.6, and 2.9, respectively, for third years; indicating that the third case history was the most difficult, while for second years the mean scores were 2.4, 2.5, and 2.3, respectively, indicating that all case histories were perceived as being equally difficult.

A one way analysis of variance was performed on both these questions. No significant effects were found for either question for both years.

Referring back to Table 27, one can see that for each session and year, the majority of subjects indicated that most decisions were made by the group working together (from sessions 1 to 3: 67%, 63%, and 57% for OT U3, and 73%, 82%, and 67%, for OT U2, respectively). The second most frequent response was that each person took a turn in making decisions (from sessions 1 to 3: 11%, 13%, and 43% for OT U3, and 12%, 18%, and 25% for OT U2, respectively). Only rarely did subjects attribute the majority of decision making to two people, and only once was it attributed to one person.

Question 24 asked subjects whether they would have performed better without the group. For both years and all sessions the majority of subjects said no (from sessions 1 to 3: 89%, 75%, and 57% for OT U3, and 84%, 68%, and 64% for OT U2, respectively). The second most

frequent response was that subjects would have performed the same without the group (from sessions 1 to 3 in order, 0%, 25%, and 29% for third years, and 16%, 32% and 36% for second years). Only twice did subjects state that they would have performed better without the group. Both responses were made by two different third years during the first and third sessions.

Initially subjects could only choose one of three responses to question 25. However, it was determined that a fourth choice was missing. This choice was officially introduced during the third session for third years and kept for the second year sessions. Please note that the third year subject who suggested this choice gave it as her response during the second session. Thus, the majority of third years preferred to play with the same group for each session (89%, 88%, and 71%, respectively), while the majority of second year preferred to play the game with any group (84%, 73%, and 96%). No subject preferred to play the game alone, and only once (first session, third year) did a subject wish they had played with a different group.

Table 28 outlines whether subjects answered yes, no, or abstained from answering the question "Do you feel you had the necessary knowledge and skills to play this game?".

As can be seen from Table 28 the percentage of third years who felt they had the necessary knowledge decreased from session 1 to 3, with an accompanying increase in the number of abstentions; while the opposite was true for second years. Rarely did anyone from either year respond negatively.

Subjects were encouraged to provide comments for question 27.

Individual comments appear in Appendix J. Please note that a subject

Table 28

Frequency of Responses to Question 27

Response	U3			U2		
	Session			Session		
	1	2	3	1	2	3
	f/%	f/%	f/%	f/%	f/%	f/%
Yes	08/89	05/63	02/29	11/44	10/45	20/83
No	00/00	01/13	01/14	01/04	02/09	01/04
Abstained	01/11	02/25	04/57	13/52	10/45	03/13

can make more than one comment. In general, the majority of comments were made during the first session for both years. During the first session, six out of nine third years provided comments. Fifty-six percent (calculated out of nine) made one or more comments suggesting that they lacked knowledge of hospital procedures, services, and personnel as well as skill in gathering information. During the second session 27% stated that they required more knowledge of the type of assessments one should carry out with respect to the case in question. No other comments were made during this session. For the third session 86% felt that they lacked knowledge concerning different aspects of the case under study (e.g., pathology, prognosis, OT treatments, necessary assessments).

During the first gaming session 17 out of 25 second years provided comments. The majority of comments made concerned their general ability to play the game. Thirty-one percent stated they required further knowledge and/or skills with respect to one or more aspects of gathering information (e.g., how, where, and in what order). Twelve percent stated they lacked experience in applying theory, and 12% felt they required a better understanding of the SOAP method of report writing. During the second session, 55% felt they lacked knowledge concerning various aspects of the particular case under study (e.g., pathology, prognosis, OT treatment, necessary assessments). In the final session only 4 out of 24 subjects commented. Twelve percent (calculated out of 24) stated they required further knowledge of the case history, particularly pathology, prognosis, and OT treatment.

Question 28 asked subjects what if anything had they learned during a particular gaming session (see Appendix J for individual comments).

The majority of third years (56%) stated that during the first session they had learned the importance of some aspect of information gathering (how, where, what, and why). Thirty-three percent stated they had learned what assessments were necessary for this particular case. During the second session few comments were made. However, 27% felt they gained knowledge of the particular case history. For the third session all subjects felt they had learned more about different aspects of the particular case history (e.g., pathology, prognosis, necessary assessments, and OT treatment).

In the first session, 80% of second years felt they had learned about one or more aspects of information gathering (e.g., how, where, what, and why). Twenty-percent stated that they had learned something about the SOAP method of report writing. During the second session 19 out of 22 provided comments. Forty-one percent of subjects stated that they had learned about one or more aspects of the case history. Eighteen percent said they had learned to be specific when planning treatment goals, and 14% said they had learned more about the SOAP method of report writing. In the last session 19 out of 24 subjects made one or more comments. Thirty-three percent felt they had learned more about information gathering, 29% about report writing, and 25% about the particular case history.

All subjects were encouraged to write any additional comments (see Appendix J) during each session. Thus, subjects were given an opportunity to present those aspects of the game that stood out most strongly in their mind. The majority of independent comments were written during the first session for both years. For the first session, 44% of third years felt compelled to state that they found the game to

be an enjoyable experience, 33% found it to be an interesting educational tool, 22% felt it promoted cooperativeness, and 22% stated it was relevant for OT students. One subject stated that the McGill program does not provide students with the necessary knowledge and skills needed to play the game. During the second and third session 22% independently commented that the game was a good learning experience. In the final session one subject stated that the game did not simulate reality in that it does not allow one to carry out more than one assessment at a time. Another subject stated that the game allows one to assess whether they can handle a patient with a given condition without having much experience/knowledge of the condition.

In the first session 18 out of 25 second years made additional comments. Thirty-two percent commented that they found the game to be a good educational tool, 16% found it to be a good learning experience, 16% thought it was fun, 16% felt it could prepare OT students for clinical work, and 12% stated it simulated reality. During the second session only 9 out of 22 subjects made any comments. Twenty-three percent (calculated out of 22) felt that it was easier to play, 14% thought it was fun, 9% felt they needed further practice in writing reports, 9% found the plan of the report very detailed, and 9% felt they did not have enough time to execute all the desired moves. In the final session 19 out of 24 subjects provided comments; however, these comments were very diverse. Therefore, only those comments made by two or more subjects are presented. Thirteen percent found the simulation-game fun, 13% found it easier to play, 8% thought it was a good educational tool, 8% felt it would help prepare them for clinical work, and 8% stated it taught them how and where to gather information for planning an OT

treatment program. Note that the above comments were unsolicited and reflect how individual subjects viewed the game. The percentages are calculated on the total sample, although only a subset responded to this section. In this light, a relatively large portion of learners felt compelled to remark upon those aspects of the game.

### Discussion

The purpose of the group dynamics questionnaire was three fold; to gain an overall understanding of the group dynamics which took place, to identify any problems which may have occurred in a given group, and to assess the perceived level of difficulty of the various case histories.

Subjects views of their group. Despite changes in group membership from session to session, subjects from both years generally had a positive view of their group; as evidenced by means and standard deviations for each question (refer to Appendix J). The overall means for the first eight questions were 2.5, 2.0, and 2.2, respectively for third years; and 2.3, 2.3, and 1.9, respectively for second years. There was little difference between both years in terms of their answers with the exception of the final session in which third years were less likely to see themselves as cautious ( $\bar{M} = 3.1$  for U3,  $\bar{M} = 2.5$  for U2) and serious ( $\bar{M} = 2.9$  for U3,  $\bar{M} = 1.9$  for U2). Please note that only two third year groups participated in this session, which makes it difficult to draw any conclusions.

A significant positive sessional effect was discovered for second years between sessions 1 and 3 for question 1, and between sessions 1 and 2, and 1 and 3 for question 3. Thus, by the second session second years gave their group a higher rating for successfulness, and by the third session they gave their groups a higher rating for superiority.

Although there was no significant difference with respect to these two questions for third years (due to small sample size) there was a positive shift in mean response; 2.9, 2.3, and 2.3, respectively for question 1; and 2.6, 1.9, and 1.7, respectively for question 3.

Given these results one might conclude that with increasing exposure to the game subjects were more likely to give their group a higher rating of successfulness and superiority. Thus, group membership was not as important as increased familiarity with the game with respect to a positive view of one's group. Both the game as a learning tool (as opposed to teaching (exclusively) group cooperativeness) and the approach of switching group membership was supported.

Subjects views of their reports. With one exception, both years viewed their reports positively, their opinion increasing from session to session. In the final session third years gave a lower rating for the completeness of their report as compared to the second session. This is likely due to the fact that they found this case particularly challenging, lacking knowledge concerning a certain aspect of the case (namely the levels of cognitive functioning).

In general, (with the exception of question 11, final session) third years gave their group's report a more positive rating on all questions for each session. This is probably due to the fact that they had more confidence than second years as a result of increased knowledge and experience.

A significant positive sessional effect was found between sessions 1 and 2, and 1 and 3 for second years on all three questions. Thus, by the second session subjects viewed their group's reports more positively. This was probably as result of familiarity with the game



and having model reports to compare. That is, during the first session subjects were learning how to play the game which resulted in poorer reports; also after being exposed to a model report they had a clearer understanding of what was expected of them.

Subjects perceived level of participation. It was impossible to assess whether or not individual subjects rated themselves consistently across sessions with respect to how they viewed their level of participation in the group decision making process. However, means and standard deviations for each question were fairly consistent from session to session (see Appendix J, pp. 477 and 506). Thus, one might infer from these results that subjects were fairly consistent with respect to their view of themselves in the decision making process. On average subjects gave themselves high ratings (between 1.0 and 2.8) on the following descriptors: active, willing, useful, sufficient, successful, meaningful, and influential. The lowest ratings (between 3.0 - 3.7) were found for the following descriptors: dominant, leading, and critical. A significant sessional effect (between sessions 1 and 3) was discovered for the paired descriptor useful/useless for second year subjects only. Thus, by the third session second year subjects rated themselves higher in terms of the usefulness of their participation ( $M_s = 2.3, 2.2, \text{ and } 1.7$ ). These results suggest that as second years became familiar with the simulation-game they felt they were making a more useful contribution to their group's decision-making process.

Group conflict. Little conflict was reported by subjects from both years in any sessions. Thus, one might infer that this game tended not to promote conflict as compared to traditional competitive games.

Interestingly, third years reported more conflict ( $M_s = 2.4, 3.4, 2.7$ ).

then second years ( $M_s = 3.3, 3.4, 3.5$ ). These findings may be as a result of more self assuredness among third year individuals. It should be noted that no correlation was found between conflict reported and the number of disagreements lodged.

Only in one case did a subject report a lot of conflict within their group. The other two group members reported some or not much. This same person gave a lower rating (3) for cooperativeness as compared to the other two (ratings of 1). This subject had a low mean for participation, felt that two people made the majority of decisions, stated they would have performed better without the group, and would have preferred to play game with a different group. In addition, this subject commented that some ideas brought up by certain individuals were overridden although they were proved to be appropriate in the debriefing session. This subject also suggested that disagreements be recorded privately. Clearly these results indicate that this subject was dissatisfied with his/her group. It should be noted that this group scored the lowest in the session on their report.

From the case described above one can see that including the question "Was there any conflict within your group?", helps to pinpoint any dissatisfied members, and see if a group is functioning poorly as a result of group dynamics.

Majority of decisions. It would appear that the simulation-game encourages cooperativeness in that the majority of time subjects stated that groups made decisions together; the second most frequent response being that each subject took a turn. These results suggest that one of the objectives of the game was met; namely that subjects will: cooperate and make decisions as a group regarding information gathering,

report writing, analysing information, and planning treatment programs.

Only once did a subject attribute all the decision-making to one person, (Session 1, U3), however the other group members stated that decisions were made by the group as a whole. Rarely did any subject attribute decision making to two members (in one of these cases the group consisted of only two members).

Performance without the group. The purpose of the question "Would you have performed better without your group?" was to gain an understanding of subjects' perceived benefit of working in groups. The majority of subjects for both years and all sessions felt they would not have performed better without the group. These results suggest that subjects found working in groups to be a valuable learning experience. Only twice did subjects (third years) state they would have performed better without the group. The first occurrence was in the first session in which it was clear that the subject was dissatisfied with his/her group. The second occurrence was in the third session. This individual gave him/herself a very high rating (1.7) with respect to participation, and saw him/herself as the group leader.

With increased exposure to the simulation-game more subjects (from 0% to 29% for U3, and from 16% to 36% for U2) had increased confidence about their ability to play the game alone. However, their preference remained to play the game in groups rather than individually (no individual from any year or session indicated a preference to play alone). Given these results a logical point in which to have subjects play the game alone (should the instructor so desire) might be after two or more plays in a group.

Preference of play. It is unfair to compare the responses of

second and third years to the question "How would you have preferred to play the game?", since the number of choices available was increased (i.e., a fourth choice "in any group" was added in the third session for third years and retained for the second year study). However, all responses indicated a satisfaction with the group format as no one preferred to play alone. With respect to second years, a large majority did not care what group they played with, which suggests that group rotation from session to session was well received.

Case history rating. Subjects were asked to rate each case history in order to provide some indication of the general level of difficulty experienced by subjects, and ascertain whether or not the cases were categorized properly (i.e. elementary, intermediate, and advanced). It was noted that how cases were rated appeared to be a function of a number of factors as outlined below:

- 1) How recently subjects had studied a particularly condition. For example, second years, had received lectures in amputees a few months prior to study, while over a year had lapsed for third years. Thus, second years had the material fresh in their memory.
- 2) The quality and quantity of lectures presented on a particular condition. Often different instructors are used to teach the same courses from one year to the next, thus subjects may not perform as expected depending on how effectively they were taught.
- 3) At what point in time subjects received a particular case history. As subjects became more familiar with the game they appeared to find the case histories easier. This was evidenced

by the ratings of second and third years with respect to the same case (amputee). Third years received the case history in the first session their mean rating of the level of difficulty was 2.6, as compared to 2.3 for second years who received the case history in their final session.

The accurate categorizing of case histories is a rather difficult feat. Therefore, it is felt that in addition to the input provided by the subject matter experts the instructor should take into account the factors outlined above before assigning a group/individual a particular case history.

With respect to this study it is felt that the amputee case history should have been categorized as elementary rather than intermediate, and the rheumatoid arthritic case (U2, Session 2) as intermediate rather than elementary on the basis of the comments made by second year subjects in the debriefing as well as on the questionnaire.

Necessary knowledge and skills. The responses to the question "Do you feel that you had the necessary knowledge and skills to play this game?", support the hypothesis that during the first session subjects were learning how to play the game, in that the majority of comments focussed on knowledge and skills needed to play the game (eg. hospital procedures, information gathering, report writing). By the second session and into the final session the majority of comments concerning any lack of knowledge or skills was related directly to the particular case history under study.

Perceived learning. With respect to perceived learning a large number of subjects reiterated two of the simulation-games objectives:

- 1) To distinguish between useful and useless information and know

- procedures for gathering useful information for a given case;
- 2) Discriminate between those assessments which will provide the most useful information and those which will not for a given patient.

Group size. An attempt was made to place subjects in groups of three; however due to fluctuating attendance this was not always possible. In three instances there were groups of four, and in one instance there was a group of two.

With respect to the group of two (U3 Session 2), there were only a few responses on the group dynamics questionnaire which distinguished from the other groups in the session. Both group members reported no conflict in the group, felt they would have performed the same without the group, and preferred playing with same group. This group scored the lowest on the reports for their session. However, since this was the only group of two in the entire study it is difficult to make any generalizations.

The groups of four shared one common feature. In each case two group members rated their participation as low. In all cases their mean scores (across the questions) were lower than the overall mean, and were among if not the lowest scores in the session. The most common descriptors in which they scored low were dominant, critical, and leading. These results lead one to conclude that groups of four may not be an optimum size, in that there is a tendency for two members to view their role in the decision making process as less involved.

### Summary

In summary, the group dynamics questionnaire is a valuable tool which allows the instructor to have a number of groups play the game

simultaneously, yet still gain insight into the dynamics of a particular group. Using this tool the instructor can quickly assess if there were any problems within a group, if there was consistency among group members concerning one or more issues, and whether or not performance was affected as a result of the group dynamics.

### Attitude Questionnaire

#### Description

At the end of the final gaming session, subjects were asked to fill out an attitude questionnaire. The purpose of this questionnaire was to solicit the reactions and opinions of each subject concerning the simulation-game. The questionnaire was divided into two sections. The first section solicited information concerning subjects opinions about the simulation-game and its use. The second section asked subjects opinions regarding the McGill OT program and the possible use of the simulation-game in the program. Biographical information was also requested of each subject at this time; these results were discussed in Chapter Four under the section entitled "Subjects" (see pp. 58-59).

#### Scoring Procedure

The first section of the questionnaire was comprised of 4 scaled items, 10 semantic differential questions, 6 open ended questions, 1 closed form item, and a checklist. The second section was comprised of 16 scaled items, 1 closed form item, a checklist, and 1 open ended question. No composite score was calculated. Rather, individual items were scored separately. Table 29 provides a description of each question and outlines the scoring procedure employed.

Table 29

Scoring Procedure for Attitude QuestionnaireSECTION 1 Opinions Regarding Simulation GameType Description

**Scaled** Questions 1 to 4 were scaled items. Subjects were asked to check the place on the scale that best reflected their opinions about the statement. Below are the questions and how they were scored.

1) The playing time of the game was

132

Too long

Too short

About right

2) The rules and directions of the game were

1234

Very clear

Fairly  
clearNot very  
clearVery  
unclear

3) The game play was a valuable learning experience.

12345Strongly  
Agree

Agree

Undecided

Disagree

Strongly  
Disagree



Table 29 (cont.)

Type	Description										
	4) The debriefing was a valuable learning experience.										
	<table style="width: 100%; border-collapse: collapse;"> <tr> <td style="text-align: center; width: 20%;"><u>1</u></td> <td style="text-align: center; width: 20%;"><u>2</u></td> <td style="text-align: center; width: 20%;"><u>3</u></td> <td style="text-align: center; width: 20%;"><u>4</u></td> <td style="text-align: center; width: 20%;"><u>5</u></td> </tr> <tr> <td style="text-align: center;">Strongly Agree</td> <td style="text-align: center;">Agree</td> <td style="text-align: center;">Undecided</td> <td style="text-align: center;">Disagree</td> <td style="text-align: center;">Strongly Disagree</td> </tr> </table>	<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>	Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree
<u>1</u>	<u>2</u>	<u>3</u>	<u>4</u>	<u>5</u>							
Strongly Agree	Agree	Undecided	Disagree	Strongly Disagree							
Semantic Differential	<p>Questions 5 to 14 were designed to gain information concerning each subject's opinion of the game experience. An 8 point scale was employed, to force subjects to make a decision and not choose a neutral answer. The scores given in each position for each question were as follows:</p> <p>Your view of the Game experience</p> <p>5) Satisfying <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Frustrating</p> <p>6) Boring <u>8</u>: <u>7</u>: <u>6</u>: <u>5</u>: <u>4</u>: <u>3</u>: <u>2</u>: <u>1</u>: Not Boring</p> <p>7) Challenging <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Easy</p> <p>8) Confusing <u>8</u>: <u>7</u>: <u>6</u>: <u>5</u>: <u>4</u>: <u>3</u>: <u>2</u>: <u>1</u>: Clear</p> <p>9) Fun <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Not Fun</p> <p>10) Slow-paced <u>8</u>: <u>7</u>: <u>6</u>: <u>5</u>: <u>4</u>: <u>3</u>: <u>2</u>: <u>1</u>: Fast-paced</p> <p>11) Motivating <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Dull</p> <p>12) Chaotic <u>8</u>: <u>7</u>: <u>6</u>: <u>5</u>: <u>4</u>: <u>3</u>: <u>2</u>: <u>1</u>: Orderly</p> <p>13) Informative <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Uninformative</p> <p>14) Fair <u>1</u>: <u>2</u>: <u>3</u>: <u>4</u>: <u>5</u>: <u>6</u>: <u>7</u>: <u>8</u>: Unfair</p>										
Open Ended	<p>Questions 15 to 20 are open ended questions. The percentage of subjects who made similar comments from one session to the next was calculated. Comment categories were created as they emerged, and were identified by the author.</p>										

Table 29 (cont.)

Type	Description
Closed	Part of question 21 was of the closed form type in which the choice of answers is discrete. Subjects were asked to answer yes or no to the question. Percentage of respondents answering yes or no was calculated.
Checklist	If subjects answered yes to the first part of question 21 they were then expected to proceed to the checklist. They were permitted to check-off more than one category. Percentage of respondents was calculated for each category checked off.

## SECTION 2 GAME IN CONTEXT OF PROGRAM

Type	Description
Scaled	For questions 1 through 8 subjects were asked to indicate whether the McGill OT program was strong, weak, or average with respect to certain characteristics. This set of questions was asked twice. Before the start of the gaming sessions during the pretest and at the conclusion of the gaming sessions as part of the attitude questionnaire. Questions 9-16 were exactly the same as questions 1-8 except that subjects were asked to rate the simulation game. Below is a list of the questions and how they were rated.

McGill Program:

Characteristics	Strong	Weak	Average
1. theoretical basis	1	3	2
2. preparation for clinical work	3	3	2

Table 29 (cont.)

Type	Description			
	3. opportunity to study a variety of case histories	<u>1</u>	<u>3</u>	<u>2</u>
	4. opportunity to plan a variety of treatment programs	<u>1</u>	<u>3</u>	<u>2</u>
	5. opportunity to write OT reports	<u>1</u>	<u>3</u>	<u>2</u>
	6. opportunity to analyse information	<u>1</u>	<u>3</u>	<u>2</u>
	7. opportunity for self-evaluation	<u>1</u>	<u>3</u>	<u>2</u>
	8. opportunity to receive peer evaluation	<u>1</u>	<u>3</u>	<u>2</u>
<u>Simulation-Game:</u>				
	<u>Characteristics</u>	<u>Strong</u>	<u>Weak</u>	<u>Average</u>
	9. theoretical basis	<u>1</u>	<u>3</u>	<u>2</u>
	10. preparation for clinical work	<u>1</u>	<u>3</u>	<u>2</u>
	11. opportunity to study a variety of case histories	<u>1</u>	<u>3</u>	<u>2</u>
	12. opportunity to plan a variety of treatment programs	<u>1</u>	<u>3</u>	<u>2</u>
	13. opportunity to write OT reports	<u>1</u>	<u>3</u>	<u>2</u>
	14. opportunity to analyse information	<u>1</u>	<u>3</u>	<u>2</u>
	15. opportunity for self-evaluation	<u>1</u>	<u>3</u>	<u>2</u>
	16. opportunity to receive peer evaluation	<u>1</u>	<u>3</u>	<u>2</u>

Table 29 (cont.)

Type	Description
Closed	Part of question 17 was of the closed form type in which the choice of answers is discrete. Subjects were asked to answer yes or no to the question. Percentage of respondents answering yes or no was calculated.
Checklist	If subjects answered yes to the first part of question 21 they were then expected to proceed to the checklist. They were permitted to check off more than one category. Percentage of respondents was calculated for each category checked off.
Open Ended	If respondents answered no to question 17 they were asked to provide an explanation for their response. Percentage of respondents making similar comments was calculated. Comment categories were created as they emerged, and were identified by the author.

## Results

Attitude towards simulation-game. Table 30 outlines the frequency and percentage of scores for questions 1-4 for both years. Please note that if no subjects entered a score then that score has been left out of the table (e.g. for question 3 no subjects had a score of 3, 4, or 5 therefore these scores were not entered in the table). These questions were scaled items, therefore mean scores and standard deviations could be calculated (refer to Appendix K). For question 1 mean scores for second and third years were 2.1, and 1.7, respectively; indicating that the second years thought the playing time of the game was just right, while third years thought it was a bit long. Mean scores for the second question were 1.4 (U2), and 1.5 (U3), indicating that in general both years felt the rules were clear. Both years felt that game play was a valuable learning experience as indicated by the mean scores, 1.3 (U2), and 1.6 (U3). The mean scores for question 4 were 2.4 for second years and 1.9 for third years. Third years felt the debriefing was a valuable experience, while second years agreed with some uncertainty to this question.

Table 31 outlines the frequency and percentage of scores for questions 5-14. As explained above, if no subject entered a score then that score has been left out of the table. Mean scores and standard deviations were calculated for these questions and are presented in Table 32. Both second and third years rated the game experience highly on all questions with the exception of pacing. Both years viewed the pacing as slightly fast ( $M_s = 3.9$  for U3, and 3.8 for U2). In general, second years gave the game experience a higher rating than third years:

Concerning the open ended questions (15-20) only the most frequent

Table 30

Frequency of Scores for Questions 1 to 4 for Both Years

Question	Score	U3	U2
		f/%	f/%
1	1	*03/33	01/04
	2	*06/67	20/80
	3	00/00	04/16
2	1	05/63	18/72
	2	02/25	06/24
	3	01/13	00/00
	4	00/00	01/04
3	1	03/38	17/68
	2	05/63	08/32
4	1	03/38	03/12
	2	03/38	13/52
	3	02/25	06/24
	4	00/00	01/04
	5	00/00	02/08

\*One subject gave two different responses to the same question.

Table 31

Frequency of Scores for Questions 5 to 14 for Both Years

Question	Score	U3	U2
		f/%	f/%
5	1	02/25	15/60
	2	05/63	08/32
	3	01/13	02/08
6	1	05/63	15/60
	2	02/25	08/32
	3	01/13	01/04
	6	00/00	01/04
7	1	03/38	12/48
	2	01/13	08/32
	3	02/25	03/12
	4	02/25	01/04
	6	00/00	01/04
8	1	03/38	10/40
	2	02/25	13/52
	3	03/38	01/04
	7	00/00	01/04
9	1	03/38	12/48
	2	01/13	10/40
	3	04/50	02/08
	4	00/00	01/04

Table 31 (cont.)

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10	1	01/13	01/04
	2	01/13	05/20
	3	00/00	03/12
	4	04/50	08/32
	5	01/13	05/20
	6	00/00	03/12
	7	01/13	00/00
<hr/>			
11	1	02/25	12/48
	2	02/25	10/40
	3	03/38	02/08
	4	01/13	00/00
	5	00/00	01/04
<hr/>			
12	1	03/38	14/56
	2	04/50	10/40
	3	01/13	00/00
	4	00/00	01/04
<hr/>			
13	1	03/38	19/76
	2	02/25	04/16
	3	03/38	02/08
<hr/>			
14	1	02/25	16/64
	2	05/63	06/24
	3	01/13	03/12

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Table 32

Mean Scores for Semantic Differential Questions 5-14 for Both Years

Question		Year	
		U3	U2
5	<u>M</u>	1.9	1.5
	<u>SD</u>	0.6	0.7
6	<u>M</u>	1.5	1.6
	<u>SD</u>	0.8	1.1
7	<u>M</u>	2.4	1.9
	<u>SD</u>	1.3	1.2
8	<u>M</u>	2.0	1.8
	<u>SD</u>	0.9	1.2
9	<u>M</u>	2.1	1.7
	<u>SD</u>	1.0	0.8
10	<u>M</u>	3.9	3.8
	<u>SD</u>	1.8	1.4
11	<u>M</u>	2.4	1.7
	<u>SD</u>	1.1	0.9
12	<u>M</u>	1.8	1.5
	<u>SD</u>	0.7	0.7
13	<u>M</u>	2.0	1.3
	<u>SD</u>	0.9	0.6
14	<u>M</u>	1.9	1.5
	<u>SD</u>	0.6	0.7

comments (2 or more subjects) are presented in this section. It should again be kept in mind that subjects were not forced to comment, and thus felt strongly enough to make additional comments. The comments made represent what impressed individuals the most about the simulation-game. Appendix K contains all the individual comments made by the subjects for each question. Please note that the results for question 19 have been presented in the discussion section for the pretest/posttest (see page 81).

Question 15 asked subjects what they liked most about the simulation-game experience. A variety of comments were made by both years. Results were as follows: 50% of third years and 36% of second years independently commented that they enjoyed learning how and where to gather information, 25% of third years and 8% of second years enjoyed learning about the patients presented (e.g. reading the PIB, results of assessments) the same percentage enjoyed the opportunity to formulate treatment plans. Twenty-five percent of third years and 4% of second years found the game to be good learning experience in a relaxed atmosphere, 13% of third years and 12% of second years enjoyed having the opportunity to compare their treatment plans (reports) to a model and the same percentage felt that the game approximated reality. Finally, 20% of second years enjoyed synthesizing and applying their knowledge, and 16% felt the game would prepare them for clinical work.

Question 16 asked subjects to state what they liked least about the simulation-game experience. Sixty-three percent of third years and 20% of second years independently stated it was rewriting the information obtained (for a discussion of results refer to p. 119). Thirteen percent of third years and 12% of second years disliked writing

the report. With respect to second years, 16% stated they disliked not having enough time to write the report, 16% felt there wasn't enough time to perform all the assessments and consultations, and 12% disliked answering the questionnaires.

When subjects were asked if they should be allowed to refer to reference materials the majority said no (63% U3, 52% U2). Those who responded yes to the question (38% U3, and 44% U2) were asked to state what type of reference materials should be used as well as under what conditions. Twenty-five percent of third years and 12% of second years felt that players should have access to medical information on the condition under study. Twenty-five percent of third years and 8% of second years felt that only basic, brief definitions concerning the medical condition should be provided (e.g. medical dictionary, health encyclopedia). Twenty percent of second years felt that norms of tests should be available for reference.

Question 18 asked subjects how they would change the simulation-game. Only 6 out of 8 third years, and 16 out of 25 second years provided suggestions. With respect to third years 25% suggested that a library location be included on the game board. Two changes were made to the game as a result of the following comments: 25% suggested that the bathroom assessment card be made clearer, and 13% suggested that the patient-interview card read "patient visit-interview". Concerning second years 12% suggested that the assessments be rank-ordered in terms of importance for each case history, 8% wanted to decrease the amount of writing, 8% wanted to decrease the length of the game, and 8% would have liked a different media (e.g. slides, video) after the game to demonstrate treatment procedures.

Question 20 asked subjects if they would have preferred another medium to acquire the knowledge and skills presented in the game. Eighty-eight percent of third years and 96% of second years said no. One third year abstained and only one respondent (second year) said yes. The respondent who said yes stated that a simulation/video of a patient interview would be more helpful. One third year cautioned that the game should not replace practical experience. Of those who responded no, 2 third years and 16 second years provided additional comments. Thirteen percent of third years and 4% of second years felt it encouraged independent thinking, and 13% of third years and 20% of second years stated that players were active in the learning process. With respect to second years; 32% felt the medium was fun, motivating, and/or novel, 16% stated they were tired of videos and lectures, 8% felt it enabled them to apply theory, and 8% felt it simulated reality.

All subjects from both years felt that the simulation-game could be used to help prepare OT students for work in other areas (other than adult physical medicine). A checklist of other areas was provided and students were asked to check off all those areas they felt could be represented in the simulation-game. Table 33 lists the choice of areas along with the percentage of subjects who chose a particular area.

Game in context of program. Subjects were asked twice (prior to and at the end of the study) to rate the strength of the McGill program on eight different characteristics. Table 34 outlines the means and standard deviations for each of these questions. Parametric tests are of limited use in analysing ordinal data. Nevertheless, dependent t-tests were carried out in order to better identify those items which represented a non-random change in response. Table 35 outlines the

Table 33.

Other Areas for Game as Indicated by Subjects

Area	U3 f/%	U2 f/%
Paediatrics	08/100	22/88
Geriatrics	07/88	22/88
Psychiatry	07/88	19/76
Community Work	05/63	15/60
Other	00/00	*02/08

\*Both subjects stated the game could be used to help prepare OT students for any area in OT.

Table 34

Mean Scores for Ratings Given to the McGill OT Program

Question		Prior to Study		Post Study	
		U3	U2	U3	U2
1	<u>M</u>	1.5	1.0	1.3	1.1
	<u>SD</u>	0.5	0.2	0.5	0.3
2	<u>M</u>	2.4	2.4	2.6	2.7
	<u>SD</u>	0.5	0.6	0.5	0.5
3	<u>M</u>	1.9	2.4	2.5	2.2
	<u>SD</u>	0.6	0.6	0.5	0.7
4	<u>M</u>	2.1	2.5	2.4	2.5
	<u>SD</u>	1.0	0.7	0.7	0.7
5	<u>M</u>	2.6	2.8	3.0	2.8
	<u>SD</u>	0.7	0.5	0.0	0.5
6	<u>M</u>	2.8	1.8	2.4	2.2
	<u>SD</u>	0.5	0.7	0.5	0.7
7	<u>M</u>	2.9	2.6	2.6	2.6
	<u>SD</u>	0.4	0.6	0.7	0.7
8	<u>M</u>	2.8	2.7	2.6	2.8
	<u>SD</u>	0.5	0.6	0.5	0.4

Table 35

T-scores for Ratings Given to McGill OT Program Prior to and Post Study

Year	Question	DF	t-score
U3	3	7	-2.52*
	5	7	1.46
	6	7	-1.90*
U2	2	24	1.88*
	6	24	2.77**

\* p &lt; .05

\*\*p &lt; .01

significant t-scores for these responses. Third years changed their view of the McGill program with respect to three characteristics. After the gaming sessions third years gave the program a lower (negative) rating with respect to opportunity to study a variety of case histories (M = 1.9 prior to study, M = 2.5 post study), and opportunity to write OT reports (Ms = 2.6, and 3.0, respectively). A higher rating was given for opportunities to analyse information (Ms = 2.8, and 2.4). Second years had a different view of the McGill program with respect to two characteristics. After the gaming sessions second years gave the program a lower rating on preparation for clinical work (Ms = 2.4, and 2.7, respectively), and opportunity to analyse information (Ms = 1.8, and 2.2, respectively).

Responses taken after the gaming sessions varied only slightly between both years. In general, both years gave the McGill OT program a high rating with respect to theoretical basis. All other characteristics were rated between weak and average. Very low ratings (between 2.5 and 3.0) were given to the following characteristics: preparation for clinical work, opportunity to write OT reports, opportunity for self-evaluation, and opportunity for peer evaluation.

Table 36 outlines the means and standard deviations for the ratings attributed by subjects to the characteristics of the game. The game was rated positively on all characteristics by both years. Second years tended to give higher ratings than third years, with one exception. Second years gave the game a lower rating for theoretical basis (Ms = 1.7 for U3, 1.9 for U2). Highly positive ratings (between 1.0 and 1.4) were given by both years for the following characteristics: preparation for clinical work, opportunity to study a variety of cases, opportunity



Table 36

Mean Scores for Ratings Given to the Simulation-Game

Question		U3	U2
9	<u>M</u>	1.7	1.9
	<u>SD</u>	0.8	0.5
10	<u>M</u>	1.4	1.1
	<u>SD</u>	0.5	0.3
11	<u>M</u>	1.4	1.1
	<u>SD</u>	0.7	0.3
12	<u>M</u>	1.3	1.0
	<u>SD</u>	0.7	0.0
13	<u>M</u>	1.4	1.0
	<u>SD</u>	0.7	0.0
14	<u>M</u>	1.3	1.3
	<u>SD</u>	0.5	0.5
15	<u>M</u>	1.8	1.5
	<u>SD</u>	0.7	0.7
16	<u>M</u>	1.8	1.6
	<u>SD</u>	0.7	0.6

to plan a variety of treatment programs, opportunity to write OT reports, and opportunity to analyse information. Lower ratings (between 1.5 and 1.8) were given with respect to opportunity for self and peer evaluation.

The final question asked subjects if they thought the simulation-game should be incorporated into the McGill OT program. All subjects (100%) from both years responded yes to this question. They were then asked to indicate how and when the simulation-game should be used in the program. Table 37 outlines the type and frequency of responses to this question for both years (Please note that results from subject matter experts were included for comparison purposes. However, these results will be discussed in the discussion section only.). In general both years felt that the game was not appropriate for first years except if employed in class in groups (38% U3, and 44% U2). The majority of subjects felt that the game should be used with second years in class in groups (75% U3, and 88% U2), some also felt that it would be appropriate for second years to play the game outside of class in groups (50% U3, and 36% U2). Very few subjects felt that second years should play the game individually. Both years differed in their opinion of how the game should be used with third years. Third years were more likely to feel that the game was appropriate for third years. Fifty percent of third years and 32% of second years felt that third years should play the game in groups either inside or outside of class. In addition 50% of third years and 28% of second years felt that third years could play the game individually outside of class. No third years and only a small percentage of second years felt the game should be used with interns (12% in groups, 24% individually). It should be noted that very few

Table 37

How and When Game Should be Incorporated into McGill OT Program

Where	How	Year	U3 f/%	U2 f/%	*SME f/%
<b>In Class</b>					
	<b>Group</b>				
		U1	03/38	11/44	19/53
		U2	06/75	22/88	30/83
		U3	04/50	08/32	13/36
	<b>Individual</b>				
		U1	00/00	00/00	02/06
		U2	02/25	04/16	07/19
		U3	01/13	05/20	15/42
<b>Outside Class</b>					
	<b>Group</b>				
		U1	01/13	04/16	08/22
		U2	04/50	09/36	20/56
		U3	04/50	08/32	14/39
		Intern	00/00	03/12	03/08
	<b>Individual</b>				
		U1	00/00	02/08	03/08
		U2	01/13	04/16	07/19
		U3	04/50	07/28	18/50
		Intern	00/00	06/24	05/14

\*SME = Subject matter experts.

subjects felt that the game should be used by individuals in class. In fact, respondents showed a strong preference for the game to be used in class with groups, when referring to any year (not applicable to interns).

### Discussion

Playing time of game. The design of question 1 (which asks subjects to rate playing time of the game, see Table 29, p. 150) is poor in that it lacks both clarity and specificity. The question posed is misleading in that it is unclear whether it is referring to playing the game only, playing the game plus report writing, or playing the game, report writing and debriefing. In actuality the question was meant to collect information on how subjects viewed the entire game from playing to debriefing. However, based on the verbal and written comments made throughout the study it would appear that subjects rated these three aspects differently. Therefore, the question should have been divided into three parts and subjects should have been asked to indicate whether length of time for playing the game (i.e., collecting data), report writing, and debriefing was too long, too short, or about right.

Based on observations made throughout the study for both years it is felt that subjects viewed the game as follows:

- 1) Length of time allowed to play the game is about right. In general, most groups (with the exception of the first session) had carried out all the moves they desired. However, it should be noted that this is dependent to some extent on the case history (some require fewer moves than others) as well as familiarity with the game.
- 2) Not enough time was allowed to write the report. This was a common complaint during all sessions for both years. In reality subjects could

probably have spent two or three hours writing their reports. However, this is not always desirable; therefore a minimum of 45 minutes should be allowed for report writing.

3) Length of debriefing is difficult to assess. It is suspected (based on observations) that the majority of subjects were exhausted at this point (after having played for 2 and a half hours) and wanted to finish. Based on comments made it is likely that subjects would have enjoyed a longer and richer debriefing session focussing on treatment procedures if it had taken place on a different day.

Debriefing session. It should be noted that the results to question 4 which asks subjects to rate the debriefing session is a reflection of whether or not they liked their debriefer (personality and teaching style) rather than a reflection of the value of debriefing sessions and the game itself. In this study two different debriefers were used for second and third years, thus making it difficult to compare the results. Instructors should keep in mind that students reactions to the debriefing session is directly related to the debriefer's teaching style and rapport with students.

Use of reference materials. A question of concern was whether or not subjects should be allowed to refer to reference materials in the simulation-game, since in daily practice OT's are constantly referring to such materials for purposes of collecting information and designing treatment programs. The majority of subjects (as well as subject matter experts) felt that subjects should not be allowed to refer to reference materials. Of those who responded yes the majority felt that access should be restricted to certain areas (e.g. medical dictionaries, and norms of tests). Interestingly, in certain cases medical information

and norms of tests were available in the location marked OT department, but subjects never thought to visit this location. It is felt that this location was somewhat confusing and that for purposes of clarification the information placed here should instead be placed in a library location (as suggested by certain subjects).

It is felt the inclusion of reference materials should be left to the discretion of the instructor, but should be limited to medical information, and testings norms. The use of reference materials on OT treatment would defeat the purpose of the game, as subjects would need only copy their references.

It should be noted that in all cases subjects played the game in groups. Thus, instructors might wish to allow access to other reference materials when subjects play individually in order to decrease level of difficulty.

Objectives. The three attitudinal objectives outlined in this study were achieved. The first stated that subjects would have a positive attitude towards the simulation-game experience. The results from the semantic differential questions (5-14) as well as comments made throughout the study indicate that subjects had a highly positive attitude towards the simulation-gaming experience and also viewed it as a positive learning experience.

The second objective was that students would feel that interaction with the simulation-game would provide a useful introduction to hospital work in an adult physical medicine setting. Subjects from both years rated the simulation-game highly concerning how well it prepared students for clinical work ( $M_s = 1.4$  for U3, and 1.1 for U2).

The third objective stated that subjects would feel that the

simulation-game should be incorporated into the University program. In fact all subjects (100%) from both years achieved this objective.

Game in context of program. When subjects were asked to rate certain characteristics of the McGill OT program the ratings were low for 7 of the 8 characteristics. On the other hand, the simulation-game was given high ratings on 5 of these same characteristics and above average ratings on the remaining three. Surprisingly, subjects gave ratings that were higher than expected with respect to theoretical basis. One reason why these ratings were greater than expected is that since case histories were dealt with in great depth, subjects were occasionally exposed to specific knowledge they had not previously encountered (e.g., levels of cognitive functioning, possibility of median nerve compression in R.A.). It is felt that they interpreted theoretical basis to mean the acquisition of generalizable knowledge with respect to the treatment of a medical condition and not just to the acquisition of general principles.

Instructor-game objectives were met since subjects gave very high ratings with respect to opportunity to analyze information, plan a variety of treatment programs, practice writing OT reports. In addition an above average rating was given for opportunity for self evaluation via the reaction of peers.

The results of these questions indicates that students perceive a gap in the McGill OT curriculum particularly with respect to preparation for clinical work, opportunity to write OT reports, and opportunities for self and peer evaluation (ratings were all between 2.6 - 3.0). In addition subjects feel that the program is below average in providing opportunities to study a variety of case histories, plan treatment

programs, and analyse information. The simulation-game has received high ratings with respect to all these characteristics. Thus one can assume that employment of the simulation-game could help to fill the gap. However, use of the simulation-game alone can not alleviate the problems perceived by the students.

Given that all subjects felt that the simulation-game should be incorporated into the McGill OT program and 97% of subjects matter experts felt that the game can help prepare students for clinical work (in adult physical medicine) one can see that it is perceived as a valuable educational tool. Interestingly, students and experts were generally in agreement with how and when the game should be used. As can be seen from Table 37 the majority believed that the game was most appropriate for second years who are the target population for this game. The two outstanding differences were that SME were more likely to see the game as being appropriate for: first years (in class in groups), and third years (in class individually).

Prototype. This simulation-game was designed as a prototype. Therefore, one of the purposes of this questionnaire was to see if others agreed that it could be used to represent other areas of OT. All students as well as 89% of SME (four abstentions) felt that the game could be used to help prepare students for clinical work in other areas. Only students were given a check list and asked to indicate which areas. The majority checked off all the areas presented. However paediatrics and geriatrics received the strongest support. This author feels that these two areas would be the easiest to adapt to the simulation-game and that the other two areas, namely psychiatry and community work, would be considerably more difficult.



### Rewards

As was noted in Chapter Four (Method Section) third years were given a lunch at the end of the study as a form of payment for their participation; while second years received refreshments during the first two debriefing sessions, as well as a lunch at the end of the study. In addition, second years were presented with certificates acknowledging their participation in the study.

This discrepancy between the two years with respect to "rewards" received was as a result of the need to attract volunteers to participate in the study. However, results of the study indicate that this difference did not influence participation from one session to the next. In fact, only once did a subject comment on the "reward" system, joking (in the attitude questionnaire) that one of the things they had liked about the simulation-game was the food provided.

Given the comments made throughout the sessions in the group dynamics and attitude questionnaire, it appears that the main reason students continued to participate in the study was because of the simulation-game itself. After all, these students chose to commit a large amount of their free time (each session lasted approximately three hours, for a total of nine) to this study.

## CHAPTER SIX

### General Discussion

Chapters Three and Five dealt with the specific results of the formative evaluation of the simulation-game. However, the experience of developing and evaluating the game lead to a number of conclusions concerning its implementation in the real world. Therefore, Chapter Six will present these conclusions in the form of a summary, as well as discussion of the implications of this simulation-game.

#### Summary

The overall process of the formative evaluation was both exhaustive and invaluable. It was exhaustive in that the evaluation involved four different phases (pilot, SME, third year, and second year studies) using two different populations (learners and SMEs). It was invaluable in that the feedback and results of the various studies allowed the author to identify problem areas and make the necessary changes required in order to make it a successful educational tool. The use of both learners and experts helped provide a balanced picture of the problems of the simulation-game. The learners helped identify where important steps had been left out, indicated whether vocabulary was at an appropriate level, and demonstrated whether or not the intended learning had occurred. On the other hand, the experts helped evaluate the realism of the simulation and aided in assessing the accuracy and appropriateness of the content.

Below is an outline of how the simulation-game evolved into its final form as a result of the evaluation process.

#### Pilot Study

As a result of the pilot study a number of changes were made to the

gaming materials. These are summarized below. Both the rules and pretest were completely revised; the former lacking both organization and clarity, the latter being too long and containing some inappropriate questions. In addition, modifications were made to both the game board and the action cards in order to facilitate game play. Thus, locations were added, changed, or deleted, and the action cards were color coded to match areas on the board.

The game workbook was introduced to aid manageability of materials (referrals, information sheets, blank OT report, and model OT report). In addition, the information sheet was altered, so that players had to record their reason for a move.

#### Subject Matter Experts Study

The SME study resulted in significant changes to the mechanics of the game, as well as the content of the case history utilized for that gaming session. Concerning the mechanics of the game, it was decided that action cards should be shared rather than divided among players in order to better simulate the actions of an OT. Also, it was determined that an initial interview card was required; therefore, this was included in the final draft of the game. Concerning the content, additional information about the patient was included in the medical chart, patient interview, and physiotherapy department.

#### Second and Third Year Studies

As a result of both of these studies, it was determined that the information sheets and reports generated provided a more accurate measure of the game's objectives than did the pretest and posttest which were functionless since it was not a good reflection of the objectives. It was concluded that in the future the pretest and posttest should not

be employed.

With respect to the reports generated, both years improved from session to session (second years achieving statistical significance), with third years scoring higher than their second year counterparts on all sections. It was determined that subjects from both years were becoming more efficient at gathering necessary or useful information. They continued to experience difficulty in deciding where it should be incorporated into the report, although this also showed improvement.

The information sheets were effective in providing subjects with a means of executing moves and recording information.

Subjects had a very positive attitude towards the simulation-game, and all felt it had been a valuable learning experience. In general, all subjects from both years rated the gaming experience as satisfying, challenging, fun, motivating and informative. They also rated the game highly on the following characteristics: ability to prepare players for clinical work; and opportunity to study a variety of cases, plan a variety of treatment programs, write OT reports, and analyse information. Conversely, they rated the McGill OT program as low for these characteristics. These results suggest that the simulation-game is able to address factors which standard instruction does not. Finally, all subjects felt that the game should be incorporated into the McGill OT program.

#### Implications Regarding the Game Itself

##### Application of the Simulation in Other Environments

This thesis has not been an evaluation of a static game, but rather of a dynamic tool. In effect, this simulation-game was designed as a prototype, such that the basic elements of the game could be used to

simulate any area an OT might work in. In this particular instance, the game focussed only on the actions of an OT functioning in an acute-care general hospital in physical medicine. Nevertheless, the large majority of SMEs and students agreed that this simulation-game could also be used to represent other areas of OT.

Basically, the functions of an OT remains the same no matter what area s/he may work in. S/he will receive a referral, be required to collect data, carry out OT assessments, plan a treatment program, and write a report (as well as implement treatment, and modify it). Thus, the basic mechanics of the game would remain the same no matter what OT area is modelled. However, a number of changes might be required with respect to the game board, and assessment cards when modelling a different area. In all instances, case histories would need to be developed to represent the patient population serviced in a given area or facility.

The main purpose of the game board is to reflect the environment an OT works in. Therefore, to adapt the simulation-game to represent an OT working in a chronic-care facility with a paediatric population, the game board would have to incorporate those areas and personnel found in such a facility, as well as the likely contacts an OT would deal with in the community. It should be noted that some of the locations and personnel would remain the same.

With respect to OT assessments, certain additional assessments would have to be incorporated, while others might be removed. For example, with a paediatric population one would want to incorporate a sensory integration assessment.

As was discussed in Chapter Five (pp. 174), this author feels that

the OT areas which would be the easiest to adapt are geriatrics and paediatrics (physical medicine), while psychiatry and community work would prove more challenging. The main reason is that the treatment approach that an OT takes in paediatrics and geriatrics shares many similarities with adult physical medicine. Thus, few changes would need to be incorporated. However, with respect to psychiatry, an OT may adopt a number (or combination) of different conceptual models (e.g., psychoanalytic, humanistic, behavioural, developmental, etc.) which would influence his/her treatment plan. Thus, a minimum of four different treatment plans could be developed for the same patient. Therefore, in addition to the changes cited above, the simulation-game would have to provide the student with some direction with respect to the type of conceptual model they should employ. By the same token, the game could be an extremely powerful tool for comparing and contrasting the various approaches, were that an instructional objective.

With respect to the area of community work, the OT could work in a variety of settings, including public schools, nursing homes, or patients' homes. The most limiting factor in trying to adapt this area to the simulation-game is modelling the environment. In this area, the OT has no standard job description, and often finds him/herself overlapping into other professional domains such as social work, physiotherapy, and teaching. Job conditions are usually less than ideal, in that a lot of travel is involved and equipment and materials are minimal. Often, the OT is not able to carry out the necessary assessments required, or implement the most desirable treatment plans. It should be noted that, in general, OTs are encouraged to gain a few years of experience in a traditional hospital setting before working in

the community.

### Limitations of the Game

There are a number of limitations of the simulation-game which both the instructor and player need to be aware of (these weaknesses are pointed out during the debriefing, see Appendix E, pp. 352-353). These limitations are outlined below.

The main weakness of this game is that players can not directly ask questions; since it is impossible for them to enter into a dialogue with the game. Therefore, players must determine how and where they are most likely to have their questions answered. For example, if they want to know if a comatose patient is eligible for workmens compensation they might ask the social worker for this information. However, there is no guarantee that their questions will be answered; that is, the social worker may not have had time to acquire the information. In addition, during the first play of the game, the player(s) are learning the mechanics of the game. Therefore, player(s) are likely to perform poorly, thereby experiencing frustration. It is critical that they be warned about this aspect of learning the game so that it does not impede future motivation:

The game can be misleading with respect to two aspects. Firstly, this game simulates one type of hospital setting, but this does not mean that all hospitals in an identical setting will function in the same way. Therefore, players need to keep in mind that each hospital is different, in that some services may be provided by a different person or department (note that this same problem exists in actual clinical placement).

The game can also be misleading with respect to the time frame.

Each location and assessment has been identified, requiring a decision on the part of the players to gather the information connected with the particular location or assessment. Therefore, players may feel it takes a long time to carry out each action. However, in reality it may take an OT only an hour to perform three assessments or talk to three different people. However, one of the objectives of the game is to force players to carefully consider their actions.

An additional problem which was discovered after the gaming sessions is that it is difficult to ensure that players abide by the rules of the game with respect to the use of action cards. Players may increase the number of action cards either by forgetting to discard the cards played, or purposely re-using discarded action cards.

Furthermore, it is easy for them to refer to the Patient Information Booklet without using any action card. Therefore, if the instructor wishes to increase conformity to the rules s/he must study both the information sheets (that is count the number and type of action cards played to ensure players discarded their action cards) and reports (to ensure that no additional information has been included in their report which has not been recorded on their information sheet). However, a warning from the instructor regarding cheating may be a sufficient deterrent.

One should keep in mind that since the simulation-game is concerned with the acquisition of knowledge and skills and not with competition, the issue of nonconformity to rules is not necessarily a serious problem.

#### Communication Objectives

A problem area concerned the communication objectives



outlined in Chapter Two (p. 28). Although communication problems were built into the various case histories, it was difficult to represent all the communication problems in any one case history. In addition, there was no guarantee that the subjects would be exposed to all the different types of communication problems possible. Finally, it was difficult if not impossible to test whether or not subjects had learned strategies to overcome these problems. Therefore, it was determined that this was an inappropriate objective for the simulation-game.

#### Proposed Changes to Physical Gaming Materials

In order to increase the longevity of the gaming materials a few changes would need to be made (assuming financing is possible). The action cards should be laminated to protect them, and the game boards should be silk screened.

#### Implications Regarding the Instructor

##### Game Preparation

Both the initial design of the game and the subsequent formative evaluation have led to a series of recommendations regarding preparation for the game. These conclusions are listed below.

Materials and knowledge required. In order to implement the game the instructor needs the appropriate number of complete copies of the game and a set of rules for each player.

To implement the simulation-game the instructor must play the simulation-game at least once beforehand. In this way, the instructor will gain an understanding of the gaming process, appreciate its potential as an instructional tool, and be able to answer any questions which students may have. When using the simulation-game with students the instructor must have a thorough knowledge of the case history being

studied. S/he can acquire this knowledge by using the debriefer breakdown and model report for the particular case under study. The debriefer breakdown (see Appendix E, pp. 354-374) outlines all the information located in the PIB for a particular case. 'It is a quick guide as to what information is available and where it can be found (location or assessment). The model report will highlight the important information students should have acquired, as well as how the treatment plan should have been written.

Instructor's role. During the first session the instructor's duties include setting up the environment, explaining the purpose of the simulation-game, explaining the rules, answering questions about the game, monitoring the action and intervening where necessary, and leading the debriefing. The instructor must keep in mind that the first session is largely dedicated to learning how to play the game, and so full knowledge of the rules (or his/her variations on them) is of paramount importance.

In subsequent sessions the instructor mainly concerns him/herself with setting up the environment especially with respect to the interplay of prior knowledge with the content of the case history, and leading the debriefing.

The instructor's role is one of a research director and coach rather than a lecturer and disciplinarian (Abt, 1970). During the debriefing the instructor does not position him/herself as an expert, but rather as a facilitator of learning; and as a resource person rather than judge, evaluator, or tester (Lederman, 1984). Thus, the instructor needs the ability to: tolerate ambiguity, observe and interpret behaviour, form questions and listen to answers, select

appropriate directive and nondirective postures, have a good sense of timing, and make judgement calls (Lederman, 1984).

### Case Histories

Although the level of difficulty of case histories is somewhat dependent on their general complexity, three additional factors influence students perception of case difficulty (see Chapter Five, pp. 146-147). These three factors are: how recently students have studied a particular condition, the quality and quantity of lectures presented on the condition, and at what point in time (which game session) students received a particular case history.

In developing the case histories for this simulation-game, the designer can indicate the complexity of the various cases; however, it is impossible to take into account the three factors outlined above. Therefore, it is the instructor who must determine the relative ease or difficulty his/her students will encounter.

The first two factors can be described as the degree of familiarity students have with a given medical condition. The results of this study suggest that prior knowledge of the case history affects how students deal with the gaming materials. Specifically, the more familiar subjects are with the case history the more likely they are to carry out the necessary steps needed to plan their treatment program. Students who are not familiar with the case history seem to be distracted by the content, and are not as likely to follow-up hints (as seen in the performance of third versus second years during the third session). On the other hand, they appear to be more cautious in carrying out assessments. However, it is difficult to ascertain whether students would act like this when placed in an actual clinical situation.

Instructors also need to take into consideration the psychological implications of student familiarity with the medical conditions presented. The more familiar subjects are with a particular condition, the more likely they are to feel confident about their performance. However, such students may not feel sufficiently challenged, which could decrease their motivation. Conversely, given a difficult case, subjects may lose confidence in their abilities; however, they are more likely to feel challenged. For example, third year subjects felt fairly confident about their performance after the second session and were demanding a more challenging case. Therefore, during the third session they were given a case which they were unfamiliar with. During this session the debriefing took on a different tone from previous sessions. Subjects voiced their concerns about the lack of knowledge they had about this type of case, and indicated that they felt less confident about their abilities as OTs. However, these students were more animated during the gaming process and debriefing, and were actively seeking further information from the debriefer concerning the case in general.

With respect to the factor of timing, by the third session students feel sufficiently confident such that the game itself is no longer an issue. Instead, their attention focusses on the case history and on its complexity or ease. It should be noted that once learners become familiar with the gaming process, they tend to perceive the cases as easier.

These different factors have implications for the use of the simulation-game with different years and during different sessions. With respect to first years, the instructor may wish to choose cases which students are very familiar with, since these students have little

knowledge and experience concerning the role of the OT. The greater the knowledge and experience students have, the less important it is for them to be familiar with the case history.

With respect to timing, since the first session involves learning how to play the game, all years should be given a familiar condition. As students become sufficiently confident with the gaming process, the instructor should provide more challenging case histories (in order to maintain their interest and help them stretch their imaginations).

Finally, it is obvious that the simulation could be used systematically throughout a three-year program. As learners advance in levels of knowledge of the field, the complexity of the case histories can be increased to match their abilities. The game would become an old friend, visited only occasionally, but always providing valuable and challenging knowledge and skills. This sort of curriculum reflects the theory of Bruner (1966) regarding spiral development.

#### Debriefing Sessions

Virtually all simulation-games are meant to be played once, necessitating only one debriefing session. Therefore, the literature pertaining to conducting debriefing sessions assumes that a simulation-game will only be played once. In contrast, the simulation-game developed in this thesis is meant to be played a number of times. Thus, the nature of the debriefing sessions are affected by the evolutionary process of the simulation-game.

The literature states that the debriefing session should be a structured discussion of limitations and insights offered by the game, and of players' performance with respect to representing and solving their problems (Abt, 1970). In essence this is true of all the

debriefing sessions conducted when using this simulation-game. However, there is a shift in the players attention from the first debriefing session to subsequent ones.

During the first debriefing session, subjects are more concerned with the simulation-game itself rather than the specific case history. Thus, students are likely to ask questions concerning how to better play the game (e.g., general strategies which should be employed), as well as how it compares to reality. During this session it is important for the debriefer to outline the advantages and limitations of the simulation-game (see Appendix E, pp. 352-353, Points to Mention).

In subsequent sessions, less and less attention is paid to the game itself. Rather attention is focussed on the specific case history being presented. Thus, subjects are anxious to discuss the particular patient, challenge the model report, discuss specific assessments, and demand further information concerning the implementation of the particular treatment plan.

#### Educational Implications for the Instructor

This simulation game is an extremely flexible tool which the OT instructor can use in a variety of ways. The instructor can manipulate the simulation-game to meet his/her objectives. In addition s/he can both administer and schedule the simulation-game in a variety of ways, thus bypassing the many constraints imposed on instructors in an academic environment.

Learning tool. The simulation-game was designed as a learning tool whose overall objective is to familiarize OT students with planning an OT treatment program for adult physical medicine patients in a general hospital setting. Thus, students are given opportunities to gather and

analyse information for planning individual OT treatment programs, as well as to write OT reports. Consequently, the instructor is able to provide students with opportunities to simulate the OT's role which is difficult to achieve using standard instructional methods.

In using the simulation-game an instructor's objectives may be identical to or differ from those of the simulation-game, that is, an instructor may wish to emphasize certain aspects of the game. Thus, an instructor emphasizing report writing might forego using the information sheets (in which case students would use the removable cards from the PIB, and keep a record of where they had visited). Another instructor may be more concerned with data gathering and might forego report writing.

This game has been designed such that subjects are expected to play the simulation-game a number of times using different case histories. Using the game in this manner, the instructor can administer a variety of cases from the most simple to complex. In addition, s/he can make his/her own cases, by producing a referral, model report, and the necessary information in the PIB.

The instructor can use the simulation-game in class after students have studied a particular medical condition. Thus, the game serves as a sort of a summing up. The game can also be used to lead the class into a new topic, e.g., OT treatment techniques. In an advanced physical medicine course the instructor may wish to surprise students and present cases without any forewarning so that students can test their knowledge and skills concerning the particular case history (assuming they are already familiar with the logistics of playing the game).

The choice of case history may be incidental to the instructor's

objective, in that s/he might wish to use the game to introduce students to a hospital organization (services and personnel). In this case an instructor would probably forego having students write a report. The simulation-game could also be used to help prepare students for their clinical placements. In this case, the instructor could use the game to promote discussions about what students are likely to encounter in the field; or to contrast this particular setting to other settings such as chronic care hospitals, and rehabilitation centers.

Evaluation tool. Although the game was initially designed as a learning tool it is also a powerful evaluation tool for the instructor. The reports measure how well students can write a report using the SOAP method of report writing. Since the information sheets recreate the behavior the player(s) engage in during the game, the instructor can also gain valuable insight into player(s) reasoning. By comparing information sheets to the corresponding report, an instructor can diagnose different groups (individuals) understanding of a particular case history, as well as their general strengths and weaknesses.

If the instructor chooses s/he can employ the group dynamics questionnaire. This would allow the instructor to gain insight into the dynamics of a particular group while running a number of groups simultaneously.

Administration. In this study, the game was administered to second and third years who played the game in groups of three. These subjects were given no forewarning with respect to the case being presented, and were not allowed to use reference materials. However, any instructor who wishes to use this game should not feel restricted to these conditions.



Instructors can have students play the game individually or in groups (groups of three are recommended). However, if the instructor has students play the game individually, s/he should conduct a debriefing session with that particular individual. The game can be administered to a large number of people at the same time, since the only limiting factors are space and copies of the simulation-game. If play is in groups, the instructor can have students write either a group report or individual reports. The instructor can choose to forewarn students about the case history to be presented. S/he can also allow students use of reference materials (these can be restricted to certain types, e.g., medical dictionaries).

The game can be administered to different years. However, the students must have the minimal entry skills outlined in Chapter Two (p. 27). The instructor can also combine years (e.g., have a first and third year student play together) so that one student assumes the role of tutor, while the other is the tutée.

Scheduling. Instructors in an academic setting are generally under severe time constraints, in that they are given a certain number of hours in which to achieve their instructional objectives. Often they are only allotted a few hours a week in two or three time slots. Thus, it would be impossible to schedule the game in a three hour time slot as was done in this study. However, a number of scheduling possibilities are available to the instructor to minimize the use of class time.

The instructor can choose to conduct the sessions inside class, or have students play the game outside of class time; since the instructor is only needed for the debriefing once students know how to play the simulation-game. If conducted during class time, the game can

be spread out over a number of classes. Logical division points are game play, report writing, and debriefing. For example, the instructor may have students play the game during one class, give the report as a homework assignment, and conduct the debriefing session the next time the class meets.

Once students know how to play the game the instructor may assign students a case history and have them play the game and write the report on their own time. Students would then meet in class for a debriefing session. The instructor can then conduct a debriefing session, armed with the debriefer breakdown (see Appendix E, pp. 354-374), model report, and general experience as a professional OT.

#### Implications Regarding the Students

##### Benefits

This simulation-game places OT students in a risk-free environment where they can engage in active exploration of the OT's role without endangering patient safety. The game is both motivating and non-threatening. If played in a group it promotes cooperativeness. It provides them with an opportunity to synthesize the knowledge they have acquired and apply it. It forces them to solve problems, and make decisions that an OT might make. It encourages the development of organizational skills, provides them with opportunities to study a variety of case histories and act on them, and provides practice in writing OT reports. In addition, students receive immediate feedback concerning their performance from a variety of sources, namely: the PIB, model report, their peers (if played in a group), and the debriefer. During the debriefing session students can challenge the model report, discuss issues, and acquire further information concerning

the case history.

Finally, for students who haven't had any placements (other than an observation placement), the game can provide a better understanding of the organization, services, and personnel of an acute-care hospital, as well as the role of the OT in physical medicine.

#### Problem Areas

There were a number of problems experienced by subjects, when interacting with the simulation-game, that need to be addressed. It was discovered that subjects had difficulty understanding the concepts of Subjective and Analysis with respect to writing OT reports.

With respect to the Subjective section, the instructor needs to ensure that subjects understand the purpose of this section, which is to record comments made by the patient. In addition, the instructor should be aware that students who have not been out on placement may not be aware that it is common practice to visit the patient in his/her room (where additional information can be obtained from the patient). Therefore, the instructor may wish to guide the debriefing to ensure that students discover this fact.

With respect to the Analysis section, students will encounter difficulties in this area due to lack of experience in analysing and expressing a professional opinion concerning the patient and his/her potential with respect to rehabilitation. Therefore, the instructor may wish to focuss on this aspect in the debriefing, and perhaps provide additional practice in this area.

Lack of time was an additional factor which affected the quality of the OT reports generated by the subjects. It was determined that 35 minutes was not adequate time in which to write an OT report.

Therefore, instructors may wish to increase the time allotted to report writing (see Chapter Five, pp. 170-171, for amount of time recommended).

#### Future Research

This thesis has provided a description of the development and formative evaluation of a simulation-game to help prepare students for clinical work. In the process it has raised a number of research questions concerning the game and its use. Below is a description of some of the areas a potential researcher might wish to investigate.

One area that requires further investigation is the use of the game with first year OT students. Some questions which would need to be answered include: what should the instructor's objectives be, what difficulties do first years encounter as opposed to other years, should sessions be conducted differently (i.e., should the game be played in its entirety or should different aspects be introduced over subsequent sessions), should they be allowed to use reference materials, and how familiar should they be with the case history.

Another area that would benefit from future research is the use of the game with individuals as opposed to groups. Questions to answer would include: how should the game be conducted with individuals, how is performance affected, when should one use the game with individuals as opposed to groups, and what are the advantages and disadvantages of using the game with individuals as opposed to groups to the player(s) and to the instructor.

Another important research and development area concerns the use of the simulation-game to model different OT areas. A number of research questions arise concerning this topic. These include: what OT areas can be easily modelled, what changes are required in order to model

different OT areas, and are certain models more successful than others.

Another research area concerns the use of the simulation-game in an educational environment. The researcher might want to ask what is the optimum way to conduct the simulation-game in an educational setting. Questions could concern its use in a course as well as in a curriculum. Bruner's theory concerning a spiral curriculum could help form the basis of future study.

Finally, a researcher might wish to examine the feasibility of transferring the simulation-game to the computer. Initially research would concern the development and evaluation of the computer version of the simulation-game. The researcher might then wish to compare the manual game with the computer version in order to discover the strengths and weaknesses of each.

In conclusion, this simulation-game has raised a number of exciting research questions. Questions which have arisen as a result of this thesis' demonstration that the simulation-game developed is a powerful educational tool which can benefit the Occupational Therapy student, educator, and program.

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Appendices

Appendix A

Questionnaires and Materials Used in Pilot Study

Pilot Study  
Pretest

Name: \_\_\_\_\_

Date: \_\_\_\_\_

Directions: Read the following passage carefully and answer the questions below.

Case History:

Mary Singer is a 53 year old female suffering from carpal tunnel syndrome of the right hand for the past two months. She has had diabetes mellitus for 15 years. She has been admitted to hospital for purposes of assessing her diabetes which is no longer being controlled by diet alone. She has been referred to O.T. to assess hand function and independence in ADL and provide the appropriate treatment.

Reading her medical chart you note that she is having trouble sleeping and is constipated. She is receiving steroid injections for her hand, which is not responding well to treatment. You visit Mary in her room, and your first impression is of a pleasant, distracted woman. She tells you that she is a homemaker who hates housework but loves to cook, joking that her husband has the stomach to prove it. She talks about her two children who are grown and live away from home. You ask her about her activities, she shrugs saying that she likes to stay at home and play the piano. She complains that her hand is very painful particularly at night and that she can only use it for light activities. She is concerned that it will become useless and wants to start therapy immediately. You set up an appointment for the next day which she records on a piece of paper.

At lunch you mention to your supervisor that you have just received a referral for Mary Singer. She shakes her head in sympathy and mentions that Mary is a neighbour. She describes Mary as a terrific organizer who is on at least half a dozen committees in the city. The dietician overhears your remark and comments that recently she has been having a terrible time trying to get Mary to stick to her diet, in fact Mary has gained 20 pounds in the past few months. She has confronted Mary about this, but Mary denies cheating on her diet.

That afternoon Mary's daughter calls you to ask about the type of treatment Mary will be getting. She mentions that her two children are concerned about their grandmother as they are very close.

The next day Mary is late for her appointment. She apologizes stating that she wasn't aware she had one. Her husband and two grandchildren have accompanied her. Mr. Singer is a plumber who enjoys his work, and he talks excitedly about the trip to California he and Mary are planning this year where they will stay with their son. The children tease Mary, accusing her of not remembering their names. Mary smiles and tells them they shouldn't tell fibs. The children deny that they are lying. At that point, the ward clerk phones to tell you that Mary must return immediately to the ward to get her injection. The appointment is cut short.

## Section A

Directions: The following numbered statements are taken from the case history above. Referring back to the case history, evaluate each statement and check off

MF if the information is a Major Factor to consider when planning an OT treatment program for this patient, that is, it will have a major influence on one's treatment plan;

PS if the information is Potentially Significant, that is, it may or may not have an affect on planning this patient's OT treatment program, but it needs to be investigated further;

U if the information is Unimportant in terms of planning an OT treatment program for this patient, that is, the information is irrelevant.

1. terrific organizer who is on at least half a dozen committees in the city  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
2. receiving steroid injections for her hand which is not responding well  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
3. must return immediately to the ward to get her injection  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
4. Mary is late for her appointment  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
5. diabetic for the past fifteen years  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
6. tells you she is a homemaker  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
7. complains that her hand is very painful particularly at night  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
8. is having trouble sleeping and is constipated  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
9. children tease Mary accusing her of not remembering their names  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------
10. diabetes no longer being controlled by diet alone  

<u>MF</u>	<u>PS</u>	<u>U</u>
-----------	-----------	----------

## Section B

**Directions:** Below is a list of some of the standard types of assessments that an Occupational Therapist is likely to perform in a physical medicine setting.

- |                         |                   |                         |
|-------------------------|-------------------|-------------------------|
| 1. Range of Motion      | 7. Mobility       | 13. Kitchen Assessment  |
| 2. Muscle Strength      | 8. Hand function  | 14. Bedroom Assessment  |
| 3. Muscle tone          | 9. Endurance      | 15. Bathroom Assessment |
| 4. Coordination/balance | 10. Cognition     | 16. Eating Assessment   |
| 5. Sensation            | 11. Communication | 17. Dressing Assessment |
| 6. Perception           | 12. Transfers     | 18. Grooming Assessment |

Referring back to the case history on page 1, and using the above list as a guideline, determine and indicate those assessments which are:

- Necessary to perform on the patient in question for purposes of planning a treatment program.
- Potentially Important to perform on the patient for purposes of planning a treatment program; that is, although not always indicated in similar cases, you suspect that in this particular case the patient's function or performance may be affected.

Those which you do not select are assumed to be unnecessary.

In your answer list the specific assessment and why you think it is necessary, or potentially significant to perform. Limit your answer to one line per assessment. For example: Necessary - muscle test lower limbs - paresis in legs.

11. Necessary Assessments:

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12. Potentially Significant Assessments:

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## Section C

**Directions:** Answer the following questions as concisely as possible.

13. In general, where is an OT most likely to get relevant information about a patient which will have a direct affect on his/her treatment program for that patient?

- A. medical chart
- B. team meeting
- C. patient
- D. patient's family
- E. attending physician

Provide an argument for your choice.

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14. You have just received an OT referral for a patient. However, the doctor has forgotten to list the reason for the referral, and you can not read his/her signature. In general, what is the quickest and most effective way you can find out who is the referring doctor? State the reason for your answer.

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15. It is Thursday afternoon, you find two messages on your desk concerning a patient you have been treating for a week. This patient is a 65 year old male who underwent an amputation of his left lower limb four weeks ago as a result of having peripheral vascular disease. The first message states that he has a prosthetic appointment for next week. The second states that he will be discharged from hospital soon. You only have to make one phone call. What do you do? Why?

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16. Your patient requires a home visit however she lives 300 miles from the hospital. Who is most likely to be able to solve your problem? Why?

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17. Your patient is unable to afford the adaptive devices he requires. What should you do?

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Section D

Directions: Below is a list of people who might be involved in the treatment of a patient. List in point form the typical information you could get from a:

18. Social Worker \_\_\_\_\_

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19. Attending Nurse \_\_\_\_\_

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20. Psychologist \_\_\_\_\_

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## Section E

**Directions:** For the following questions fill in the title of the person who is the most reliable source for obtaining information regarding the patient. Provide a reason for your answer.

21. The \_\_\_\_\_ is the person to talk to regarding the patient's medication. Because \_\_\_\_\_

22. You should ask the \_\_\_\_\_ what the patient's appetite is like. Because \_\_\_\_\_

23. The \_\_\_\_\_ knows best what the patient's goals are for the future. Because \_\_\_\_\_

## Section F

24. Compare and contrast the advantages and disadvantages of using a phone versus visiting a person in order to gain information about a patient, you as an OT are treating. Cite examples.

25. Describe the function and contents of medical charts. Include in your description the problems and limitations of its use.

26. Cite at least three factors which will result in an OT receiving unreliable information while planning a treatment program. Provide examples.

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27. Referring back to question 26, describe strategies and criteria which an OT can use for evaluating the reliability of information received.

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28. Cite the major steps involved in planning an OT treatment program.

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15) What did you like most about the simulation-game experience?

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16) What did you like least about the simulation-game experience?

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17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type?

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18) How would you change the game if you could?

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19) Did the posttest measure the material that was presented in the game?

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20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

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Game in Context of Program

Directions: Indicate whether the following are strong, weak, or average characteristics of the McGill OT program.

Characteristics	strong	weak	average
1. theoretical basis	_____	_____	_____
2. preparation for clinical work	_____	_____	_____
3. opportunity to study a variety of case histories	_____	_____	_____
4. opportunity to plan a variety of treatment programs	_____	_____	_____
5. opportunity to write OT reports	_____	_____	_____
6. opportunity to analyse information	_____	_____	_____
7. opportunity for self-evaluation	_____	_____	_____
8. opportunity to receive peer evaluation	_____	_____	_____

Directions: Indicate whether the following are strong, weak, or average characteristics of the simulation-game.

Characteristics	strong	weak	average
9. theoretical basis	_____	_____	_____
10. preparation for clinical work	_____	_____	_____
11. opportunity to study a variety of case histories	_____	_____	_____
12. opportunity to plan a variety of treatment programs	_____	_____	_____
13. opportunity to write OT reports	_____	_____	_____
14. opportunity to analyse information	_____	_____	_____
15. opportunity for self-evaluation	_____	_____	_____
16. opportunity to receive peer evaluation	_____	_____	_____

17. Do you think that the simulation-game should be incorporated into the McGill OT program?  
 yes  no

18. If you answered yes to question 17, check off during the program should the game be used; e.g. during second year, as well as how it should be used, e.g. in class on an individual basis. You may check off more than one category.

Years	In class		Outside of class	
	Group	Individual	Group	Individual
first	_____	_____	_____	_____
second	_____	_____	_____	_____
third	_____	_____	_____	_____
intern	N/A	N/A	_____	_____

19. If you answered no to question 17, please explain why.

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## Biographical Data

1. SEX:  male  female
2. MOTHER TONGUE:  English  French  Other
3. UNDERGRADUATE YEAR:  2nd year  3rd year
4. PREVIOUS EDUCATION (tick one or more boxes)
- a) Completed High School outside Quebec \_\_\_\_\_
- b) CEGEP \_\_\_\_\_
- c) Completed part of a University degree other than OT. \_\_\_\_\_
- d) Completed a University degree, other than OT \_\_\_\_\_
- Name of degree \_\_\_\_\_ Discipline \_\_\_\_\_
- Name of discipline \_\_\_\_\_

## e) Language of education in:

High School.  English  French  Both  Other

Cegep  English  French  Both  Other

University (Answer only if you have studied in a program other than OT)

English  French  Both  Other

## 5. CLINICAL PLACEMENTS: Record all your completed placements (as in example).

<u>TYPE</u>	<u>POPULATION</u>	<u>SETTING</u>	<u>DURATION</u>	<u>YEAR</u>
(phys. med.)	(children)	(school)	(3 weeks)	(2nd)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

Pilot Study  
Group Dynamics Questionnaire

Group: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions:** Place an X on one of the positions that bests represents your view of the statement in capital letters.

## A. Your view of your group.

- |    |             |       |       |       |       |       |       |       |       |               |
|----|-------------|-------|-------|-------|-------|-------|-------|-------|-------|---------------|
| 1. | superior    | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | inferior      |
| 2. | good        | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | bad           |
| 3. | successful  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | unsuccessful  |
| 4. | lazy        | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | hard working  |
| 5. | cooperative | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | uncooperative |
| 6. | bungling    | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | skillful      |
| 7. | cautious    | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | rash          |
| 8. | serious     | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | silly         |

## B. Your view of your group's report.

- |     |            |       |       |       |       |       |       |       |       |              |
|-----|------------|-------|-------|-------|-------|-------|-------|-------|-------|--------------|
| 9.  | poor       | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | good         |
| 10. | successful | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | unsuccessful |
| 11. | complete   | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | incomplete   |

## C. Your participation in your group's decision making.

- |     |             |       |       |       |       |       |       |       |       |                |
|-----|-------------|-------|-------|-------|-------|-------|-------|-------|-------|----------------|
| 12. | active      | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | passive        |
| 13. | unwilling   | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | willing        |
| 14. | influential | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | noninfluential |
| 15. | successful  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | unsuccessful   |
| 16. | meaningful  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | meaningless    |
| 17. | dominant    | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | lax            |
| 18. | sufficient  | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | insufficient   |
| 19. | leading     | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | following      |
| 20. | critical    | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | indiscriminate |
| 21. | useful      | _____ | _____ | _____ | _____ | _____ | _____ | _____ | _____ | useless        |

**Directions:** Place an X on the line.

22. Was there conflict within your group?

a lotsomenot muchnone

23. Who made the majority of decisions in the group?

one persontwo peopleeach person  
took a turnthe group  
as a whole

24. Would you have performed better without the group?

yesnothe same

Group: \_\_\_\_\_

25. Would you have preferred to play the game

- alone?
- with a different  
group?
- with the same  
group?
- In any  
group?

26. The case history was

- too easy
- fairly  
easy
- not very  
easy
- very  
difficult

27. Do you feel you had the necessary knowledge and skills to play this game? If not what knowledge or skills were lacking?

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28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

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Additional Comments:

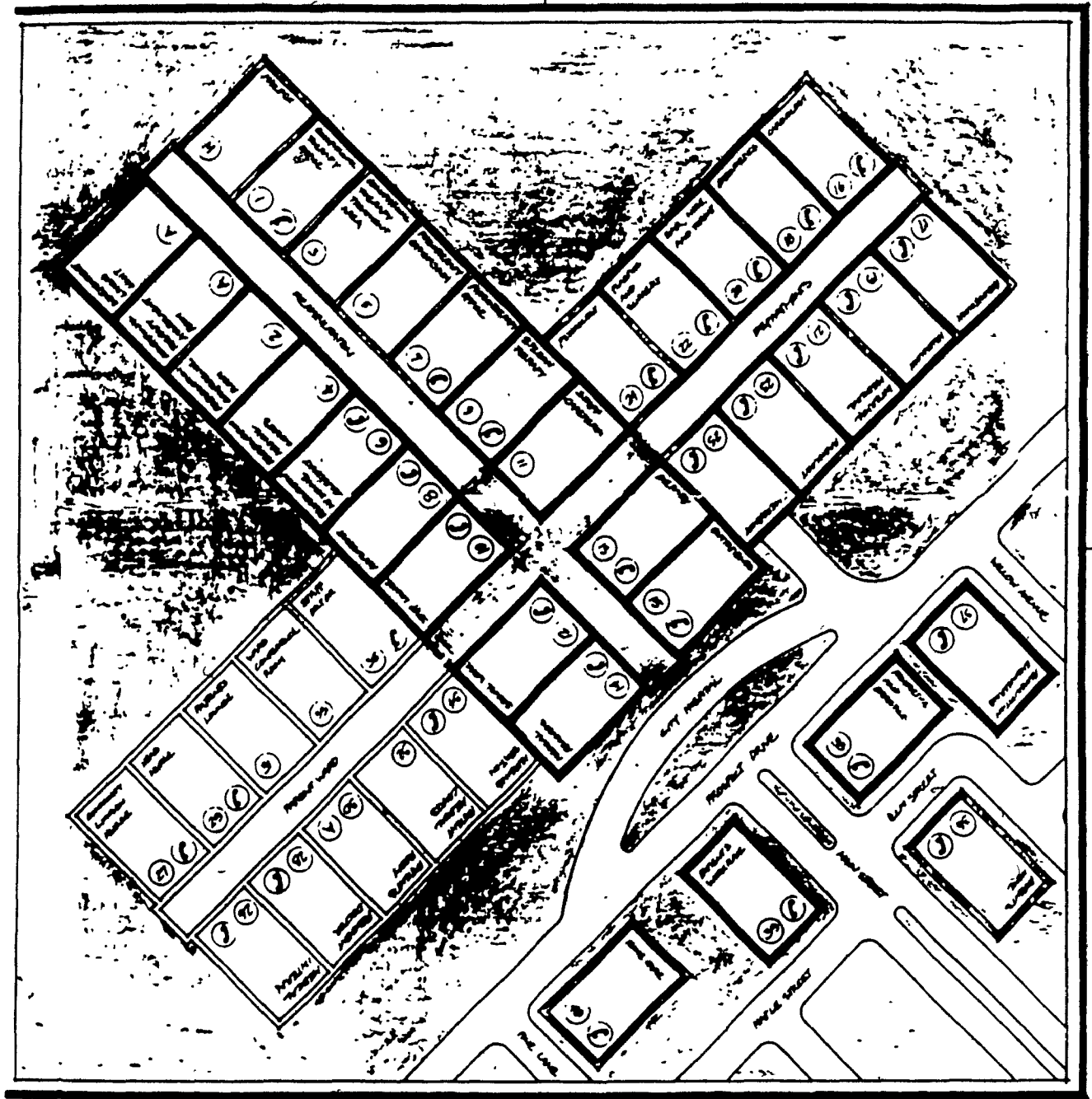
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SAMPLE OF CARDS USED IN PILOT STUDY

CONSULTATION	TELEPHONE	TAXI
Move directly to any numbered location inside the hospital and consult the Patient Information Booklet.	Attempt two calls. to any locations having a telephone, in order to consult the Patient Information Booklet roll a four or higher on the die.	Move directly to any numbered location in the community, consult the Patient Information Booklet.
ASSESSMENT 1 ROM	ASSESSMENT 12 TRANSFERS	ASSESSMENT 16 EATING
Move directly to the OT ASSESSMENT ROOM and consult the Patient Information Booklet for this assessment	Move directly to the INDEPENDENT LIVING UNIT and consult the Patient Information Booklet for this assessment	Move directly to the PATIENT'S ROOM and consult the Patient Information Booklet for this assessment

N.B. All cards on blue cardboard.

Pilot Study  
Occupational Therapy Referral

City General  
Reese, Paul G.  
Rm 216  
623 Elm Street  
Montreal, Quebec  
H3D 1Y7  
REE 5006 0814  
Next of Kin: Wife  
Sally Reese

Date: Dec. 4, 1985

Case History: A 35 year old male who suffered a traumatic amputation of the left hand November 17, 1985.

Reason for Referral: Please assess and provide appropriate treatment.

---

Doctor's Signature.

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INFORMATION CODE

CONSULTATION

1-1, 2-9, 3-17, 4-25, 5-33, 6-41, 7-49, 8-57, 9-65, 10-73, 11-81, 12-89, 13-97, 14-105, 15-113, 16-121, 17-129, 18-137, 19-145, 20-153, 21-161, 22-169, 23-177, 24-185, 25-193, 26-201, 27-209, 28-217, 29-225, 30-233, 31-241, 32-249, 33-257, 34-265, 35-273.

TELEPHONE

1-321, 6-329, 7-337, 8-345, 9-353, 10-361, 12-369, 13-377, 14-385, 15-393, 16-401, 17-409, 18-417, 19-425, 20-433, 21-441, 22-449, 23-457, 24-465, 25-473, 26-481, 27-489, 28-497, 29-505, 34-513, 35-521, 36-529, 37-537, 38-545, 39-553, 40-561.

ASSESSMENT

1-569, 2-577, 3-585, 4-593, 5-601, 6-609, 7-617, 8-625, 9-633, 10-641, 11-649, 12-657, 13-665, 14-673, 15-681, 16-689, 17-697, 18-705.

TAXI

36-281, 37-289, 38-297, 39-305, 40-313.

## Sample Sheet Used in Pilot Study

Case History #	Observation Sheet #	Date
----------------	---------------------	------

Player #5555	Card Played Consultation	Location or Assessment #23
Observations/Disagreements		(X-ray)
O/ Lower 1/3 of femur has a hairline fracture.		
D/ #4323 felt a wasted move. Wanted to go to Head Nurse's Office.		

Player #2815	Card Played Assessment	Location or Assessment #1
Observations/Disagreements		(ROM)
O/ Right shoulder flexion equals 110 degrees. active.		
D/ None		

Player #4323	Card Played Consultation	Location or Assessment #29
Observations/Disagreements		(Head Nurse)
O/ Patient to undergo surgery to Right shoulder tomorrow.		
D/ #5555 and #2815 felt better to consult doctor.		

Player #	Card Played	Location or Assessment
Observations/Disagreements		

Player #	Card Played	Location or Assessment
Observations/Disagreements		

Player #	Card Played	Location or Assessment
Observations/Disagreements		

Pilot Study  
Observation Sheet #

Case History # \_\_\_\_\_ Date \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Observations/Disagreements \_\_\_\_\_

REPORT SOLUTION FILE FOR PILOT STUDY

## Using the Solution Report

**Description:** Each Occupational therapist has his/her own style of writing and may stress certain factors more than others. The report found in this file attempts to represent a model of how a report should be written. Thus it incorporates all those factors which are felt to be necessary to include with respect to a given case history. Please note that in general a list of all the assessments that could be performed is not included in a report. It has only been included here to aid the player.

**Instructions:** Compare your report to the "model" report. Note any discrepancies. Ask yourselves the following questions:

- 1) In what way do the two reports differ?
- 2) In what way are the two reports similar?
- 3) Was our report well organized, logical, clear, too long, too short?
- 4) Did we fail to acquire and/or report vital information?
- 5) Did we "conduct" too many or too few assessments?

**Debriefing:** Because the "model" report can not anticipate all the factors which could possibly have occurred in players reports, a debriefing session is conducted by the game director. This allows players to discuss the reports and gain a better understanding of the reasons why certain factors have been included and other factors excluded from the "model" report. In addition players may have included certain factors which although not present in the "model" report are not necessarily inappropriate and therefore need to be discussed.

## Occupational Therapy Report Used in Pilot Study

Patient's Name: Mr. Paul G. Reese  
 Medicare #: Ree 5006 0814

Date: December 8, 1985

CASE HISTORY: A 35 year old male involved in a chemistry explosion at work (Carleson University) on November 17, 1985. Underwent surgery to amputate left hand and wrist. Fragments of glass removed from face, chest, and upper limbs. Presently patient is medically stable. Stump healing well. Referral to OT received December 4, 1985.

SOCIAL HISTORY:

Married to a 34 year old wife who works part time as a real estate agent. Has two daughters aged 8 and 10. Patient employed as a University professor in Chemistry at Carleson University. Presently receiving workmen's compensation.

SUBJECTIVE: Patient states he wants a "bionic" hand similar to one portrayed on a television program.

ASSESSMENTS PERFORMED:

<input checked="" type="checkbox"/> 1. Range of motion	<input type="checkbox"/> 7. Mobility	<input type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input checked="" type="checkbox"/> 8. Hand Function	<input type="checkbox"/> 14. Bedroom
<input type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Bathroom
<input checked="" type="checkbox"/> 4. Gross coord/balance	<input type="checkbox"/> 10. Cognition	<input checked="" type="checkbox"/> 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> 18. Grooming

OBJECTIVE:

ROM: Full, except for pronation/supination of left arm, 40° active/50° passive for both movements.

Muscle Strength: Normal except for: all right shoulder muscles = 4; all left shoulder muscles = 4-, left elbow flexion/extension = 3+; left supination and pronation = 3-.

Gross Coordination/Balance: Balance very good. Right hand dominant for gross motor activities. Patient protecting left arm.

Sensation: Hypersensitive to light touch, pin prick, and unable to tolerate rough material to bottom of stump. Experiencing a cramping sensation which appears periodically throughout the day. Phantom sensation present.

Hand Function: Left hand dominant. Dexterity fair for right hand. Normal pinch and grasp of right hand.

Endurance: Fair. Breathing hard after walking to therapy.

Evaluation of ADL:

Communication: Verbal-intact. Written- writes slowly but legibly with left stump using a universal cuff. Writes poorly with right hand.

Bathroom: Difficulty manipulating soap, shampoo, and towel when washing.

Eating: Difficulty cutting meat, buttering bread, and opening small containers. Otherwise independent.



Dressing: Difficulty manipulating small fastenings, and zippers.

Unable to tie shoelaces.

Grooming: Independent, but slow.

Observations: Attending nurse reports patient doing little for himself, frequently requesting help. Patient not discussing feelings. Wife expressing concern about husband claims he is depressed and helpless. Wife confides that she is having difficulty coping and the children are getting into trouble.

ANALYSIS: Patient and family appear to be having difficulty adjusting to the patient's amputation. Although Mr. Reese is independent in most self care activities he is frequently requesting help for activities which he does not require.

PLAN: Patient to be seen daily in OT for treatment.

Short Term Goals:

- 1) Increase independence in self care activities. Provide a universal cuff, and any appropriate aids as required.
- 2) Educate patient and family regarding patient's present and future capabilities.
- 3) Provide psychological support to patient and family.
- 4) Increase stump shrinkage by teaching patient to wrap own stump with ace bandages.
- 5) Desensitization of stump.
- ~~6) Increase active ROM of pronation and supination of left arm.~~
- 7) Increase dexterity of right hand.
- 8) Encourage patient to retain left hand dominance for writing.
- 9) In conjunction with the Physiotherapist increase upper limb strength and endurance.
- 10) To train patient in use of temporary prosthesis once he receives it.

Long Term Goals:

- 1) To follow patient on an outpatient basis upon discharge.
- 2) To train patient in care and use of conventional prosthesis.
- 3) Maximize independence.
- 4) Vocational Assessment.

## Occupational Therapy Report

Group: \_\_\_\_\_

Date: \_\_\_\_\_

Patient's Name: \_\_\_\_\_  
Medicare #: \_\_\_\_\_Case History:Social History: \*Subjective:Assessments Performed: (Check off ones performed)

- |   |  |                                       |
|---|--|---------------------------------------|
| <input type="checkbox"/> 1. Range of motion | <input type="checkbox"/> 7. Mobility       | <input type="checkbox"/> 13. Kitchen  |
| <input type="checkbox"/> 2. Muscle Strength | <input type="checkbox"/> 8. Hand Function  | <input type="checkbox"/> 14. Bedroom  |
| <input type="checkbox"/> 3. Muscle Tone     | <input type="checkbox"/> 9. Endurance      | <input type="checkbox"/> 15. Hygiene  |
| <input type="checkbox"/> 4. Coord/balance   | <input type="checkbox"/> 10. Cognition     | <input type="checkbox"/> 16. Eating   |
| <input type="checkbox"/> 5. Sensation       | <input type="checkbox"/> 11. Communication | <input type="checkbox"/> 17. Dressing |
| <input type="checkbox"/> 6. Perception      | <input type="checkbox"/> 12. Transfers     | <input type="checkbox"/> 18. Grooming |

Objective:

Analysis:

Plan:

---

Signature

## DESCRIPTION AND RULES USED IN PILOT STUDY

Object of the Game:

The game is played in a cooperative team of three or four players simulating the actions of an Occupational Therapist (it can also be similiarly played by one or two players). The object is to gather the necessary information on a patient referred to the Occupational Therapist and to plan a treatment program. (This process would take place over several days in an actual hospital).

Required Equipment:

Game board, 42 action cards, Patient Information Booklet (PIB), OT token, die, Referral File, Sample Observation Sheet, Blank Observation Sheets, Blank OT Report Sheet, and Report Solution File.

Game Board:

The board represents various locations in a general hospital, and in the community. It is not drawn to scale and not all locations in a typical hospital are included. Only the locations where the OT might gather information on patients are represented. Most of the locations are equipped with telephones.

Patient Information Booklet:

The patient Information Booklet (PIB) contains information about the various patients portrayed in the different case histories. A player must be careful to refer only to the information concerning the particular case history being studied.

Set Up and Preparation:

1. Place game board face-up on the table.
2. Place OT token on the square marked Mailbox.
3. Place die on game board.
4. Place Patient Information Booklet to the side of the board. Keep it closed.
5. Shuffle the action cards and deal all of them out to the players.
6. Each player sorts their cards placing them face up on the table in front of them.
7. Players are allowed to see each others cards, but may not exchange them.
8. The game director tells you the number of the referral you will be working on.
9. Retrieve the Referral from the Referral File.
10. Read the referral.
11. Decide which player will start first.

Playing the Game:

- Players take turns moving the OT token and playing an action card. Turns occur in a clockwise fashion.
- The player whose turn it is must decide which of their own action cards to play in order to gather information to help in planning a treatment program. The player should consult with the team in deciding which card to play. However, the player can override the decision of the team and play the card they want. No matter how a decision is reached, the player whose turn it is is held accountable for the decision made and must be prepared to defend it.

- A turn is over once an action card has been played and acted upon.
- 12. After carefully reading the referral the first player selects an appropriate action card to play.
  - There are four types of action cards to choose from: Consultation, Taxi, Assessment, and Telephone.
  - Consultation cards allow players to visit any numbered location in the hospital, while Taxi cards allow one to visit any numbered location in the community.
  - Assessment cards allow players to move to a designated location as indicated on the card.
  - Each assessment card is different and allows a player to gain information concerning a specific OT assessment.
  - Not all assessments need be carried out, in fact the team is penalized for carrying out unnecessary ones.
- If a Consultation, Taxi, or Assessment card is played then the player must proceed as follows:
  - a) Follow the directions on the action card and move the OT token to the desired numbered location or appropriate assessment area.
  - b) Note the number of the location written on the board, or if using an Assessment card the number of the assessment written on the action card.
  - c) Look at the referral sheet and find the name of the action card played.
  - d) Find the number of the location or assessment which is the first number of a pair of numbers, e.g. 14 of 13-154.
  - e) Note the PIB number which is the second number of the pair, e.g. 154 of 14-154.
  - f) Look up the information in the PIB associated with that specific number.
- Telephone cards allow players to attempt up to two phone calls.
- To use this card a player must be at a location with a phone (a drawing of a telephone must be in the square). In order to put through a call; that is, have access to the PIB, a player must roll a 4 or higher on the die. When using the Telephone card a player is allowed to roll the die only twice. Therefore, three different possibilities can occur: the player makes two successful calls, one successful call (it doesn't matter whether it is the first or second call), or none. Players may use the Telephone card for either one or two attempts, but the card must be discarded once the turn is finished; therefore, a second call can not be saved for future turns.
- If a telephone card is played, the player proceeds as follows:
  - a) Read the instructions of the card. Do not move the OT token.
  - b) Select a location you wish to call which has a telephone.
  - c) Roll the die. If a four or higher has been rolled, note the location number of the place you are calling.
  - d) Look at the referral sheet and find the heading marked telephone.
  - e) Find the number of the location called which is the first number

of a pair of numbers, e.g. 12 of 12-345.

f) Note the PIB number which is the second number of the pair, e.g. 345 of 12-345.

g) Look up the information in the PIB associated with that specific number.

13. Record the appropriate information on the observation sheet.

- Refer to the sample sheet provided.
- At the top of each sheet information regarding the referral number, page number, and date should be entered.
- The player whose turn it is must record their identification number (in this case the last four digits of their phone number), the action card played, location or assessment number, observations obtained from the PIB, and any disagreements which may have arisen among the group as to what action the player decided to carry out.
- Observation sheets are shared among the players, being passed to the player whose turn it is. Each player is responsible for filling out the sheet during their turn.

14. Pass the observation sheet to the next player who repeats the same process (refer to step #12).

- Please note that the PIB can only be consulted during the turn an action card is played.
- To refer back to the PIB for information previously received, the move must be repeated with a new action card.
- If all a player has left to play are Assessment cards viewed as being unnecessary, then the player should discard these cards and pass on his/her turn.

15. Game ends when all the appropriate cards have been played.

#### Writing the Report:

16. Retrieve the Blank OT Report sheet.

17. Using the SOAP method the team works together to write one OT report.

18. Once the report is written, retrieve the appropriate report from the Report solution file.

19. Compare your report to the "Solution Report".

#### Debriefing Session:

A debriefing session is conducted by the game director at the end of the game to discuss the game process and the reports.

#### Caution:

Actions simulated in the game are those of a professional occupational therapist and should not be initiated during clinical placements by OT students without clearing them with a supervising therapist. Any reports written by a student must be approved and signed by the supervising therapist before being filed in the patient's chart.

### Protocol for Pilot Study

**Materials:** watch, tape recorder, 6 cassettes, note pad, 4 pencils, 4 pretests, 4 copies of game rules. Game which includes: game board, OT token, die, 42 action cards, referral, patient information booklet, 6 observation sheets, 1 sample observation sheet, 1 blank OT report, solution report. Four attitude questionnaires, four group dynamics questionnaires.

1. Administer Pretest: TIME: 3:35 p.m.  
 Have students start on section D and stop when slowest has read scenario.
  - a) Have students circle any vocabulary which is unclear to them.
  - b) Have students place a check beside any directions, questions, or response requirements that are unclear to them.
  - c) Have students write additional comments in the test if they desire.
  - d) Do not stop and discuss unclear items with students during the test.
  - e) Record the time required for students to complete the entry test.
  
2. Discuss Pretest: TIME: 4:35 p.m.
  - a) Discuss questions which were unclear, note changes.
  - b) Ask students if they knew what I was looking for.
  - c) Get feedback about scenario.
  - d) Do not discuss the answers to the questions.
  
3. Explain rules of the Game: TIME: 5:00 p.m.
  - a) Distribute rules to players.
  - b) Instruct players to write on materials to indicate where difficulty is encountered or to discuss verbally ideas and problems.
  - c) Read rules aloud, have students read along silently and follow directions. Stop at each section and students if there are any questions.
  - d) Note questions, changes made.
  
4. Play game: TIME: 5:45 p.m.
  - a) Instruct students to try and play the game without consulting me.
  - b) Instruct students to write on materials to indicate where difficulty is encountered or to discuss verbally ideas and problems.
  - c) Have students start game play.
  - d) Note if students have difficulty following or understanding any rules.
  - e) Note if any of the game materials or game board are problematic.
  - f) Observe group dynamics, is the play of the game developing as expected?
  
5. Review Report: TIME: 7:35 p.m.
  - a) Instruct students to review format of the report.
  - b) Ask students if it is clear.
  - c) Have students review ideal report, allow 5-10 minutes.

**6. Conduct Debriefing:****TIME: 7:45 p.m.**

- a) Explain what game was trying to do.
- b) Discuss report generated by players.
- c) Explain solution report.
- d) Retrace routes and decisions made.
- e) Compare experience to real world.
- f) What did they learn from the experience?

**7. Review Pretest:****TIME: 8:10 p.m.**

- a) Which questions too easy.
- b) Which difficult.
- c) What questions did the game help answer.
- d) What questions not addressed by game.
- e) What questions are addressed by game which should be asked in pretest.

**7. Administer Attitude Questionnaire:****TIME: 8:30 p.m.**

- a) Answer first three pages. If tired do verbally.
- b) Have students circle any vocabulary which is unclear to them.
- c) Have students place a check beside any directions, questions, or response requirements which are unclear.
- d) Have students write additional comments in the test if they desire.
- e) Discuss unclear items, ask for alternative questions.
- f) Verbally review group dynamics questionnaire get reactions.
- g) Ask students what additional questions should be asked.

**FINISHED****TIME: 8:45 p.m.**



**Appendix B**  
**Questionnaires and Materials Used With Subject Matter Experts**

Attitude Questionnaire for Subjects Matter Experts  
Questions Regarding the Game

1. What do you like most about the simulation-game?

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2. What do you like least about the simulation-game?

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3. Do you think that this simulation-game can help prepare students for clinical work in a physical medicine setting?

\_\_\_ yes (see a below)      \_\_\_ no (see b below)

a) If you answered yes to question 3, check off during which year(s) in an OT student's education you feel that the simulation-game should be used, and how in each year it should be used. You may check off more than one category.

eg. during first year in class as a group; \_\_\_\_\_  
during second year out of class on an individual basis.

Years	In class		Outside of class	
	Group	Individual	Group	Individual
First	_____	_____	_____	_____
second	_____	_____	_____	_____
third	_____	_____	_____	_____
intern	N/A	N/A	_____	_____

b) If you answered no to question 3, please explain why.

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4. Do you think that students should be allowed to refer to reference materials during the game? If yes, what type and in what year?

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5. How would you change the game?

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6. With the appropriate modifications, can you see this game being used to help prepare students for work in other areas, eg, psychiatry, paediatrics? Please explain.

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Biographical Information

7. Have you been employed at your present job for more than one year?  
 yes  no

8. Starting with your present job, list the area, type of setting, population and your role at work.  
 eg. Phys. med - public school system - adolescents - sole OT  
 Psychiatry- acute general hospital - adults, geriatrics - staff OT.

Area	Setting	Population	Role

9. How many years of experience do you have as an OT?

- less than one
- 1-3
- 3-5
- more than 5

CASE HISTORIES

A total of 8 cases (to be used in the simulation-game) are being developed for testing with OT students. The case histories will be categorized according to three levels of difficulty: elementary (ELEM), intermediate (INTER), and advanced (ADV). Level of Difficulty is determined by complexity of disability, patient compliance, and social situation. Below is a brief outline of the case histories to be used.

Directions: Please study the following cases and indicate the level of difficulty you feel that these case histories would represent to OT students. Please include any suggestions for change on the following page.

DISABILITY	PT. COMPLIANCE	SOCIAL SITUATION	ELEM	INTER	ADV
1) Recent Quadriplegic C7, male (m).	Unrealistic, assumes will walk out of hospital.	Grade 10 education. Employed as a store clerk. Wife and 2 small children.			
2) Right Total Hip Replacement female (f).	Compliant, but fearful. Wishes to regain independence.	Recently remarried. Husband supportive.			
3) Multiple Sclerosis x 8 yrs w/c bound, homemaker (f).	Compliant, not achieving her full potential. Requires guidance in this area.	Lives with parents and 2 daughters; 10 & 12. Family overly protective. Financially secure.			
4) Rheumatoid Arthritis affecting hands, wrists, knees, feet, in flare up.	Very compliant, alert, bright.	Husband difficulty understanding disease, not very supportive. She has job security.			
5) Flexor Tendon Repair (FDP of D2) (m).	Compliant, overly cautious.	Full family support. On sick leave.			
6) Recent B/E Amputee (m).	Depressed, but compliant.	Family difficulty coping want to help. Job secure.			
7) Traumatic grade four closed head injury, 4 weeks in coma, right hemiparalysis, aphasia, multiple contractures (f).	Confused-inappropriate.	Family concerned and supportive. Last year in chemistry at University.			
8) Myocardial Infarction (first) Several coronary disease risk factors, prognosis poor (m).	Concerned wants to be compliant, but difficulty monitoring his own behaviour.	Marital Conflict. Self-employed, financially secure.			

Please record any suggestions you may have regarding the case histories.

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Additional Comments.

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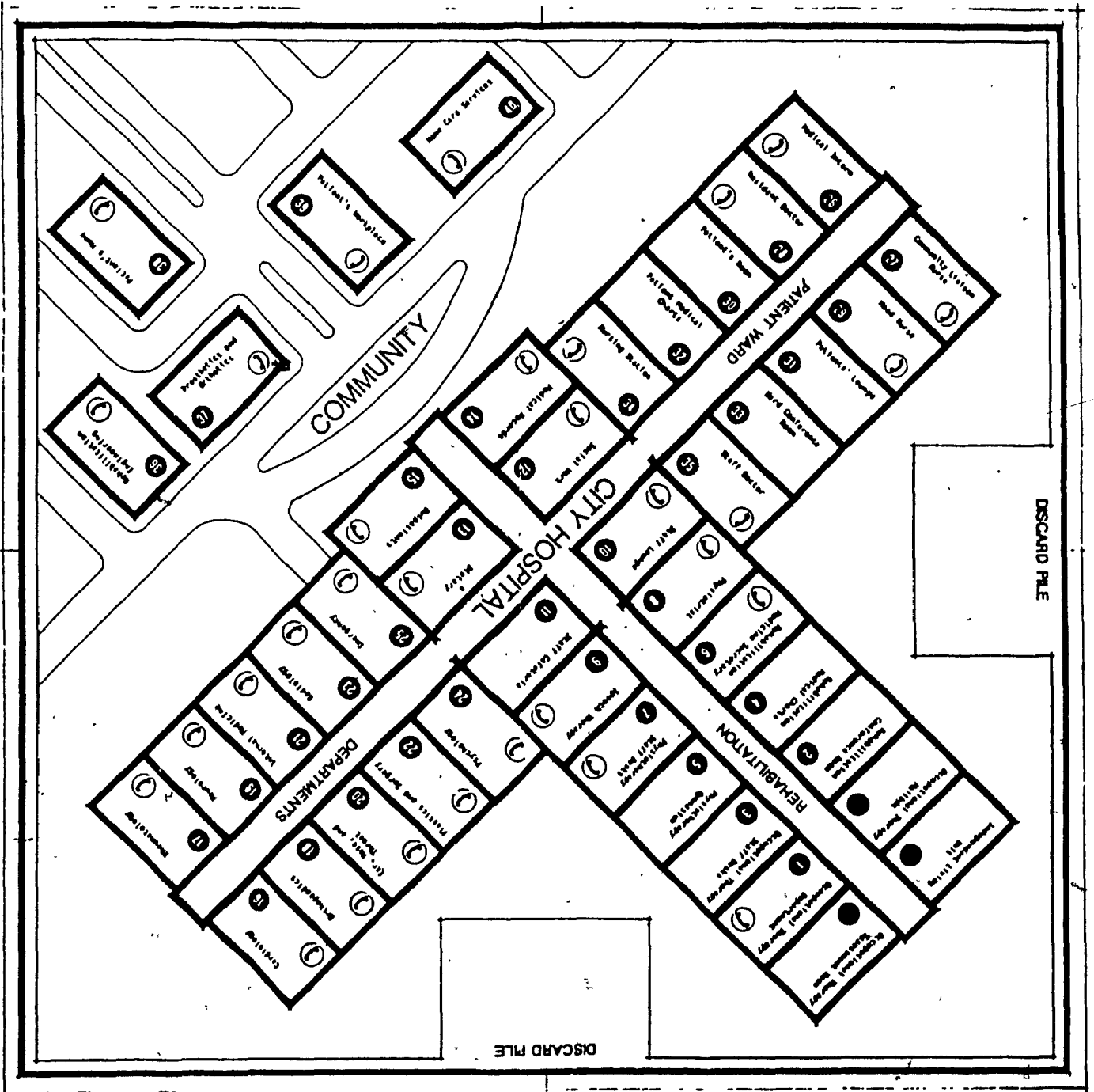
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Thank you for your cooperation and assistance.



SAMPLE OF CARDS USED IN SUBJECT MATTER EXPERTS STUDY

+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
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+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+
+	+	+	+	+	+	+

CONSULTATION



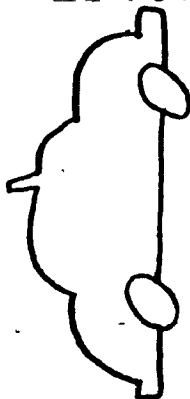
Move directly to any numbered location inside the hospital and consult the Patient Information Booklet.

TELEPHONE



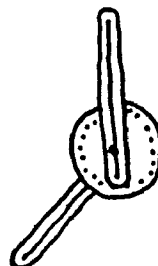
Do not move OT token. Attempt two calls to any locations having a telephone. To consult the Patient Information Booklet, roll a four or higher on the die.

TAXI



Move directly to any numbered location in the community, consult the Patient Information Booklet, and return to the OT Mailbox.

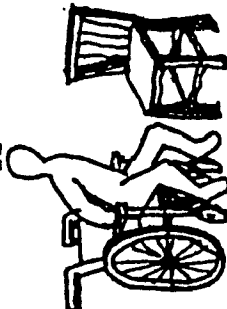
ASSESSMENT 1



RANGE OF MOTION

Move directly to the OT ASSESSMENT ROOM and consult the Patient Information Booklet for assessment 1.

ASSESSMENT 12



TRANSFERS

Move directly to the INDEPENDENT LIVING UNIT and consult the Patient Information Booklet for assessment 12.

ASSESSMENT 16



EATING

Move directly to the INDEPENDENT LIVING UNIT and consult the Patient Information Booklet for assessment 16.

## Referral for Subject Matter Experts Study

## Occupational Therapy Referral #1

X Inpatient         Outpatient  
 Room 216

City General  
 Reese, Paul G.  
 623 Elm Street  
 Montreal, Quebec  
 H3D 1Y7

REE 5006 0814  
 Next of Kin: Wife,  
 Sally Reese

Date: Dec. 4, 1985

Case History: A 35 year old male who suffered a traumatic amputation of the left hand November 17, 1985.

Reason for Referral: Please assess and provide appropriate treatment.

\_\_\_\_\_  
 Doctor's Signature

\_\_\_\_\_  
 INFORMATION CODES

CONSULTATION		TELEPHONE		ASSESSMENT	TAXI
1-1,	19-145,	1-321,	24-465,	1-569,	36-281,
2-9,	20-153,	6-329,	25-473,	2-577,	37-289,
3-17,	21-161,	7-337,	26-481,	3-585,	38-297,
4-25,	22-169,	8-345,	27-489,	4-593,	39-305,
5-33,	23-177,	9-353,	28-497,	5-601,	40-313.
6-41,	24-185,	10-361,	29-505,	6-609,	
7-49,	25-193,	12-369,	34-513,	7-617,	
8-57,	26-201,	13-377,	35-521,	8-625,	
9-65,	27-209,	14-385,	36-529,	9-633,	
10-73,	28-217,	15-393,	37-537,	10-641,	
11-81,	29-225,	16-401,	38-545,	11-649,	
12-89,	30-233,	17-409,	39-553,	12-657,	
13-97,	31-241,	18-417,	40-561.	13-665,	
14-105,	32-249,	19-425,		14-673,	
15-113,	33-257,	20-433,		15-681,	
16-121,	34-265,	21-441,		16-689,	
17-129,	35-273.	22-449,		17-697,	
18-137,		23-457,		18-705.	



## SAMPLE INFORMATION SHEET FOR SUBJECT MATTER EXPERTS

Referral # 5

Page # 1

Date Dec. 5, 1985

Player #4321 Card Played: Consultation Location or Assessment: X-Ray  
Reason/Disagreements/Information

R/ to see status of femur

D/ 2145 said should phone first

I/ 23 Nov. 85 - lower 1/3 of right femur has a hairline fracture

Player #2145 Card Played: Assessment Location or Assessment: Mobile  
Reason/Disagreements/Information

R/ to assess extent of impairment of mobility

D/ none

I/ ambulating with a cane

Player #6543 Card Played: Telephone Location or Assessment: pt home  
Reason/Disagreements/Information

R/ to talk to family member

D/ #4321 and #2145 thought should do an eating assessment instead.

I/ wife is sick and can not visit patient

Player # Card Played Location or Assessment  
Reason/Disagreements/Information

Player # Card Played Location or Assessment  
Reason/Disagreements/Information

Player # Card Played Location or Assessment  
Reason/Disagreements/Information

## Information Sheet Used With Subject Matter Experts

Referral #	Page #	Date
------------	--------	------

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

Player #	Card Played	Location or Assessment
Reason/Disagreements/Information		

REPORT SOLUTION FILE FOR SUBJECT MATTER EXPERTS

## Using the Solution Report

**Description:** Each Occupational therapist has his/her own style of writing and may stress certain factors more than others. The report found in this file attempts to represent a model of how a report should be written. Thus it incorporates all those factors which are felt to be necessary to include with respect to a given case history. Please note that in general a list of all the assessments that could be performed is not included in a report. It has only been included here to aid the player.

**Instructions:** Compare your report to the "model" report. Note any discrepancies. Ask yourselves the following questions:

- 1) In what way do the two reports differ?
- 2) In what way are the two reports similar?
- 3) Was our report well organized, logical, clear, too long, too short?
- 4) Did we fail to acquire and/or report vital information?
- 5) Did we "conduct" too many or too few assessments?

**Debriefing:** Because the "model" report can not anticipate all the factors which could possibly have occurred in players reports, a debriefing session is conducted by the game director. This allows players to discuss the reports and gain a better understanding of the reasons why certain factors have been included and other factors excluded from the "model" report. In addition players may have included certain factors which although not present in the "model" report are not necessarily inappropriate and therefore need to be discussed.

## Occupational Therapy Report Used with Subject Matter Experts

Patient's Name: Mr. Paul G. Reese  
 Medicare #: Ree 5006 0814

Date: December 8, 1985

**CASE HISTORY:** A 35 year old male involved in a chemistry explosion at work (Carleson University) on November 17, 1985. Underwent surgery to amputate left hand and wrist. Fragments of glass removed from face, chest, and upper limbs. Presently patient is medically stable. Stump healing well. Referral to OT received December 4, 1985.

**SOCIAL HISTORY:**

Married to a 34 year old wife who works part time as a real estate agent. Has two daughters aged 8 and 10. Patient employed as a University professor in Chemistry at Carleson University. Presently receiving workmen's compensation.

**SUBJECTIVE:** Patient states he wants a "bionic" hand similar to one portrayed on a television program.

**ASSESSMENTS PERFORMED:**

<input checked="" type="checkbox"/> 1. Range of motion	<input type="checkbox"/> 7. Mobility	<input type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input checked="" type="checkbox"/> 8. Hand Function	<input type="checkbox"/> 14. Bedroom
<input type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Bathroom
<input checked="" type="checkbox"/> 4. Gross coord/balance	<input type="checkbox"/> 10. Cognition	<input checked="" type="checkbox"/> 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> 18. Grooming

**OBJECTIVE:**

**ROM:** Full, except for pronation/supination of left arm, 40° active/50° passive for both movements.

**Muscle Strength:** Normal except for: all right shoulder muscles = 4; all left shoulder muscles = 4-, left elbow flexion/extension = 3+; left supination and pronation = 3-.

**Gross Coordination/Balance:** Balance very good. Right hand dominant for gross motor activities. Patient protecting left arm.

**Sensation:** Hypersensitive to light touch, pin prick, and unable to tolerate rough material to bottom of stump. Experiencing a cramping sensation which appears periodically throughout the day. Phantom sensation present.

**Hand Function:** Left hand dominant. Dexterity fair for right hand. Normal pinch and grasp of right hand.

**Endurance:** Fair. Breathing hard after walking to therapy.

**Evaluation of ADL:**

**Communication:** Verbal-intact. Written- writes slowly but legibly with left stump using a universal cuff. Writes poorly with right hand.

**Bathroom:** Difficulty manipulating soap, shampoo, and towel when washing.

**Eating:** Difficulty cutting meat, buttering bread, and opening small containers. Otherwise independent.

Dressing: Difficulty manipulating small fastenings, and zippers.  
Unable to tie shoelaces.  
Grooming: Independent, but slow.

Observations: Attending nurse reports patient doing little for himself, frequently requesting help. Patient not discussing feelings. Wife expressing concern about husband claims he is depressed and helpless. Wife confides that she is having difficulty coping and the children are getting into trouble.

ANALYSIS: Patient and family appear to be having difficulty adjusting to the patient's amputation. Although Mr. Reese is independent in most self care activities he is frequently requesting help for activities which he does not require.

PLAN: Patient to be seen daily in OT for treatment.

Short Term Goals:

- 1) Increase independence in self care activities. Provide a universal cuff, and any appropriate aids as required.
- 2) Educate patient and family regarding patient's present and future capabilities.
- 3) Provide psychological support to patient and family.
- 4) Increase stump shrinkage by teaching patient to wrap own stump with ace bandages.
- 5) Desensitization of stump.
- 6) Increase active ROM of pronation and supination of left arm.
- 7) Increase dexterity of right hand.
- 8) Encourage patient to retain left hand dominance for writing.
- 9) In conjunction with the Physiotherapist increase upper limb strength and endurance.
- 10) To train patient in use of temporary prosthesis once he receives it.

Long Term Goals:

- 1) To follow patient on an outpatient basis upon discharge.
- 2) To train patient in care and use of conventional prosthesis.
- 3) Maximize independence.
- 4) Vocational Assessment.

## Occupational Therapy Report Used with Subject Matter Experts

Group: \_\_\_\_\_

Date: \_\_\_\_\_

Patient's Name: \_\_\_\_\_

Medicare #: \_\_\_\_\_

Case History:Social History:Subjective:Assessments Performed: (Check off ones performed)

- |   |  |                                       |
|---|--|---------------------------------------|
| <input type="checkbox"/> 1. Range of motion | <input type="checkbox"/> 7. Mobility       | <input type="checkbox"/> 13. Kitchen  |
| <input type="checkbox"/> 2. Muscle Strength | <input type="checkbox"/> 8. Hand Function  | <input type="checkbox"/> 14. Bedroom  |
| <input type="checkbox"/> 3. Muscle Tone     | <input type="checkbox"/> 9. Endurance      | <input type="checkbox"/> 15. Hygiene  |
| <input type="checkbox"/> 4. Coord/balance   | <input type="checkbox"/> 10. Cognition     | <input type="checkbox"/> 16. Eating   |
| <input type="checkbox"/> 5. Sensation       | <input type="checkbox"/> 11. Communication | <input type="checkbox"/> 17. Dressing |
| <input type="checkbox"/> 6. Perception      | <input type="checkbox"/> 12. Transfers     | <input type="checkbox"/> 18. Grooming |

Objective:

Analysis:

Plan:

---

Signature



## DESCRIPTION AND RULES USED WITH SUBJECT MATTER EXPERTS

Object of the Game:

The object of the game is to gather necessary information on a patient referred to the Occupational Therapist and to plan a physical medicine treatment program. A group of three or four players works together, with each player taking a turn to act as the Occupational Therapist. The game is played cooperatively; that is, players do not compete with each other. (In reality, this process would take place over several days.)

Game Process:

There are three phases of the game process, explained later on in the rules:

- First Phase: Playing the game;
- Second Phase: Writing the Occupational Therapy Report;
- Third Phase: Debriefing session.

Required Equipment:

Game board, 39 action cards, Patient Information Booklet (PIB), token, and die. Game Workbook containing: copies of a Referral, Sample Information Sheet, Blank Information Sheets, Blank OT Report Sheet, and "Solution Report".

Playing the Game:Set up and preparation:

1. Place game board face-up on the table.
2. Study the game board:
  - The board represents various locations in a general hospital, and in the community. It is not drawn to scale and not all locations in a typical hospital are included. Only the locations where the OT might gather information on patients are represented. Most of the locations are equipped with telephones.
  - The board is divided into four general areas: Patient Ward, Departments, Rehabilitation, and Community.
3. Find these four areas and note the names of the various squares located in these areas.
4. Place the token on the square marked OT Mailbox, which is located in the Rehabilitation area.
5. Place die on game board.
6. Place Patient Information Booklet (PIB), to the side of the board. Don't open it.
7. Shuffle the action cards and deal all of them out to the players.
8. Each player places their cards face up on the table in front of them. Cards may be grouped into four piles: Consultation, Taxi, Assessment, and Telephone.
9. Players are allowed to see each others cards, but may not exchange them.
10. Retrieve copies of the Referral for each player, these are located inside the cover of the Game Workbook.
11. Each player should read the top half of the referral and place it near them for quick reference.
12. Decide which player will start first.

Game play:

13. After carefully reading the referral the player whose turn it is carefully considers what type of information they wish to gather and how they are most likely to acquire that information using an action card.
  - There are four types of action cards to choose from: Consultation, Taxi, Assessment, and Telephone.
  - These different cards allow players to visit locations, gather information on a particular OT assessment, or make telephone calls. (The specific function of each action card will be explained later.)
  - The player whose turn it is must decide which of their own action cards to play in order to gather information to help in planning a treatment program for the patient. The player should consult with the team in deciding which card to play. However, the player can override the decision of the team and play the card they want. No matter how a decision is reached, the player whose turn it is is held accountable for the decision made and must be prepared to defend it during the debriefing session.
14. Once a decision has been reached the first player opens the Game Workbook and locates the Sample Information Sheet and the Blank Information Sheets.
  - In order to fill out the Information Sheet players should study the Sample Information Sheet provided (the sheets can be taken out of the workbook).
15. At the top of the Blank Information Sheet enter the referral number, page number (starting with number one), and date.
16. The player whose turn it is then enters their ID number (use the last four digits of your phone number), the action card selected, and the selected location or OT assessment (these are explained below).
17. The player then records the reason for carrying out a certain action.
18. If any disagreements arise as to the decision made by the player these should be recorded.
19. The player then carries out the action described on the selected action card as explained in the next section.

Action cards:

For practice carry out the steps outlined below using the examples [in the square brackets]; however, do not write on your Information Sheet.

- Consultation cards allow players to visit any numbered location in the hospital.
  - If a Consultation card is played than the player must proceed as follows:
    - a) Record decision made, reason, and any disagreements on the Information Sheet.
    - b) Follow the directions on the action card and move the token to the desired numbered location in the hospital. [advance to Dietary]
    - c) Note the number of the location written on the board. [number 13 for dietary]
    - d) Look at the bottom of the referral sheet and find the name of the

- action card played. [Consultation]
- e) Find the number of the location which is the first number of a pair of numbers. [13 of 13-97]
  - f) Note the PIB number which is the second number of the pair. [97 of 13-97]
  - g) Look up the information in the PIB associated with that specific number. [Patient on a regular diet.]
  - h) Record information obtained on the Information Sheet.
- Taxi cards allow players to visit any numbered location in the community. As soon as the player has visited the location they must return the token to the Taxi-Dropoff in front of the hospital.
    - If a Taxi card is played the player follows the same procedure as outlined for the Consultation card; the only difference being that a player advances to a location in the community.
  - Assessment cards allow players to gain information about a particular OT assessment carried out on the patient; thus each assessment card is different. Not all assessments need be carried out, in fact the group should not play assessment cards which they feel are unnecessary as this will affect the quality of the report to be written.
    - If an Assessment card is played than the player must proceed as follows:
      - a) Record decision made, reason, and any disagreements on the Information Sheet.
      - b) Follow the directions of the Assessment card and move the Token to the designated location as written on the card. [Find the Perception Assessment card and advance to the OT Assessment Area]
        - all assessments occur in the Rehabilitation Area either in the OT Assessment Room or Independent Living Unit. Both locations are marked with a letter A.
      - c) Note the number of the Assessment written on the Assessment card. [Number 6 for perception]
      - d) Look at the bottom of the referral sheet and find the name of the action card played. [Assessment]
      - e) Find the number of the Assessment which is the first number of a pair of numbers. [6 of 6-609]
      - f) Note the PIB number which is the second number. [609 of 6-609]
      - g) Look up the information in the PIB associated with the specific number. [Normal]
      - h) Record information obtained on the Information Sheet.
  - Telephone cards allow players to attempt up to two phone calls. To use this card a player must be at a location with a phone (a drawing of a telephone must be in the square). In order to put through a call; that is, have access to the PIB, a player must roll a 4 or higher on the die. When using the Telephone card a player is allowed to roll the die only twice. Therefore, three different possibilities can occur: the player makes two successful calls, one successful call (it doesn't matter whether it is the first or second call), or none. Players may use the Telephone card for either one or two attempts, but the card must be discarded once the turn is finished; therefore, a second call can not be saved for future turns.
    - If a telephone card is played, the player proceeds as follows:

- a) Record decision made, reason, and any disagreements on the Information Sheet.
  - b) Read the instructions of the card. Do not move the OT token.
  - c) Select a location you wish to call which has a telephone. [Rheumatology]
  - d) Roll the die. If a four or higher has been rolled, note the location number of the place you are calling. [Number 17]
  - e) Look at the referral sheet and find the heading marked telephone.
  - f) Find the number of the location called which is the first number of a pair of numbers. [17 of 17-409]
  - g) Note the PIB number which is the second number of the pair. [409 of 17- 409]
  - h) Look up the information in the PIB associated with that specific number. [Not one of our patients]
  - i) Record the information on the Information Sheet.
  - j) Roll the die again to see if a second call can be made.
- Players take turns moving the Token and playing an action card. Turns occur in a clockwise fashion. Information sheets are shared among the players, being passed to the player whose turn it is. Each player is responsible for filling out the sheet during their turn.
  - Once a card has been played it is discarded into the discard pile (outlined on the board) and a turn is over.

PLEASE REMEMBER TO RECORD THE REASON FOR PLAYING A CERTAIN ACTION CARD AS WELL AS ANY DISAGREEMENTS WHICH MAY HAVE ARISEN AS A RESULT OF THIS DECISION ON THE INFORMATION SHEET. ONCE THIS INFORMATION HAS BEEN RECORDED THEN AND ONLY THEN CAN A PLAYER LOOK UP INFORMATION IN THE PATIENT INFORMATION BOOKLET.

20. The first player passes the Information sheet to the next player who repeats the same process (refer to step # 13).

**Additional Information:**

- Please note that the PIB can only be consulted during the turn an action card is played.
- If a player fails to record information the move must be repeated with a new action card.
- Game ends when all the appropriate cards have been played.
- A time limit of one hour has been placed on Game Play.

**Writing the Report:**

21. Retrieve the Blank OT Report sheet located at the back of the workbook (remove the report from the workbook).
20. Using the SOAP method and referring to the Information Sheets, the team works together to write one OT report. The team has 20 minutes in which to complete the report.
21. Once the report is written, retrieve the "Solution Report" located in the back flap of the workbook.
22. Read the instructions on the first page.
23. Compare the report written to the "Solution Report" this should take 5-10 minutes.

**Debriefing Session:**

A debriefing session is conducted by the game director at the end of the

game to discuss the game process and the reports.

Caution:

Actions simulated in the game are those of a professional occupational therapist and should not be initiated during clinical placements by OT students without clearing them with a supervising therapist. Any reports written by a student must be approved and signed by the supervising therapist before being filed in the patient's chart.

Protocol for Presentation for Subject Matter Experts; Study

Materials: 3 overhead transparencies, 4 games, 37 copies of rules, 36 attitude questionnaires, 4 notepads, 8 pencils, and 1 cassette.

Equipment: Overhead projector, 4 tables, and 12 chairs.

- 1) Quick introduction to the simulation-game. 5 MINUTES
  - overhead transparency of format of presentation
  - definition of term simulation-game
  - description of production & development phase
  - warn that will discuss objectives after game play
  
- 2) Ask for 12 volunteers, mixed experience. 5 MINUTES
  - Set up 12 players, in two rooms
  - Ask others to observe and take part (7 per group)
  - assign four observers from each group to record comments made during game play by subjects, provide notepads and pencils
  - Handout rules.
  - Project transparency of game board onto screen for observers
  
- 3) Explanations 5 MINUTES
  - Explain will play for 30 minutes.
  - Caution subjects to keep in mind game designed for students.
  - Author will 1) observe how play is developing  
2) be a source of info
  
- 4) Rules 15 MINUTES
  - Author and assistant to read rules aloud
  - Instruct subjects to read along silently
  
- 5) Stop game play after 30 minutes 30 MINUTES
  
- 6) Explain next steps in the game. 10 MINUTES **START TAPE RECORDER**
  - Blank OT Report, pass around.
  - Solution report
  - Debriefing session
  
- 7) Discussion 20 MINUTES
  - Ask subjects what they think the objectives are.
  - Present own objectives, use overhead transparency.
  - Invite comments concerning the simulation-game.
  
- 8) Ask subjects to fill out Attitude questionnaire. 10 MINUTES
  
- 9) Wrap up, present results of the pilot study. 5 MINUTES
  - development of strategies (eg. med rec)
  - interesting false assumptions
  - promoted discussion, involvement
  - enjoyed its realism
  - collect attitude questionnaires

**Appendix C**

**Questionnaires and Materials Used in Main Study**

## PRETEST

Identification: list the  
last four digits of your phone:

Date: \_\_\_\_\_

**Instructions:** For purposes of identification, please record the last four digits of your phone number where indicated. Please use a pencil to fill in the questionnaire. Do not hesitate to erase and change your answers should you so desire.

In this questionnaire there are a total of eight questions to answer. Try to answer all eight questions, please keep your responses brief and concise. Feel free to use point form.

Read each question carefully, if the question is unclear raise your hand and an attempt will be made to clarify it. If you have difficulty with a question simply do the best you can or move on to the next one, you may return to the difficult question later if you have time. You will have up to 30 minutes to answer all the questions. Should you finish early, raise your hand, and I will collect your materials. Please leave the classroom quietly. Do you have any questions?



PRETEST  
Section A

1. The passage below provides you with a case history of a patient with a particular disability. There are three types of information available in this case history:

- a) information which is a Major Factor to consider when planning an OT treatment program for this patient, that is, it will have a major influence on one's treatment plan;
- b) information which is Potentially Significant, that is, it may or may not have an affect on planning this patient's OT treatment program, but it needs to be investigated further;
- c) information which is Unimportant in terms of planning an OT treatment program for this patient, that is, the information is irrelevant.

Directions: Read the passage on the following page carefully. Circle all the pieces of information which you feel are major factors in planning an OT treatment program for this patient. Underline all the pieces of information which you feel are potentially significant to the planning of an OT program for this patient. Leave blank any information which you feel is unimportant.

Eg. Mr. Hines is a talkative man suffering from osteoarthritis of the left hip and both knees; he mentions to you that he and his wife are experiencing marital difficulties.

Case History:

Mary Singer is a 53 year old female suffering from carpal tunnel syndrome of her dominant right hand for the past two months. She has had diabetes mellitus for 15 years. She has been admitted to hospital for purposes of assessing her diabetes which is no longer being controlled by diet alone. She has been referred to D.T. to assess hand function and independence in ADL and provide the appropriate treatment.

Reading her medical chart you note that she is having trouble sleeping and is constipated. She is receiving steroid injections for her hand, which is not responding well to treatment. You visit Mary in her room, she tells you that she is a homemaker and loves to cook, joking that her husband has the stomach to prove it. She talks about her two children who are grown and live away from home. You ask her about her activities, she shrugs saying that she likes to stay at home and play the piano. She complains that her hand is very painful particularly at night and that she can only use it for light activities. You set up an appointment for the next day which she records on a piece of paper.

At lunch you mention to your supervisor that you have just received a referral for Mary Singer. The dietician overhears your remark and comments that recently she has been having a terrible time trying to get Mary to stick to her diet, in fact Mary has gained 20 pounds in the past few months. She has confronted Mary about this, but Mary denies cheating on her diet.

The next day Mary is late for her appointment. She apologizes stating that she wasn't aware she had one. Her husband and two grandchildren have accompanied her. Mr. Singer is a plumber who enjoys

his work, and he talks excitedly about the trip to California he and Mary are planning this year where they will stay with their son. The children tease Mary, accusing her of not remembering their names. Mary smiles and tells them they shouldn't tell fibs. The children deny that they are lying. At that point, the ward clerk phones to tell you that Mary must return immediately to the ward to get her injection. The appointment is cut short.



Section C

4. You have just received a referral to assess and treat a 35 year old male who has recently suffered a laceration to his Right wrist extensor tendons, ECRL & ECRB. What would be the first three steps you would do in order to gain information to help in planning your treatment program. List the three steps, citing your reason for each step. Restrict your answer to two lines per step; eg. a. talk to psychologist - to find out how patient is adjusting to the accident

a. \_\_\_\_\_

b. \_\_\_\_\_

c. \_\_\_\_\_

5. Compare the advantages and disadvantages of using a phone versus visiting a person in order to gain information from others about a patient, you as an OT are treating. Feel free to use point form.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Describe the function and contents of medical charts (phys. med.). Include in your description the problems and limitations of its use. Feel free to use point form.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

7. Cite three distinct factors or situations in which an OT will receive (from the patient or others) unreliable information about a patient he/she is treating. Provide examples. Feel free to use point form.

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8. Referring back to question 7, describe strategies and criteria which an OT can use for evaluating the reliability of information received from others. Feel free to use point form.

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## POSTTEST

Identification: List the  
last four digits of your phone:

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Date: \_\_\_\_\_

**Instructions:** For purposes of identification, please record the last four digits of your phone number where indicated. Please use a pencil to fill in the questionnaire. Do not hesitate to erase and change your answers should you so desire.

In this questionnaire there are a total of eight questions to answer. Try to answer all eight questions, please keep your responses brief and concise. Feel free to use point form.

Read each question carefully, if the question is unclear raise your hand and an attempt will be made to clarify it. If you have difficulty with a question simply do the best you can or move on to the next one, you may return to the difficult question later if you have time. You will have up to 30 minutes to answer all the questions. Should you finish early, raise your hand, and I will collect your materials. Please leave the classroom quietly. Do you have any questions?

POSTTEST  
Section A

1. The passage below provides you with a case history of a patient with a particular disability. There are three types of information available in this case history:

- a) information which is a Major Factor to consider when planning an OT treatment program for this patient, that is, it will have a major influence on one's treatment plan;
- b) information which is Potentially Significant, that is, it may or may not have an affect on planning this patient's OT treatment program, but it needs to be investigated further;
- c) information which is Unimportant in terms of planning an OT treatment program for this patient, that is, the information is irrelevant.

Directions: Read the passage on the following page carefully. Circle all the pieces of information which you feel are major factors in planning an OT treatment program for this patient. Underline all the pieces of information which you feel are potentially significant to the planning of an OT program for this patient. Leave blank any information which you feel is unimportant.

Eg. Mr. Hines is a talkative man suffering from osteoarthritis of the left hip and both knees, he mentions to you that he and his wife are experiencing marital difficulties.



Case History:

Carl Hunt is a quiet man who has been married for 26 years. He was admitted to emergency two weeks ago with the following symptoms: drooling, loss of balance, and left sided weakness. He has been diagnosed as suffering from a right cerebral vascular accident. During a ward meeting you are given a referral to assess and treat him in order to increase functional independence. The physiotherapist for Mr. Hunt's ward is leaving on vacation. The social worker mentions that Mr. Hunt is an architect with the government. While reading his medical chart you note that he was admitted on a Saturday evening, accompanied by his wife. The chart indicates that Mr. Hunt is disoriented to time. Previous medical history includes an appendectomy in 1954. This is Mr. Hunt's first CVA. Radiology report indicates that pt. suffered a cerebral hemorrhage in the area of the right parietal lobe.

You visit Mr. Hunt in his room, he voices his eagerness to commence therapy. He is propped up in bed with pillows, when all of a sudden he starts to fall to the left, he is able to catch and right himself using both arms. You make an appointment to see Mr. Hunt the following day. You meet his wife as you are about to leave, she introduces herself. She explains that she runs her own business and is able to schedule her hours. You explain that her husband has been referred to OT, describing what an Occupational Therapist does. Mr. Hunt's doctor accosts you, as you are leaving and asks if you have received a referral yet for Mr. Hunt. You run into Mr. Hunt's attending nurse who tells you that he is having trouble eating. She describes how he seems to have difficulty manipulating his utensils with his hands. In fact he often ends up

using his hands to eat. Upon further questioning she reports that they are having difficulty restraining Mr. Hunt, in that he does not like to be helped and will try to get out of bed on his own. In fact he has fallen twice, fortunately he hasn't been hurt.

Section B

Referring back to the case history, determine and indicate all the OT assessments which are:

- Necessary to perform on the patient in question for purposes of planning a treatment program.
- Potentially Important to perform on the patient for purposes of planning a treatment program; that is, although not always indicated in similar cases, you suspect that in this particular case the patient's function or performance may be affected.

In your answer list each specific assessment and why you think it is necessary, or potentially significant to perform. Limit your answer to one line per assessment. For example: Necessary - muscle test lower limbs - paresis in legs.

2. Necessary Assessments:

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3. Potentially Significant Assessments:

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## Section C

4. You have just received a referral which requests you to assess and treat a 19 year old male who has recently suffered a crush injury of the right hand. What would be the first three steps you would do in order to gain information to help in planning your treatment program. List the three steps, citing your reason for each step. Restrict your answer to two lines per step; eg. a. talk to psychologist - to find out how patient is adjusting to the accident

a. \_\_\_\_\_  
\_\_\_\_\_

b. \_\_\_\_\_  
\_\_\_\_\_

c. \_\_\_\_\_  
\_\_\_\_\_

5. Compare the advantages and disadvantages of using a phone versus visiting a person in order to gain information from others about a patient, you as an OT are treating. Feel free to use point form.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

6. Describe the function and contents of medical charts (phys. med.). Include in your description the problems and limitations of its use. Feel free to use point form.

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

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7. Cite three distinct factors or situations in which an OT will receive (from the patient or others) unreliable information about a patient he/she is treating. Provide examples. Feel free to use point form.

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8. Referring back to question 7, describe strategies and criteria which an OT can use for evaluating the reliability of information received from others. Feel free to use point form.

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15) What did you like most about the simulation-game experience?

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16) What did you like least about the simulation-game experience?

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17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and under what conditions?

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18) How would you change the game?

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19) Did the posttest measure the material that was presented in the game?

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20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

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21) With the appropriate modifications, can you see this game being used to help prepare OT students for work in other areas?

yes  no

If you answered yes tick off which areas. You can tick off more than one.

paediatrics  geriatrics  psychiatry  community work

other, please specify \_\_\_\_\_



### Game in Context of Program

Directions: Indicate whether the following are strong, weak, or average characteristics of the McGill OT program.

Characteristics	strong	weak	average
1. theoretical basis	_____	_____	_____
2. preparation for clinical work	_____	_____	_____
3. opportunity to study a variety of case histories	_____	_____	_____
4. opportunity to plan a variety of treatment programs	_____	_____	_____
5. opportunity to write OT reports	_____	_____	_____
6. opportunity to analyse information	_____	_____	_____
7. opportunity for self-evaluation	_____	_____	_____
8. opportunity to receive peer evaluation	_____	_____	_____

Directions: Indicate whether the following are strong, weak, or average characteristics of the simulation-game.

Characteristics	strong	weak	average
9. theoretical basis	_____	_____	_____
10. preparation for clinical work	_____	_____	_____
11. opportunity to study a variety of case histories	_____	_____	_____
12. opportunity to plan a variety of treatment programs	_____	_____	_____
13. opportunity to write OT reports	_____	_____	_____
14. opportunity to analyse information	_____	_____	_____
15. opportunity for self-evaluation	_____	_____	_____
16. opportunity to receive peer evaluation	_____	_____	_____

17. Do you think that the simulation-game should be incorporated into the McGill OT program?

\_\_\_\_\_ yes (see a below)

\_\_\_\_\_ no (see b below)

a) If you answered yes to question 17, check off during which year(s) in an OT student's education you feel that the simulation-game should be used, and how in each year it should be used. You may check off more than one category.

eg. during first year in class as a group;  
during second year out of class on an individual basis.

Years	In class		Outside of class	
	Group	Individual	Group	Individual
first	_____	_____	_____	_____
second	_____	_____	_____	_____
third	_____	_____	_____	_____
intern	N/A	N/A	_____	_____

b) If you answered no to question 17, please explain why.

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Biographical Data

Identification: record last four digits  
of your phone number: \_\_\_\_\_

Date: \_\_\_\_\_

Directions: Please tick off the appropriate answer.

- 1. SEX:    \_\_\_ male       \_\_\_ female
- 2. MOTHER TONGUE:   \_\_\_ English   \_\_\_ French   \_\_\_ Other
- 3. UNDERGRADUATE YEAR:   \_\_\_ 2nd year   \_\_\_ 3rd year
- 4. PREVIOUS EDUCATION : answer only those questions which are applicable.

- a) Completed High School outside Quebec       \_\_\_ yes   \_\_\_ no
- b) Attended CEGEP                               \_\_\_ yes   \_\_\_ no
- c) Completed a University degree, other than OT   \_\_\_ yes   \_\_\_ no

Name of degree \_\_\_\_\_ Discipline \_\_\_\_\_

- d) Completed part of a University degree other than OT.                               \_\_\_ yes   \_\_\_ no
- Name of discipline \_\_\_\_\_

e) Language of education in:

High School   \_\_\_ English   \_\_\_ French   \_\_\_ Both   \_\_\_ Other

Cegep       \_\_\_ English   \_\_\_ French   \_\_\_ Both   \_\_\_ Other

University (Answer only if you have studied in a program other than OT)

\_\_\_ English   \_\_\_ French   \_\_\_ Both   \_\_\_ Other

5. CLINICAL PLACEMENTS: Record all your completed placements (as in example).

<u>TYPE</u>	<u>POPULATION</u>	<u>SETTING</u>	<u>DURATION</u>	<u>YEAR</u>
(phys. med.)	(children)	(school)	(3 weeks)	(2nd)
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____
_____	_____	_____	_____	_____

## Group Dynamics Questionnaire

Group: \_\_\_\_\_

Date: \_\_\_\_\_

**Directions:** Place an X on one of the positions that best represents your view of the statement in capital letters.

**Example:** Your view of the Game experience.

challenging \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : easy

If you found the game challenging you would place an X close to challenging. If you found the game experience easy you would place an X near the easy end of the scale. A mark in the middle would indicate that you found the game experience neither challenging or easy.

## A. Your view of your group.

- |    |             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |               |
|----|-------------|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|---------------|
| 1. | superior    | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | inferior      |
| 2. | good        | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | bad           |
| 3. | successful  | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | unsuccessful  |
| 4. | lazy        | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | hard working  |
| 5. | cooperative | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | uncooperative |
| 6. | clumsy      | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | skillful      |
| 7. | cautious    | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | impulsive     |
| 8. | serious     | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | silly         |

## B. Your view of your group's report.

- |     |            |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |              |
|-----|------------|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|--------------|
| 9.  | poor       | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | good         |
| 10. | successful | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | unsuccessful |
| 11. | complete   | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | incomplete   |

## C. Your participation in your group's decision making.

- |     |             |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |       |   |                |
|-----|-------------|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|-------|---|----------------|
| 12. | active      | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | passive        |
| 13. | unwilling   | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | willing        |
| 14. | influential | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | noninfluential |
| 15. | successful  | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | unsuccessful   |
| 16. | meaningful  | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | meaningless    |
| 17. | dominant    | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | lax            |
| 18. | sufficient  | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | insufficient   |
| 19. | leading     | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | following      |
| 20. | critical    | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | indiscriminate |
| 21. | useful      | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | _____ | : | useless        |

**Directions:** Place an X on the line.

22. Was there conflict within your group?

            
a lot

            
some

            
not much

            
none

23. Who made the majority of decisions in the group?

            
one person

            
two people

            
each person  
took a turn

            
the group  
as a whole

24. Would you have performed better without the group?

            
yes

            
no

            
the same

Group: \_\_\_\_\_

25. Would you have preferred to play the game

- alone?
- with a different  
group?
- with the  
same group?
- in any  
group?

26. The case history was

- too easy
- fairly  
easy
- not very  
easy
- very  
difficult

27. Do you feel you had the necessary knowledge and skills to play this game? If not what knowledge or skills were lacking?

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28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

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Additional Comments:

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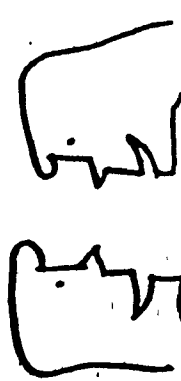


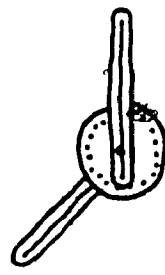


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SAMPLE OF CARDS USED IN U2 and U3 STUDY

<p>CONSULTATION</p> 	<p>TELEPHONE</p> 	<p>TAXI</p> 
<p>Move directly to any numbered location inside the hospital and consult the Patient Information Booklet.</p>	<p>Do not move OT token. Attempt two calls to any locations having a telephone. To consult the Patient Information Booklet, roll a four or higher on the die.</p>	<p>Move directly to any numbered location in the community, consult the Patient Information Booklet, and return to the OT Mailbox.</p>
<p>ASSESSMENT 1</p> 	<p>ASSESSMENT 12</p> 	<p>ASSESSMENT 19</p> 
<p>RANGE OF MOTION</p>	<p>INDEPENDENT LIVING UNIT TRANSFERS</p>	<p>PATIENT INTERVIEW</p>
<p>Move directly to the OT ASSESSMENT ROOM and consult the Patient Information Booklet for assessment 1.</p>	<p>Move directly to the INDEPENDENT LIVING UNIT and consult the Patient Information Booklet for assessment 12.</p>	<p>Move directly to the OT ASSESSMENT UNIT and consult the Patient Information Booklet for assessment 19.</p>

N.B. Cards color coded. Consultation - blue, Telephone - grey, Taxi - yellow, Assessment - pink.

## Referral for OT U3 Session 1 and OT U2 Session 3

Occupational Therapy Referral #1

Inpatient       Outpatient  
 Room 216

D. of A.: 17/11/85  
 Name: Reese, Paul G.  
 Address: 623 Elm Street  
 Montreal, Quebec  
 H3D 1Y7  
 Medicare: REE 5006 0814  
 Next of Kin: Wife, Sally Reese

Date: Dec. 4, 1985

Case History: A 35 year old male who suffered a traumatic amputation of the left hand November 17, 1985.

Reason for Referral: Please assess and provide appropriate treatment.

\_\_\_\_\_  
 Doctor's Signature

INFORMATION CODES

<u>CONSULTATION</u>		<u>TELEPHONE</u>		<u>ASSESSMENT</u>	<u>TAXI</u>
1-1,	19-145,	1-321,	24-465,	1-569,	36-281,
2-9,	20-153,	6-329,	25-473,	2-577,	37-289,
3-17,	21-161,	7-337,	26-481,	3-585,	38-297,
4-25,	22-169,	8-345,	27-489,	4-593,	39-305,
5-33,	23-177,	9-353,	28-497,	5-601,	40-313.
6-41,	24-185,	10-361,	29-505,	6-609,	
7-49,	25-193,	12-369,	34-513,	7-617,	
8-57,	26-201,	13-377,	35-521,	8-625,	
9-65,	27-209,	14-385,	36-529,	9-633,	
10-73,	28-217,	15-393,	37-537,	10-641,	
11-81,	29-225,	16-401,	38-545,	11-649,	
12-89,	30-233,	17-409,	39-553,	12-657,	
13-97,	31-241,	18-417,	40-561.	13-665,	
14-105,	32-249,	19-425,		14-673,	
15-113,	33-257,	20-433,		15-681,	
16-121,	34-265,	21-441,		16-689,	
17-129,	35-273.	22-449,		17-697,	
18-137,		23-457,		18-705.	
				19-713	

OT U3 Session 2  
Occupational Therapy Referral #2

Inpatient     Outpatient  
Room 114

D. of. A.: 23/10/85

Name: Lott, Janice

Address: 123 Fay Street  
Montreal, Quebec  
H4G 2Y7

Medicare: LOT 5010 0817

Next of Kin: Mother, Edna Lott

Date: Dec. 1, 1985

Case History: A 35 year old female, diagnosed as having Multiple Sclerosis 3 years ago. Completed one month of bedrest during which she received corticosteroid treatment.

Reason for Referral: Assess and increase level of independence.

\_\_\_\_\_  
Doctor's Signature

INFORMATION CODES

CONSULTATION		TELEPHONE		ASSESSMENT	TAXI
1-2,	19-146,	1-322,	24-466,	1-570,	36-282,
2-10,	20-154,	6-330,	25-474,	2-578,	37-290,
3-18,	21-162,	7-338,	26-482,	3-586,	38-298,
4-26,	22-170,	8-346,	27-490,	4-594,	39-306,
5-34,	23-178,	9-354,	28-498,	5-602,	40-314.
6-42,	24-186,	10-362,	29-506,	6-610,	
7-50,	25-194,	12-370,	34-514,	7-618,	
8-58,	26-202,	13-378,	35-522,	8-626,	
9-66,	27-210,	14-386,	36-530,	9-634,	
10-74,	28-218,	15-394,	37-538,	10-642,	
11-82,	29-226,	16-402,	38-546,	11-650,	
12-90,	30-234,	17-410,	39-554,	12-658,	
13-98,	31-242,	18-418,	40-562.	13-666,	
14-106,	32-250,	19-426,		14-674,	
15-114,	33-258,	20-434,		15-682,	
16-122,	34-266,	21-442,		16-690,	
17-130,	35-274.	22-450,		17-698,	
18-138,		23-458,		18-706.	
				19-714	



OT U3 Session 3  
Occupational Therapy Referral #3

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Inpatient       Outpatient  
ICU

D. of A.: Jan. 11, 1986  
Name: Carol Riat  
Address: 23 Fay Street  
Montreal, Quebec  
H5G 2N4  
Medicare: RIA 7685 0934  
Next of Kin: Mother,  
Anne Riat  
Date: Jan. 18, 1986

Case History: A 19 year old female involved in a car accident Jan. 11, 1986. Suffered a grade four closed head injury with right occipital scalp lacerations and left intracerebral hemorrhage. Patient continues to be comatose.

Reason for Referral: Splint to prevent contractures. Assess and provide a graded rehabilitation program.

\_\_\_\_\_  
Doctor's Signature

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INFORMATION CODES

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CONSULTATION		TELEPHONE		ASSESSMENT	TAXI
1-3,	19-147,	1-323,	24-467,	1-571,	36-283,
2-11,	20-155,	6-331,	25-475,	2-579,	37-291,
3-19,	21-163,	7-339,	26-483,	3-587,	38-299,
4-27,	22-171,	8-347,	27-491,	4-595,	39-307,
5-35,	23-179,	9-355,	28-499,	5-603,	40-315.
6-43,	24-187,	10-363,	29-507,	6-611,	
7-51,	25-195,	12-371,	34-515,	7-619,	
8-59,	26-203,	13-379,	35-523,	8-627,	
9-67,	27-211,	14-387,	36-531,	9-635,	
10-75,	28-219,	15-395,	37-539,	10-643,	
11-83,	29-227,	16-403,	38-547,	11-651,	
12-91,	30-235,	17-411,	39-555,	12-659,	
13-99,	31-243,	18-419,	40-563.	13-667,	
14-107,	32-251,	19-427,		14-675,	
15-115,	33-259,	20-435,		15-683,	
16-123,	34-267,	21-443,		16-691,	
17-131,	35-275.	22-451,		17-699,	
18-139,		23-459,		18-707,	
				19-715.	

OT U2 Session 1  
Occupational Therapy Referral #4

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Inpatient       Outpatient

Room 213

D. of A.: Jan. 19, 1986

Name: Lyne Dieppe

Address: 14 Pine Street  
Montreal, Quebec,  
H7G 3X4

Medicare: DIE 8585 3234

Next of Kin: Husband,

Jean Dieppe

Date: Jan. 30, 1986

Case History: A 59 year old female admitted to hospital with a diagnosis of loosening of the femoral component of a hip joint replacement which the patient had received five years ago. Underwent surgery Jan 23, 1986 for a new left total hip replacement.

Reason for Referral: Patient to be discharged to home in two to three weeks. Please assess function and provide treatment in ADL. Patient is to avoid hip flexion beyond 90 degrees, hip adduction past body midline, internal rotation of the hip, and full weight bearing.

\_\_\_\_\_  
Doctor's Signature

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INFORMATION CODES

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CONSULTATION		TELEPHONE		ASSESSMENT	TAXI
1-4,	19-148,	1-324,	24-468,	1-572,	36-284,
2-12,	20-156,	6-332,	25-476,	2-580,	37-292,
3-20,	21-164,	7-340,	26-484,	3-588,	38-300,
4-28,	22-172,	8-348,	27-492,	4-596,	39-308,
5-36,	23-180,	9-356,	28-500,	5-604,	40-316.
6-44,	24-188,	10-364,	29-508,	6-612,	
7-52,	25-196,	12-372,	34-516,	7-620,	
8-60,	26-204,	13-380,	35-524,	8-628,	
9-68,	27-212,	14-388,	36-532,	9-636,	
10-76,	28-220,	15-396,	37-540,	10-644,	
11-84,	29-228,	16-404,	38-548,	11-652,	
12-92,	30-236,	17-412,	39-556,	12-660,	
13-100,	31-244,	18-420,	40-564.	13-668,	
14-108,	32-252,	19-428,		14-676,	
15-116,	33-260,	20-436,		15-684,	
16-124,	34-268,	21-444,		16-692,	
17-132,	35-276.	22-452,		17-700,	
18-140,		23-460,		18-708,	
				19-716.	

OT U2 Session 2  
Occupational Therapy Referral #5

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Inpatient       Outpatient  
Room 123

D. of A.: Dec 10, 1985.  
Name: Julie Nice  
Address: 547 Milo Rd.  
Orms town, Quebec  
H9G 1P4  
Medicare: NIE 6549 0965  
Next of Kin: Husband,  
Pierre Nice

Date: Dec, 16, 1985

Case History: A 37 year old female school teacher recently diagnosed as having R.A., suffering past 4 mos. Sero positive. Presently in flare up. Hands and wrists affected.

Reason for Referral: Please evaluate and provide treatment in preparation for eventual discharge.

\_\_\_\_\_  
Doctor's Signature

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INFORMATION CODES

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CONSULTATION		TELEPHONE		ASSESSMENT	TAXI
1-5,	19-149,	1-325,	24-469,	1-573,	36-285,
2-13,	20-157,	6-333,	25-477,	2-581,	37-293,
3-21,	21-165,	7-341,	26-485,	3-589,	38-301,
4-29,	22-173,	8-349,	27-493,	4-597,	39-309,
5-37,	23-181,	9-357,	28-501,	5-605,	40-317.
6-45,	24-189,	10-365,	29-509,	6-613,	
7-53,	25-197,	12-373,	34-517,	7-621,	
8-61,	26-205,	13-381,	35-525,	8-629,	
9-69,	27-213,	14-389,	36-533,	9-637,	
10-77,	28-221,	15-397,	37-541,	10-645,	
11-85,	29-229,	16-405,	38-549,	11-653,	
12-93,	30-237,	17-413,	39-557,	12-661,	
13-101,	31-245,	18-421,	40-565.	13-669,	
14-109,	32-253,	19-429,		14-677,	
15-117,	33-261,	20-437,		15-685,	
16-125,	34-269,	21-445,		16-693,	
17-133,	35-277.	22-453,		17-701,	
18-141,		23-461,		18-709,	
				19-717.	

## SAMPLE INFORMATION SHEET

Referral # 5 Page # 1 Date Dec. 5, 1985

Player # 4321 Card Played: Consultation Location or Assessment: X-Ray  
Reason/Disagreements/Information

R/ to see status of femur

D/ 2145 said should phone first

I/ 23/Nov. 85- lower 1/3 of right femur has a hairline fracture

Player #4567 Card Played: Consultation Location or Assessment: Dietary  
Reason/Disagreements/Information

R/ To see if patient is on a special diet.

D/ 9876 said pt should be on normal diet.

I/ Patient on a regular diet.

Player #9876 Card Played: Assessment Location or Assessment: Percep  
Reason/Disagreements/Information

R/ See if any perceptual problems.

D/ None

I/ Normal.

Player #1342 Card Played: Telephone Location or Assessment: Rheum  
Reason/Disagreements/Information

R/ Find out if treated by rheumatology.

D/ 4567 and 9876 feel should contact Neurology instead.

I/ Not one of our patients.

Player # 2145 Card Played: Assessment Location or Assessment: Mobile  
Reason/Disagreements/Information

R/ to assess extent of impairment of mobility

D/ none

I/ ambulating with a cane

Player # 6543 Card Played: Telephone Location or Assessment: pt.home  
Reason/Disagreements/Information

R/ to talk to family member

D/ 4321 + 2145 thought should do an eating assessment instead

I/ wife is sick and can not visit patient

Information Sheet

Referral # \_\_\_\_\_ Page # \_\_\_\_\_ Date \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

Player # \_\_\_\_\_ Card Played \_\_\_\_\_ Location or Assessment \_\_\_\_\_  
Reason/Disagreements/Information \_\_\_\_\_

REPORT SOLUTION FILE

## Using the Solution Report

Description: Each Occupational therapist has his/her own style of writing and may stress certain factors more than others. The report found in this file attempts to represent a model of how a report should be written. Thus it incorporates all those factors which are felt to be necessary to include with respect to a given case history. Please note that in general a list of all the assessments that could be performed is not included in a report. It has only been included here to aid the player. In addition the case history and social history are not usually separated out from the SOAP method, but are usually included under the heading Objective. The reason for separating these headings out was to draw players attention to the importance of recording this information.

Instructions: Compare your report to the "model" report. Note any discrepancies. Ask yourselves the following questions:

- 1) In what way do the two reports differ?
- 2) In what way are the two reports similar?
- 3) Was our report well organized, logical, clear, too long, too short?
- 4) Did we fail to acquire and/or report vital information?
- 5) Did we "conduct" too many or too few assessments?

Debriefing: Because the "model" report can not anticipate all the factors which could possibly have occurred in players reports, a debriefing session is conducted by the game director. This allows players to discuss the reports and gain a better understanding of the reasons why certain factors have been included and other factors excluded from the "model" report. In addition players may have included certain factors which although not present in the "model" report are not necessarily inappropriate and therefore need to be discussed. At the end of the debriefing session, players must hand in their report along with the information sheets to the game director.

OT U3; SESSION 1; OT U2, SESSION 3

## Occupational Therapy Report

Patient's Name: Mr. Paul G. Reese  
Medicare #: Ree 5006 0814

Date: December 8, 1985

**CASE HISTORY:** A 35 year old male involved in a chemistry explosion at work (Carleson University) on November 17, 1985. Underwent surgery to amputate left limb two inches proximal to wrist. Fragments of glass removed from face, chest, and upper limbs. Presently patient is medically stable. Stump healing well. Referral to OT received December 4, 1985.

**SOCIAL HISTORY:**

Married to a 34 year old wife who works part time as a real estate agent. Has two daughters aged 8 and 10. Patient employed as a University professor in Chemistry at Carleson University. Presently receiving workmen's compensation.

**SUBJECTIVE:** Patient states he wants a "bionic" hand similar to one portrayed on a television program. He reports that his stump is hypersensitive, and that he has not been using it. He expresses a wish to be discharged from hospital as soon as possible.

**ASSESSMENTS PERFORMED:**

<input checked="" type="checkbox"/> 1. Range of motion	<input checked="" type="checkbox"/> 7. Mobility	<input type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input checked="" type="checkbox"/> 8. Hand Function	<input type="checkbox"/> 14. Bedroom
<input type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Bathroom
<input checked="" type="checkbox"/> 4. Gross coord/balance	<input type="checkbox"/> 10. Cognition	<input checked="" type="checkbox"/> 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> 18. Grooming
		<input checked="" type="checkbox"/> 19. Interview

**OBJECTIVE:**

**ROM:** Full, except for pronation/supination of left arm, 40° active/50° passive for both movements.

**Muscle Strength:** Normal except for: all right shoulder muscles = 4; all left shoulder muscles = 4-, left elbow flexion/extension = 3+; left supination and pronation = 3-.

**Gross Coordination/Balance:** Balance very good. Right hand dominant for gross motor activities. Patient protecting left arm.

**Sensation:** Hypersensitive to light touch, pin prick, and unable to tolerate rough material to bottom of stump. Experiencing a cramping sensation which appears periodically throughout the day. Phantom sensation present.

**Hand Function:** Left hand dominant. Dexterity fair for right hand. Normal pinch and grasp of right hand.

**Endurance:** Fair. Breathing hard after walking to therapy.

**Communication:** Verbal-intact. Written- writes slowly but legibly with left stump using a universal cuff. Writes poorly with right hand.

**Bathroom:** Difficulty manipulating soap, shampoo, and towel when washing.

**Eating:** Difficulty cutting meat, buttering bread, and opening small



containers. Otherwise independent.

Dressing: Difficulty manipulating small fastenings, and zippers.

Unable to tie shoelaces.

Grooming: Independent, but slow.

Observations: Attending nurse reports patient doing little for himself, frequently requesting help. Patient not discussing feelings. Wife expressing concern about husband claims he is depressed and helpless. Wife confides that she is having difficulty coping and the children are getting into trouble.

ANALYSIS: Patient and family appear to be having difficulty adjusting to the patient's amputation. Although Mr. Reese is independent in most self care activities he is frequently requesting help for activities which he does not require.

PLAN: Patient to be seen daily in OT for treatment.

Short Term Goals:

- 1) Encourage use of stump via bilateral activities, stressing the retainment of normal movement patterns.
- 2) Increase independence in self care activities. Provide a universal cuff, and any appropriate aids as required.
- 3) Educate patient and family regarding patient's present and future capabilities.
- 4) Provide psychological support to patient and family.
- 5) Increase stump shrinkage by teaching patient to wrap own stump with ace bandages.
- 6) Desensitization of stump.
- 7) Increase active ROM of pronation and supination of left arm.
- 8) Increase dexterity of right hand.
- 9) Encourage patient to retain left hand dominance for writing.
- 10) In conjunction with the Physiotherapist increase upper limb strength and endurance.
- 11) To train patient in use of temporary prosthesis once he receives it.

Long Term Goals:

- 1) To follow patient on an outpatient basis upon discharge.
- 2) To train patient in care and use of conventional prosthesis.
- 3) Maximize independence.
- 4) Vocational Assessment.

OT U3, SESSION 2

## Occupational Therapy Report

Patient's Name: Janice Lott  
Medicare #: LOT 5010 0817

Date: Dec. 4, 1985

CASE HISTORY: A 35 year old female diagnosed as having multiple sclerosis in 1982. Admitted to hospital 23 Oct. 1985 in exacerbation of the disease x 3 months. Received corticosteroid treatment and placed on bed rest for a month. During exacerbation had decreased endurance and muscle strength with difficulty breathing, and optic neuritis.

SOCIAL HISTORY: Divorced since 1982, lives with parents and two daughters aged 10 and 12. Retired from secretarial job in 1982 due to disability, presently a homemaker. Has a high school education. Receives alimony and a disability pension.

SUBJECTIVE: Patient states that she feels very helpless, and is worried about her role as a parent. For the past three years she has spent the majority of her time reading, listening to the radio, and watching T.V. She expresses a desire to take a more active role as a homemaker. She would also like to increase her social contact with others.

ASSESSMENTS PERFORMED: (Check off ones performed)

<input checked="" type="checkbox"/> 1. Range of motion	<input checked="" type="checkbox"/> 7. Mobility	<input checked="" type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input checked="" type="checkbox"/> 8. Hand Function	<input checked="" type="checkbox"/> 14. Bedroom
<input checked="" type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Bathroom
<input checked="" type="checkbox"/> 4. Gross coord/balance	<input checked="" type="checkbox"/> 10. Cognition	<input checked="" type="checkbox"/> ** 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input checked="" type="checkbox"/> 6. Perception	<input checked="" type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> ** 18. Grooming
		<input checked="" type="checkbox"/> 19. Interview

OBJECTIVE:

ROM: Full bilaterally for upper extremities.

Gross coord/balance: Standing balance-very poor. Sitting balance-fair, tends to fall forward and back particularly when engaged in bilateral activities. No ataxia in upper extremities.

Sensation: Intact except for 2 pt discrimination, impaired at 1/4 inch, and diminished at 2 inches on dorsal and volar surfaces of both U.E. Complains of paresthesia in hands.

Perception: Normal.

Mobility: Able to propell a wc for 75 meters on a flat surface only. Requires 2 brief rest periods.

Hand Function: Right hand dominant. Coordination for small objects fair. Gross grasp: R-58 lb, L-29 lb. Able to pick up objects 1 inch in diameter. MRMT results:

Test	Percentile for age and sex
Placing	3%
Turning	63%
Displacing	59%
1 hand turning + placing	5%
2 hand turning + placing	3%

\*precise information available from physio no need to repeat the assessment.

\*\*information available from attending nurse.

Endurance: Fair. Can only work for 30 minute periods on activities requiring moderate exertion before tires.

Cognition: Difficulty problem solving and planning with respect to ADL and short term goals.

Communication: Handwriting legible. Slight slurring of speech.

Transfers: Requires minimal assistance for transfers from wc to bed, commode, chair and vice versa. Requires moderate assistance to transfer from wc to bathtub and vice versa.

Kitchen: Requires 10 to 15 minutes to maneuver wc around kitchen in order to retrieve or place an item in or out of stove, fridge, or cabinets. Difficulty planning simple meals. Past year has been responsible for most of the meal preparation. Relies on others to do all other aspects of kitchen work.

Bedroom: Independent in bed mobility and positioning. Great difficulty in cleaning bedroom and making the bed, due to poor planning.

Bathroom: Requires a bath chair for safety in tub. Able to wash self using a hand held shower with supervision as she is prone to losing her balance. Uses a commode for toileting.

Dressing: Able to dress upper body. Unable to maintain balance to get clothes over feet.

Observations: Family aiding patient too much, not allowing her to do things for herself. Family concerned that patient may over exert herself and trigger an attack.

ANALYSIS: Patient not realizing her full potential possibly due to assumption of invalid role and overprotectiveness of family. Would benefit from a full ADL program to increase independence and aid her in assuming a more active role as homemaker and parent.

PLAN: Patient to be seen daily in OT.

Short Term Goals:

- 1) Increase endurance.
- 2) In conjunction with PT increase upper extremity strength.
- 3) Improve sitting balance.
- 4) Increase independence in transfers.
- 5) Increase independence in wheelchair mobility; eg. ascending and descending ramps, maneuvering around obstacles.
- 6) Educate pt and family regarding nature of disability.
- 7) Increase independence in dressing, providing any necessary aids.
- 8) Teach work simplification and energy conservation techniques which specifically apply to MS.
- 9) Aid pt in determining which tasks she will assume as homemaker.
- 10) Provide opportunities for problem solving and planning particularly with reference to ADL.

Long Term Goals:

- 1) Perform a home visit to assess architectural barriers and provide recommendations.
- 2) Assist pt in reorganizing furniture, cupboards, etc., for greater efficiency.
- 3) Explore pt's interests, for purposes of increasing socialization.
- 4) Aid patient in planning a schedule which balances work and play.

## OT U3, SESSION 3

## Occupational Therapy Report

Patient's Name: Carol Riat  
 Medicare #: RIA 7685 0934

Date: January 22, 1986

**CASE HISTORY:** A 19 year old female involved in a car accident Jan 11, 1986 in which she was driving alone without a seatbelt. Suffered a grade four closed head injury with occipital lacerations and left intracerebral hemorrhage. Underwent emergency surgery to remove blood clot and control bleeding point. Patient comatose, exhibiting decorticate rigidity and right hemiparalysis, possibility that patient may be aphasic.

**SOCIAL HISTORY:** First year university student studying anthropology. Prior to accident worked part-time for one year as a waitress in a small restaurant. Lives with parents; has two brothers aged 26 and 28 who have lived away from home for the past five years.

**ASSESSMENTS PERFORMED:** (Check off ones performed)

<input checked="" type="checkbox"/> 1. Range of motion	<input type="checkbox"/> 7. Mobility	<input type="checkbox"/> 13. Kitchen
<input type="checkbox"/> 2. Muscle Strength	<input type="checkbox"/> 8. Hand Function	<input type="checkbox"/> 14. Bedroom
<input checked="" type="checkbox"/> 3. Muscle Tone	<input type="checkbox"/> 9. Endurance	<input type="checkbox"/> 15. Bathroom
<input type="checkbox"/> 4. Gross coord/balance	<input checked="" type="checkbox"/> 10. Cognition	<input type="checkbox"/> 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input type="checkbox"/> 12. Transfers	<input type="checkbox"/> 18. Grooming
		<input checked="" type="checkbox"/> 19. Interview

**OBJECTIVE:**

<b>ROM: UNABLE TO TEST</b>	<b>ACTIVE ROM</b>			
<b>PASSIVE ROM:</b>	<b>LEFT</b>	<b>RIGHT</b>		
<b>SHOULDER</b>			<b>THUMB</b>	
FLEXION	0-120	0-40	ABDUCTION	N N
EXTENSION	0-30	0-9	OPPOSITION	N N
ABDUCTION	0-90	0-30	<b>INDEX FINGER</b>	
ADDUCTION	N	N	MCP FLEXION	N +5-90
INTERNAL ROT.	0-60	0-25	PIP FLEXION	N +5-90
EXTERNAL ROT.	0-50	0-5	DIP FLEXION	N +5-80
<b>ELBOW/FOREARM</b>			<b>MIDDLE FINGER</b>	
FLEXION	+8-150	+60-150	MCP FLEXION	N +10-85
SUPINATION	N	0-10	PIP FLEXION	N +25-95
PROMATION	N	0-50	DIP FLEXION	N +5-75
<b>WRIST</b>			<b>RING FINGER</b>	
FLEXION	0-65	+5-40	MCP FLEXION	N +10-85
EXTENSION	+10	+10	PIP FLEXION	N +5-95
ULNAR DEV.	N	0-15	DIP FLEXION	N +5-75
RADIAL DEV.	N	0-10	<b>LITTLE FINGER</b>	
<b>THUMB</b>			MCP FLEXION	N +7-80
MCP FLEXION	N	N	PIP FLEXION	N +5-100
IP FLEXION	N	+5-45	DIP FLEXION	N +5-70
<b>PASSIVE ROM:</b>	<b>LEFT</b>	<b>RIGHT</b>		
<b>HIP</b>			<b>KNEE</b>	
FLEXION	0-110	0-45	FLEXION	0-120 0-45
EXTENSION	N	N	<b>ANKLE</b>	
ABDUCTION	0-35	0-15	DORSIFLEX	0-10 -5

ADDUCTION	N	N	PLANTARFLEX N	5-50
INTERNAL ROT.	0-30	0-20	INVERSION N	0-20
EXTERNAL ROT.	0-30	0-5	EVERSION	0-10 0-5

Muscle Tone: In decorticate position, legs maintained in hip adduction and extension with plantar flexion. Arms adducted and internally rotated at the shoulder, held in full elbow flexion, both hands held in  $\frac{1}{2}$  wrist and finger flexion. Marked spasticity in all extremities.

Sensation: Responsive to pain and kinesthetic stimulation. Response delayed, takes the form of gross movements, and moans.

Cognition: Specific yet inconsistent response to auditory stimuli only. Responses take form of voluntary movements of the head and upper limbs. Patient unable to follow one step commands.

Communication: Patient has made no attempt to speak. Only vocalizations have been moans. Patient does not appear to be comprehending others.

Observations: Patient completely dependent for all ADL activities, mobility, and positioning. Patient confined to bed, requires restraints as she is thrashing around. Patient has an IV, Nasogastric tube, and Foley catheter.

Hobbies, Interests: (as reported by family) enjoys sports, particularly horseback riding. Prior to accident was learning how to downhill ski. Enjoys music, especially jazz and singing. Actively involved in Savoy Society which puts on Gilbert and Sullivan and has had a few roles in the chorus. Enjoys socializing, and was planning to travel to Europe with a friend this summer.

ANALYSIS: Patient appears to be at the generalized response level of cognitive functioning. However, there are indications that she is progressing to the next level of functioning which is localized response. Patient requires positioning and splinting to prevent contractures particularly prone areas are elbow, wrist, and finger flexors; hip adductors, and ankle plantarflexors.

PLAN: To see patient 3-4 times daily for fifteen minute periods.

Short Term Goals:

- 1) Commence a stimulation program to prevent sensory deprivation, and attempt to elicit responses the patient is capable of making, as well as heighten those responses and channel them into activity. Program to be centered on patient's past interests.
- 2) Provide sensory stimulation using all modalities. However not more than two modalities will be used for each session.
- 3) Educate family regarding patient's condition and importance of stimulation program.
- 4) Involve family, friends and staff in stimulation program.
- 5) Reality orientation.
- 6) Fabricate bilateral foot drop splints, resting hand splints, and elbow extension splints.
- 7) Monitor splints, and status of hip adduction as a hip adduction splint may be required.
- 8) Provide passive ROM to all joints.

Long Term Goals:

To provide an active, graded treatment program focusing on attaining maximum independence. Program to follow patient's recovery process.

OT U2, SESSION 1

## Occupational Therapy Report

Patient's Name: Lyne Dieppe  
 Medicare #: DIE 8585 3234

Feb 2, 1986

**CASE HISTORY:** A 50 year old female homemaker admitted to hospital with a diagnosis of loosening of the femoral component of a left hip joint replacement. Three months prior to admission experiencing severe pain on weight bearing. Underwent surgery Jan 23, 1986 for a new total left hip replacement. Past medical history: experienced incapacitating pain of left hip in 1979, diagnosed as having osteoarthritis of left hip joint. A left cup arthroplasty performed and patient returned to full function. Nine months later patient began to experience pain on weight bearing, and fifteen months following her first surgery, was readmitted for a left total hip replacement.

**SOCIAL HISTORY:** Patient recently remarried and lives with husband. She has two married sons, both living in Calgary, and one granddaughter. Her husband works full-time as a draftsman for an Engineering firm. Financially they are secure but do not have much money saved.

**SUBJECTIVE:** Patient states that she is responsible for all the cooking and housekeeping and is concerned that she will not be able to resume these activities upon discharge. She further states that that she will be alone in the house and that there is no one to help out. Patient enjoys gardening, doing puzzles, playing bridge, and is actively involved in church activities. She wishes to be independent, however she states that she is very apprehensive about moving her leg and is unsure about what she should and shouldn't be doing.

**ASSESSMENTS PERFORMED:** (Check off ones performed)

<input checked="" type="checkbox"/> 1. Range of motion	<input checked="" type="checkbox"/> 7. Mobility	<input type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input type="checkbox"/> 8. Hand Function	<input checked="" type="checkbox"/> 14. Bedroom
<input type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Hygiene
<input checked="" type="checkbox"/> 4. Gross Coord/Balance	<input type="checkbox"/> 10. Cognition	<input type="checkbox"/> 16. Eating
<input type="checkbox"/> 5. Sensation	<input type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input checked="" type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> 18. Grooming
		<input checked="" type="checkbox"/> 19. Interview

**OBJECTIVE:**

**ROM:** Full, except for left hip.

Hip A/P  
 Flexion 20°/90° (must avoid movement past 90°)  
 Extension 10°/30°  
 Abduction 15°/45°  
 Adduction not tested as pt to avoid this movement  
 Exter/Rot 20°/45°  
 Inter/Rot not tested as pt to avoid this movement.

**Muscle Strength:** Normal except for: all muscles of right leg are 4; muscles of left ankle and knee are 4-. Muscles of left hip are severely weakened as can be seen by active ROM. Patient using both hands to move and position left leg.

**Balance:** Good sitting balance. Standing balance poor to fair needs to hold on to something. Has a fear of falling.

**Mobility:** Using a semi-reclining wheelchair for mobility. Requires someone to hold her and move left leg forward when using a walker.

**Endurance:** Poor to fair for any activity involving use of lower limbs.

Transfers: Requires assistance for all transfers. Patient stands and pivots on right leg.

Bed Positioning/Mobility: Requires assistance with rolling and getting in and out of bed. Also requires some assistance to come to a seated position.

Bathroom/Hygiene: Dependent for toileting, using a bed pan. Able to sponge bathe upper body and front of thighs, dependent otherwise. Patient reports that she has a raised toilet seat, a bath bench, and a grab bar in her bathtub at home. These were acquired after her first operation.

Dressing: Independent for upper extremity dressing. Requires maximal assistance to dress lower extremities. Unable to reach past knees.

Grooming: Independent except for shaving her legs.

Observations: Attending nurse reports that Mrs. Dieppe is remaining in bed for the majority of the day and depending on nurse for most of her self-care activities and positioning. The social worker reports that Mrs. Dieppe is very concerned that she not appear disabled to her husband. The husband states that he is willing to provide assistance to his wife when she is discharged. Home Care Services to provide a homemaker once a week once patient is discharged.

ANALYSIS: Three factors appear to be delaying Mrs. Dieppe's progress:

- 1) a lack of knowledge concerning the condition of her left hip replacement;
- 2) apprehensiveness about moving her left leg;
- 3) the fear that she will not be able to resume her former activities as a homemaker upon discharge.

PLAN:

Short Term Goals:

- 1) To train patient to protect the hip joint while engaging in normal activity.
- 2) To encourage patient to lift and move her left leg on her own by providing a leg lifter.
- 3) To increase independence in positioning in bed, and sitting up in bed.
- 4) Increase independence in transfers.
- 5) Encourage Mrs. Dieppe to perform those self-care activities which she can achieve thereby increasing endurance and muscle strength.

Long Term Goals:

Once the above goals have been achieved the following goals will be emphasized:

- 1) To increase independence in dressing, hygiene, and toileting through training and provision of adapted equipment such as: a long handled sponge, reacher, extended shoe horn, and stocking aide.
- 2) In conjunction with PT to increase mobility via the use of a walker.
- 3) To assess independence in the kitchen once patient is mobile using a walker.
- 4) To teach work simplification and energy saving techniques particularly with respect to her role as a homemaker.
- 5) To aid patient in planning a schedule for housework, meals, and resting periods which will allow maximum independence and require assistance from her husband, and homemaker only at times when they will be present.

## OT U2 SESSION 2

## Occupational Therapy Report

Patient's Name: Julie Nice  
 Medicare #: NIE 6549 0965

Date: Dec 20, 1986

**CASE HISTORY:** A 37 year old female recently diagnosed as having Rheumatoid Arthritis, sero-positive, suffering past 4 months. Symptoms include morning stiffness lasting two hours, effusions and tenderness in hands and wrists. Presently in flare up. Radiology report indicates no joint damage. Periarticular swelling and demineralization present in hands, and wrists. WBC + SER elevated, slightly anemic. On steroids, prednizone, and anti-inflammatory drugs.

**SOCIAL HISTORY:** Married, living with husband and two daughters aged 8 and 11. Lives on a farm 55 miles from the city centre. Husband is a farmer. Patient works full-time as a grade 6 teacher, presently on sick leave.

**SUBJECTIVE:** Complains of pain in morning, occasionally experiencing tingling in some digits. Concerned about loss of independence. Wants to return to her work as the family needs her income. Reports that children are helpful with homemaking activities but not her husband.

**ASSESSMENTS PERFORMED:**

<input checked="" type="checkbox"/> 1. Range of motion	<input type="checkbox"/> 7. Mobility	<input checked="" type="checkbox"/> 13. Kitchen
<input checked="" type="checkbox"/> 2. Muscle Strength	<input checked="" type="checkbox"/> 8. Hand Function	<input checked="" type="checkbox"/> 14. Bedroom
<input type="checkbox"/> 3. Muscle Tone	<input checked="" type="checkbox"/> 9. Endurance	<input checked="" type="checkbox"/> 15. Hygiene
<input checked="" type="checkbox"/> 4. Gross Coord/Balance	<input type="checkbox"/> 10. Cognition	<input checked="" type="checkbox"/> 16. Eating
<input checked="" type="checkbox"/> 5. Sensation	<input checked="" type="checkbox"/> 11. Communication	<input checked="" type="checkbox"/> 17. Dressing
<input type="checkbox"/> 6. Perception	<input type="checkbox"/> 12. Transfers	<input checked="" type="checkbox"/> 18. Grooming
		<input checked="" type="checkbox"/> 19. Interview

**OBJECTIVE:**

**Functional ROM:** (fluctuates daily): Wrists limited flex/ext positioned in radial deviation. Limited finger extension of PIP and finger flexion at MCP, PIP, and DIP. Thumb opposition to D4.

**Muscle Strength:** 60/20 on sphygmomanometer. Intrinsic tightness, and atrophy of intrinsic, thenar, and hypothenar eminence.

**Gross Coordination:** Gross coordination of upper extremities affected due to pain, movements slow and cautious.

**Hand Function:** Right hand dominant. Difficulty grasping small objects often drops them. Uses lateral pinch as tip to tip is poor. Spherical and cylindrical grasp limited by pain and ROM.

**Sensation:** Experiences tingling and numbness intermittently in thumb, index, and middle finger. Has occasional pain at night in these three digits.

**Endurance:** Poor, fatigues easily. Requires a 1-2 hour nap daily.

**Communication:** Pen slips from grasp, writing is wobbly. Can type slowly on electric typewriter for five minutes. Tires when holding a phone. Can't write on chalk board.

**Bedroom:** Able to move around slowly in bed, using elbows and shoulders instead of hands. Difficulty making the bed, blankets too heavy, and trouble putting on draw sheets. Fatigues quickly.

**Bathroom/Hygiene:** Can't wash back or scrub hair. Difficulty washing hair and drying herself.

\* Does not need to be evaluated immediately, but should be evaluated



Grooming: Difficulty putting on makeup and combing hair uses only right hand. Can't curl hair. Fatigues quickly. before discharge.

Dressing: Difficulty doing up zipper on tight clothing, and tying shoe laces (wears slip-ons). Needs assistance to put on coat, and boots. Can't fasten small buttons on sleeve and collar, can't do up back fastenings on bra and clothing. Difficulty putting on tight pants, and snug gloves, and pantyhose.

Eating: Difficulty cutting, opening containers, needs two hands to hold a cup. Cutlery slips from grasp. Fatigues during meal.

Kitchen: Responsible for all cooking. Can't lift heavy pots, peel vegetables, or remove pots from the oven. Difficulty washing pots, transporting items, stirring, pouring liquid from a large or heavy container, and cutting food.

Observations: Dietary reports that patient suffering from loss of appetite, and has lost fifteen pounds in the past four months. On a salt free diet, receiving iron supplements and sustical. Community Liason nurse states that upon discharge Mrs. Nice is entitled to the services of a nurse, an OT, and a PT one day per week. Husband states he doesn't understand what is wrong with his wife and suspects that "it is all in her head".

ANALYSIS: Patient in flare-up requires splinting. Suspect patient may have carpal tunnel syndrome because of tingling and numbness in first three digits, as well as problems with prehension. Husband does not appear to be very supportive.

PLAN:

Short Term Goals

- 1) To provide hand splints to be worn at night and during naps. Patient to be splinted as follows: wrist in neutral, MCP in 5-10° flexion, splint to end proximal to PIP joints.
- 2) To provide leather gauntlets to be worn during the day.
- 3) Gentle active non-resistive hand activities to maintain active ROM and increase strength and opposition.
- 4) Activities to increase prehension of light objects.
- 5) To investigate further possibility of Carpal Tunnel Syndrome and report findings to rheumatologist.
- 6) Teach joint protection and energy conservation.
- 7) Provide aids such as rocker knife, large hand grips, and a light weight mug to increase independence in eating.
- 8) Slowly introduce ADL training as patient can tolerate, provide any necessary aids and adaptations.
- 9) To educate family concerning the disease and treatment.

Long Term Goals

- 1) Provide ADL training in all areas of dysfunction.
- 2) Aid patient in planning a work/rest schedule in conjunction with family.
- 3) Monitor hand function.
- 4) Vocational assessment and training incorporating work simplification techniques.
- 5) Arrange for community OT to perform a home visit.
- 6) To follow patient upon discharge in order to monitor RA and splints, this will be combined with appointments with the rheumatologist.

## Occupational Therapy Report

Group: \_\_\_\_\_

Date: \_\_\_\_\_

Patient's Name: \_\_\_\_\_

Medicare #: \_\_\_\_\_

Case History:Social History:Subjective:Assessments performed: (Check off ones performed)

- |   |  |  |
|---|--|--|
| <input type="checkbox"/> 1. Range of motion | <input type="checkbox"/> 7. Mobility             | <input type="checkbox"/> 13. Kitchen     |
| <input type="checkbox"/> 2. Muscle Strength | <input type="checkbox"/> 8. Hand Function        | <input type="checkbox"/> 14. Bedroom     |
| <input type="checkbox"/> 3. Muscle Tone     | <input checked="" type="checkbox"/> 9. Endurance | <input type="checkbox"/> 15. Hygiene     |
| <input type="checkbox"/> 4. Coord/balance   | <input type="checkbox"/> 10. Cognition           | <input type="checkbox"/> 16. Eating      |
| <input type="checkbox"/> 5. Sensation       | <input type="checkbox"/> 11. Communication       | <input type="checkbox"/> 17. Dressing    |
| <input type="checkbox"/> 6. Perception      | <input type="checkbox"/> 12. Transfers           | <input type="checkbox"/> 18. Grooming    |
|   |  | <input type="checkbox"/> 19. Visit/Inter |

Objective:

Analysis:

Plan:

\_\_\_\_\_  
Signature

## DESCRIPTION AND RULES

Object of the Game:

The object of this game is to gather necessary information on a patient referred to Occupational Therapy; and to plan a physical medicine treatment program. The players simulate the actions an Occupational Therapist would engage in over a two to four day period. Three or four players work together in a group, each player taking a turn to act as the Occupational Therapist. The game is played cooperatively; that is, players do not compete with each other.

Game Process:

There are three phases of the game process, explained later on in the rules:

- First Phase: Playing the game;
- Second Phase: Writing the Occupational Therapy Report;
- Third Phase: Debriefing session.

Required Equipment:

Game board, 36 action cards, Patient Information Booklet (PIB), token, and die. Game Workbook containing: copies of a Referral; Sample Information Sheet, Blank Information Sheets, Blank OT Report Sheet, and "Solution Report".

Playing the Game:

## Set up and preparation:

1. Place game board face-up on the table.
2. Study the game board:
  - The board represents various locations in a general hospital, outlined in blue, and in the community, outlined in yellow. It is not drawn to scale and not all locations in a typical hospital are included. Only the locations where the OT might gather information on patients are represented. Most of the locations are equipped with telephones.
  - The board is divided into four general areas: Patient Ward, Departments, Rehabilitation, and Community.
3. Find these four areas and take a few moments to note the names of the various squares located in these areas.
4. Place the token on the square marked OT Mailbox, which is located in the Rehabilitation area.
5. Place die on game board.
6. Place Patient Information Booklet (PIB), which is red, to the side of the board. Do not open it.
7. Place the action cards to the side of the board, face up, where everyone can see them. Cards may be grouped according to their color: blue, grey, yellow, or pink. You should spread out the pink cards as each one is different.
8. Retrieve copies of the Referral for each player, these are blue and are located inside the cover of the Game Workbook.
9. Each player should read the top half of the referral and place it near them for quick reference.
10. Decide which player will start first.

Game play:

11. After carefully reading the referral the player whose turn it is carefully considers what type of information they wish to gather and how they are most likely to acquire that information using an action card.
  - There are four types of action cards to choose from: Consultation (blue), Taxi (yellow), Assessment (pink), and Telephone (grey).
  - These different cards allow players to visit locations, gather information on a particular OT assessment, or make telephone calls. (The specific function of each action card will be explained later.)
  - The player whose turn it is must decide which action card to play in order to gather information to help in planning a treatment program for the patient. The player should consult with the team in deciding which card to play. However, the player can override the decision of the team and play the card he/she wants. No matter how a decision is reached, the player whose turn it is is held accountable for the decision made and must be prepared to defend it during the debriefing session.
12. Once a decision has been reached the first player opens the Game Workbook and locates the Sample Information Sheet and the Blank Information Sheets. Locate your game workbook and find the sample and blank information sheets.
  - In order to fill out the Information Sheet players should study the Sample Information Sheet provided (the sheets can be taken out of the workbook).
13. At the top of the Blank Information Sheet the player enters the referral number (written on your referral sheet), page number (starting with number one), and today's date. Look at the top of the Sample Information Sheet to see how this information is entered.
14. The player whose turn it is then enters their ID number (use the last four digits of your phone number), the action card selected, and the selected location or OT assessment. For example; the first entry in the Sample Information Sheet lists the player's ID as 4321, card selected as Consultation, and the location visited as the X-ray Department.
15. The player then records the reason for carrying out a certain action. Which in the example provided is to see the status of the patient's femur.
16. If any disagreements arise as to the decision made by the player these should be recorded. In the example provided player 2145 feels that the team should phone first.
17. The player then carries out the action described on the selected action card as explained in the next section.

#### Action cards:

For practice carry out the steps outlined below using the examples [in the square brackets]; however, do not write on your Information Sheet.

- Consultation (blue) cards allow players to visit any numbered location in the hospital, and obtain verbal information about the patient.
- If a Consultation card is played then the player must proceed as follows:
  - a) Record decision made, reason, and any disagreements on the

- Information Sheet. [see Sample Information Sheet entry #2]
- b) Follow the directions on the action card and move the token to the desired numbered location in the hospital. [advance to Dietary]
  - c) Note the number of the location written on the board. [number 13 for dietary]
  - d) Look at the bottom of the referral sheet [referral #4] and find the name of the action card played. [Consultation]
  - e) Find the number of the location which is the first number of a pair of numbers. [13 of 13-100]
  - f) Note the PIB number which is the second number of the pair. [100 of 13-100]
  - g) Look up the information in the PIB associated with that specific number. [Patient on a regular diet.]
  - h) Record information obtained on the Information Sheet.
- Taxi (yellow) cards allow players to visit any numbered location in the community. As soon as the player has visited the location they must return the token to the OT Mailbox.
    - If a Taxi card is played the player follows the same procedure as outlined for the Consultation card; the only difference being that a player advances to a location in the community.
  - Assessment (pink) cards allow players to gain information about a particular OT assessment carried out on the patient; thus each assessment card is different. Not all assessments need be carried out, in fact the group should not play assessment cards which they feel are unnecessary as this will affect the quality of the report to be written.
    - If an Assessment card is played then the player must proceed as follows:
      - a) Record decision made, reason, and any disagreements on the Information Sheet. [see Sample Information Sheet entry #3]
      - b) Follow the directions of the Assessment card and move the Token to the designated location as written on the card. [Find the Perception Assessment card and advance to the OT Assessment Area]
        - all assessments occur in the Rehabilitation Area either in the OT Assessment Room or Independent Living Unit. Both locations are outlined in Pink.
      - c) Note the number of the Assessment written on the Assessment card. [Number 6 for perception]
      - d) Look at the bottom of the referral sheet and find the name of the action card played. [Assessment]
      - e) Find the number of the Assessment which is the first number of a pair of numbers. [6 of 6-612]
      - f) Note the PIB number which is the second number. [612 of 6-612]
      - g) Look up the information in the PIB associated with the specific number. [Normal]
      - h) Record information obtained on the Information Sheet.
  - Telephone (grey) cards allow players to attempt up to two phone calls. To use this card a player must be at a location with a phone (a drawing of a telephone must be in the square). In order to put through a call; that is, have access to the PIB, a player must roll a

- 4 or higher on the die. When using the Telephone card a player is allowed to roll the die only twice. Therefore, three different possibilities can occur: the player makes two successful calls, one successful call (it doesn't matter whether it is the first or second call), or none. Players may use the Telephone card for either one or two attempts, but the card must be discarded once the turn is finished; therefore, a second call can not be saved for future turns.
- If a telephone card is played, the player proceeds as follows:
    - a) Record decision made, reason, and any disagreements on the Information Sheet. [see entry #4 on Sample Information Sheet]
    - b) Read the instructions of the card. Do not move the OT token.
    - c) Select a location you wish to call which has a telephone. [Rheumatology]
    - d) Roll the die. If a four or higher has been rolled, note the location number of the place you are calling. [Number 17]
    - e) Look at the referral sheet and find the heading marked telephone.
    - f) Find the number of the location called which is the first number of a pair of numbers. [17 of 17-412]
    - g) Note the PIB number which is the second number of the pair. [412 of 17- 412]
    - h) Look up the information in the PIB associated with that specific number.
      - [Not one of our patients]
    - i) Record the information on the Information Sheet.
    - j) Repeat steps a through d to see if a second call can be made.
  - Players take turns moving the Token and playing an action card. Turns occur in a clockwise fashion. Information sheets are shared among the players, being passed to the player whose turn it is. Each player is responsible for filling out the sheet during their turn.
  - Once a card has been played it is discarded into the discard pile (outlined on the board) and a turn is over.
18. The first player passes the Information sheet to the next player who repeats the same process (refer to step # 11).

**Additional Information:**

- Please note that the PIB can only be consulted during the turn an action card is played.
- If a player fails to record information the move must be repeated with a new action card.
- Game ends when all the appropriate cards have been played.

PLEASE REMEMBER TO RECORD THE REASON FOR PLAYING A CERTAIN ACTION CARD AS WELL AS ANY DISAGREEMENTS WHICH MAY HAVE ARISEN AS A RESULT OF THIS DECISION ON THE INFORMATION SHEET. ONCE THIS INFORMATION HAS BEEN RECORDED THEN AND ONLY THEN CAN A PLAYER LOOK UP INFORMATION IN THE PATIENT INFORMATION BOOKLET.

Writing the Report: Once you have finished playing the game you must write an OT report. In order to write the report carry out the following steps:

19. Retrieve the Blank OT Report sheet located at the back of the workbook. (remove the report from the workbook)
20. Using the SOAP method and referring to the Information Sheets, the

team works together to write one OT report. The team has 30 minutes in which to complete the report.

21. Once the report is written, retrieve the "Solution Report" located in the back flap of the workbook.
22. Read the instructions on the first page.
23. Compare the report written to the "Solution Report" this should take 5-10 minutes.

**Debriefing Session:**

A debriefing session is conducted by the game director at the end of the game to discuss the game process and the reports.

**Caution:**

Actions simulated in the game are those of a professional occupational therapist and should not be initiated during clinical placements by OT students without clearing them with a supervising therapist. Any reports written by a student must be approved and signed by the supervising therapist before being filed in the patient's chart.

IN ORDER TO PLAY THE GAME YOU SHOULD REFER BACK TO STEP #11.



**Appendix D**  
**Raw Data for Subject Matter Experts Questionnaire**

## RESULTS OF ATTITUDE QUESTIONNAIRE FOR SUBJECT MATTER EXPERTS

ATTITUDE QUESTIONNAIRE: The attitude questionnaire was administered at the end of the session. The purpose of this questionnaire was three-fold: to obtain information concerning each subject's attitude towards the simulation-game, solicit advice on the development of case histories to be used in the game, and to acquire biographical data on each subject.

1. OPEN ENDED: Questions 1-2, and 4-6 are open ended questions. Below are a list of the questions asked.

- 1) What did you like most about the simulation-game experience?
- 2) What did you like least about the simulation-game experience?
- 4) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and in what year.
- 5) How would you change the game?
- 6) With the appropriate modifications, can you see this game being used to help prepare students for work in other areas, e.g. psychiatry, paediatrics? Please explain.

TABLE 1a: outlines the different categories of comments and their content for question 1. As well as the number and percentage of subjects who made comments classified under a particular category.

CAT	#(%)	CONTENT
1	04/11	good teaching tool for students
2	01/03	good evaluation tool
3	04/11	good introduction to hospital organization
4	07/19	approximates reality
5	03/08	simulates daily activities of an OT
6	06/17	familiarizes one with hospital personnel and services
7	01/03	prepares students for the interactions, communications they need to have in order to treat a patient.
8	02/06	fairly realistic responses (in PIB)
9	07/19	aids student in developing organizational skills
10	05/14	encourages problem solving
11	02/06	allows students to synthesize and apply knowledge acquired
12	07/19	aids students in learning how and where to obtain relevant information
13	01/03	teaches students necessary consults (for a given case)
14	02/06	teaches students necessary assessments (for a given case)
15	02/06	provides immediate feedback
16	01/03	opportunity to practice assessments
17	03/08	encourages treatment planning and synthesis of information
18	01/03	stimulates analysis of cases
19	01/03	encourages initiative in obtaining relevant information about a patient
20	07/19	group effort, cooperativeness
21	01/03	simulates team approach principles

22	01/03	reinforces a team approach to treatment
23	01/03	built in frustrations realistic
24	08/22	fun, motivating
25	01/03	simple
26	02/06	non threatening

Table 1b: provides a report of all the comments made for question 1 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

1) What did you like most about the simulation-game experience?

SUB COMMENT

- 1 Il peut aider l'étudiant a connaître l'organisation au niveau du service ergo en rapport avec les autres services propres aux institutions (5,6), a discerner les info-pertinentes (12), a faire les priorites. Aide l'étudiant a etre plus efficacee dans ses demarches. (9)
- 2 Ce jeu amene l'etudiant a s'organiser a savoir ou chercher l'information necessaire et comment. (12)
- 3 True to physical medicine setting (4). Answers to questions were relevant (8). A good introduction to a hospital centre,(3).
- 4 Your approach stimulates enthusiasm. (24)
- 5 It give opportunity to allow students to search and collate their knowledge (11). This sounding out in the warm setting of a peer group (as opposed to the "sterile" setting of an exam) (26).
- 6 Its realism (4), group effort (20), having to get information and put it together afterwards (17).
- 7 Gives opportunity to practice organization skills in data gathering (9). Stimulates analysis of cases (18). As evaluation procedure could reflect individual abilities if categories reason and disagreement are labelled by student's initials (2).
- 8 It shows how to get the information (12) and it's "fun" to know what kind of information you got. (24)
- 9 Be involved in the logical thinking of what we are doing everyday (5) but in a "fun" way. (24)
- 10 Good for teaching students 1) info gathering (12), 2) necessary consults (13) 3) necessary assessments. (14)
- 11 Allows for orientation (3) and data gathering (12). (where to go for information).
- 12 Makes the learning process enjoyable (24), not threatening (26),

- relaxed atmosphere. Gets familiar with the other members of a multi-disciplinary team. (6)
- 13 Encourages problem solving (10) and treatment planning (17) especially in terms of establishing priorities (9).
  - 14 Encourages initiative in obtaining relevant information about patient. (19)
  - 15 It allows students to: 1) Work in a group (20) i.e. as a team and simulates team-approach principles (21), 2) allows them to question each others actions, 3) simple (25), 4) non-threatening (i.e. you don't worry so much about mistakes as in a placement) (26), 5) It is fun also. (24)
  - 16 Teaching tool re- information gathering (12), selecting assessments (14), familiarity with different services within large institution (6), cooperation aspect, idea exchange. (20)
  - 17 It is a stimulation game (24); very realistic (4) and helps the student for work planning (= pt involvement) in a logical sequence.\*\*
  - 18 Ce jeu prepare l'etudiant a toute les interactions (communications) qu'il doit souvent avoir - pour traiter un patient (on a souvent besoin de communiquer avec tous les intervenants) ce qui est souvent difficile ou oublier chez les etudiants surtout 1 et 2 annee. (7)
  - 19 Orientation to hospital departments (6). Fairly realistic responses to consults (except pt. himself). (8)
  - 20 Opportunity to practice the assessments (16)/treatment planning (17)/ organization aspects of patient care in as more realistic situation (4) than the classroom.
  - 21 Good orientation to hospitals (3). Useful for students as to info retrieval (12). It reinforces a team approach to treatment. (22)
  - 22 Opportunity to plan in a group. Exchange with others (20). Different areas to look at that we may forget. (6)
  - 23 It is a good teaching tool for students. (1)
  - 24 Several things: It would be nice to give this to students not yet in placement or after observation session so that they have an idea about organization (3), bureacracy, reality (4) and feel more at ease with the whole process of referral - pt meeting - data gathering - and prioritizing information gathered.
  - 25 Teaching tool which will assist students in getting ready for "real-life" (1,4). Practice what has been taught in academic setting (11). Test themselves i.e. get immediate feedback from choice they made and therefore learn. (15)

- 26 The ability of the game to force students to make decisions and justify them (10). Also, the immediate feedback received is very useful. (15)
- 27 The game procedure. Interesting teaching instrument. (1)
- 28 Cooperativeness (20); somewhat close to the real situation a therapist is in after getting a consultation (5).
- 29 Good learning situation. (1)
- 30 The problem solving aspect in having to decide which assessments and/or consultations are appropriate (10). Also, it is nice intro to hospital services and resources that are indeed available to consult for further info (6). The built in frustrations are realistic (23).
- 31 Having to think logically and make decisions, and plan steps to proceed. (9,10)
- 32 Felt like a real hospital situation (4). Needed to think things out logically. (9)
- 33 It offers the student opportunities for to make decisions on where to collect data, which are priorities (9,10), and to be able to practice assessment writing.\*\*
- 34 That it is fun. (24)
- 35 Very absorbing (24); good discussion with fellow players (20); subjectively experience frustration and/or pleasure depending upon information obtained.
- 36 It is non-competitive in a positive, constructive fashion (20). The game is useful in encouraging the players to self-organize and prioritize. (9)

\*\* Statement unclear therefore unable to code.

TABLE 1c: outlines the different categories and their content for question 2. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	06/17	Rules lengthy, time consuming.
2	07/19	Rules initially difficult to understand.
3	01/03	Reading the rules before the game.
4	07/19	Restricted to cards dealt, can't play logically.
5	05/14	Unable to carry out initial interview.
6	08/22	Limited information from some stations.
7	03/08	Scarce information from patient's chart.
8	02/06	Scarce information from physiotherapy.
9	02/06	Limited number of assessment cards.

10	01/03	Method of information gathering superficial, unrealistic.
11	02/06	Unrealistic, running around to different departments.
12	01/03	Ambiguity concerning responsibility of each service.
13	02/06	Can't ask questions (to the game).
14	01/03	No consult option to psychiatry.
15	01/03	Not enough autonomy to OT.
16	01/03	Ideal setting, not applicable to smaller settings.
17	02/06	Length of time to understand the game.
18	01/03	Game too long.
19	01/03	Slow and frustrating at times.
20	02/06	Familiarization with different area on board lengthy.
21	01/03	Small size of characters on board.

TABLE 1d: provides a report of all the comments made for question 2 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

2) What did you like least about the simulation-game experience?

SUB COMMENT

- 1 Les limitations imposées par les cartes d'évaluation d'ergothérapie cars ils empechant de fonctionner par priorité (4). Je suis d'accord que chaque jouer devait plutôt choisir la carte que lui est nécessaire pour procéder a l'évaluation et ainsé le faire dans l'ordre logique de plus on serait plus a comprendre sa logique.
- 2 De na pas pouvoir utiliser n'importe quelle carte d'evaluation; c'était frustrant (4).
- 3 Difficulty in getting to the patient easily (5). Maybe we didn't use cards to the best advantage.
- 4 Sometimes info given at a specific station is limited, thus, frustrating. (6).
- 6 Length of time to understand rules (2). Size of characters on board. (21)
- 7 Unavailability of resources: i.e. limited number of assessment cards (9). Scarce info found in patient's chart (7). One may not ask questions. (13)
- 8 Reading the rules before! (3)
- 9 The instructions were so long (1), and seemed very complicated at first. (2)
- 10 Complete information was not obtainable i.e. site of amputation. (6)
- 11 Not sufficient assessment cards (9). Find oneself running to

- different departments and not getting adequate information (6) as you cannot ask questions (13). Gather info on a superficial level as in reality would have to establish interpersonal contact with others and ask pertinent questions directly. (10)
- 12 Frustration at not having as much information on the initial contact with the patient as I would have in reality. (5)
  - 13 Lengthy rules at the beginning (1) but once begun, easily understood. -Being restricted to the cards dealt to a player. (4)
  - 14 Length of instructions prior to commencement of game. (1)
  - 15 Responses are not detailed enough at times (6)-especially where you least expect it e.g. Physio - response was "on treatment". Usually type of treatment would be stipulated. (8)
  - 16 Some of the information needs expansion and refinement e.g. charts, physio report. (7,8)
  - 17 This "City Hospital" presents an ideal work setting for Phys. Med. O.T.'s in smaller hospitals with limited treatment services available will not learn how to go about getting outside consultations and/or referrals and information. (16)
  - 19 Direct pt. info - i.e. interview (5). Going to pt's room could give the info you would tend to ask in interview. Only way to get much of the info was to go to many other departments - in reality O.T. would get much of this info directly.
  - 20 Certain restrictions on access directly to patient (5), ambiguity concerning responsibilities of each service in the institution. (17)
  - 21 Instructions are too long and time consuming (1). Game takes too long. (18)
  - 22 Time to know the game (17). Could be more than three per game.\*\*
  - 23 It is slow and can be frustrating at times (areas that are not clear). (19)
  - 24 I felt frustrated at times when insufficient info was given, when in my experience it was not that area where I was getting lack of info from i.e. nursing and progress notes rather than i.e. initial evaluation. (6)
  - 25 Long instructions may confuse non-experienced student player. (1,2)
  - 26 Difficult to find what looking for on the board-not due to small print. (20) [Maybe you could have a list of room numbers and departments.]
  - 27 Frustration about not having initial information. (6)

- 28 Instructions before the start of the game were very lengthy and at times very confusing. (1,2)
  - 29 Somewhat unrealistic - e.g. the student gains the impression that her day is spent running around data gathering when most (not all) initial info is gathered from the chart and initial patient interview. (11)
  - 30 There is a lot of "chasing around" to various services for info which in this game is good (for the above reasons), however may not be realistic when applied to actual gathering of data base and assessment administration. (11)
  - 31 Rules are complicated to learn and follow, but became easier once playing (2). Built-in frustration in not being able to proceed as one believed best - constrained by rules (no initial assessment/interview, couldn't exchange cards). (4,5)
  - 32 Takes some time to actually understand the board and how to proceed. (20,17)
  - 33 Difficult to understand all the rules at first (2). Can only choose from your own personal cards (4). Not enough info in the medical chart and from consultations. (6,7)
  - 34 Not enough autonomy for the OT (15). No consultation option to psychiatry. (14)
  - 35 As presently set up, you may not have the cards you want in order to logically proceed through the data collection. (4)
  - 36 The instruction sheets are initially a bit overwhelming (2). I sometimes didn't have cards I felt should be played next (4). Some lack of information in PIB when I felt I made a right choice. (6)
- \*\*Statement unclear, unable to code.

Table 1e: outlines the number of subjects that responded yes or no to question 4.



SUBJECT	YES	NO
1		X
2		X
3		X
4		X
5		X
6		X
7	X	
8	-	-
9		X
10		X
11	X	
12	X	
13	X	
14	X	
15	X	
16	X	
17	X	
18		X
19		X
20		X
21	-	-
22	X	
23	X	
24		X
25		X
26		X
27	-	-
28	X	
29		X
30		X
31		X
32	-	-
33		X
34		X
35		X
36		X
TOTAL	11	21
PERCENT	31	58

TABLE 1f: outlines the different categories and their content for question 4.

CAT	#(%)	CONTENT
1	02/06	reflects reality
2	01/03	any reference materials to all years
3	01/03	reference books, and articles in second and third year
4	02/06	second years should have access to basic reference materials in medicine and OT
5	01/03	school notes for first and second years
6	01/03	reference materials for first years
7	01/03	no reference materials for third years
8	02/06	medical dictionary

9 01/03 to help write the report  
 10 01/03 kept to a minimum

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**TABLE 1g:** provides a report of all the comments made for question 4 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number or letter in brackets after the comment.

4) Do you think that students should be allowed to refer to reference materials during the game? If yes, what type and in what year?

SUB COMMENT

- 1 Si ce sont des étudiants de 2<sup>ème</sup> année, il devrait le faire par eux-mêmes. A la fin du jeu, ils pourraient alors consulter des livres qui leur permettrait de faire auto-corrections niveau évaluation, plan de traitement. Par la suite, il pourrait y avoir correction de la personne évaluatrice.
- 2 Je ne pense pas, je crois que ce serait un bon moyen de cette façon de savoir ce qui a été assimilé par l'étudiant.
- 3 No. Better to have peer input. Students could always refer to material out of game.
- 4 Teacher feedback may be more helpful than reference sources.
- 5 No. To me it negates the point of the exercise.
- 6 No. This would really slow down the game. This should be played after they have been taught a certain area as an opportunity to synthesize knowledge.
- 7 Yes, because this reflects realistic situation (1) - in clinic your reference books are available (books, articles could be used in 2nd and 3rd years). (3) For exam purposes i.e. after completing courses of OT applied to med/psych conditions - reference material could be left out however.
- 10 Depends on what they have learned in their courses - i.e. curriculum should contain the necessary information.
- 11 Not initially but later on when there is doubt about an area.
- 12 Sure whenever: if they feel that would help them in the learning process.
- 13 Perhaps medical dictionary (8) if necessary but not extensive medical books pertinent to conditions as they should be familiar with them from previous exposure in courses. This could remind them of the condition they should be familiar with.
- 14 With the exception of appropriate reference books on

symptomatology! (8) Do not see reference materials as being necessary.

- 15 In first year maybe it might be applicable depending of case (6). But in general I think it would just complicate matters. In second and third year this could be used before writing out the report. (9) As a way of clarifying some assessment results or sifting out unnecessary info.
- 16 Yes to allow for students to benefit as much as possible. Although it should be kept to a minimum. (10)
- 17 Second year should have access to basic reference materials, e.g. medical dictionary and OT reference books. (4) Third years no reference books. (7)
- 19 No but perhaps the need for further info could be listed during the game and then referred to references later such as specific assessment techniques.
- 20 No. As a learning tool it should be used independently. Students will then become more aware of implications of their clinical decisions.
- 21 Depends on what year the student is in.
- 22 Yes. First and second year school notes. (5)
- 23 Yes. At second year should refer to appropriate available material or even to their own notes. (4)
- 24 No. When one is doing an initial assessment they should use already knowledge. The only time there should be reference materials is once referral is received and need i.e. medical, anatomical info. Feedback can be given after so they can reflect back.
- 25 No. I feel student should play with what they have already learned through observation, placements, courses. The game itself gives them information they need. They should apply it logically via feedback from their learning group.
- 26 Not during the game. Maybe for the report.
- 28 Yes. In the clinical setting, clinicians and students make use of reference materials whenever they need to (1). i.e. medical and pharmacological dictionaries, OT manuals, etc. should be supplied to all years. (2)
- 29 No, will lose the thread, but perhaps consultation of OT books eg. Willard etc. after to do treatment planning.
- 31 It would make it much longer to play, and it would be less of a game and more of a work activity.

- 33 No. This is like a test to see what they would do if faced with the situation of a new referral. This is a very realistic situation.
- 35 No - not if used following a section of a course which has been taught - use it as a means of seeing whether they have learned and/or understood the course material.
- 36 I think it might be too confusing to have reference materials around as well. Besides, one of the good points is that it teaches you to think of your options and discuss your choices based on what you have in front of you, not based on theoretical material. Reference material would prolong the game.

TABLE 1h: outlines the different categories and their content for question 5. Included in this table are the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#/%	CONTENT
1	16/44	Cards shared among all players
2	02/06	Cards displayed on a central display board
3	01/03	More assessment cards.
4	01/03	More information cards.
5	05/14	Initial patient evaluation card.
6	03/08	More concise initial interview information.
7	04/11	More information when consulting medical chart.
8	03/08	Some answers more detailed.
9	01/03	Differentiate type of information get re: call, consultation, and written report.
10	01/03	Information on direct contact or by phone should be similar but much updated information added.
11	01/03	Answers written on cards inserted into Information sheet.
12	02/06	Increased incentive to use phone.
13	01/03	More emphasis on assessment.
14	01/03	Extra points for limiting number of assessments.
15	01/03	Increased emphasis on report writing.
16	02/06	Emphasize selection of pertinent data for treatment planning/report writing.
17	01/03	Prior to game play have students outline individually what they see as appropriate procedures in data gathering (for comparison purposes post game).
18	03/08	Shorter less complicated instructions.
19	01/03	Allow more time to study the board game.
20	01/03	Another hospital organization.
21	01/03	Psychiatric orientation.
22	02/06	Include consult to psychiatry.
23	01/03	Larger print in PIB.
24	01/03	Individual board games rather than one large one.
25	01/03	List of room numbers and departments.

TABLE 1i: provides a report of all the comments made for question 5 as

well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments which addressed question 5 were made in questions 2, 6 or concerning the case histories. These comments have been included here.

5) How would you change the game?

SUB COMMENT

- 1 Ne pas distributes les cartes a chaque jouer mais les laisser sur la table afin que chaque jouer puisse les choisir selon leur volanté. (1)
- 2 Permettre de choisir n'importe laquelle des cartes, i.e. ne pas les passer a chacun mais plutot de les laisser dans le milieu par catégories. (1)
- 3 More information when consulting with medical records. (7)
- 4 More concise initial interview info. (6)
- 5 Beyond the post play discussions that came up - no wise I handed in my suggestion to your colleague re: the making of three little playmats instead of the "upside down" large one. (24)
- 6 Have all the cards located on a central display board (like the slide display unit). (2) Have the answers written on cards that could be inserted into the information sheet (it took a long time to write down the responses). (11)
- 7 Make cards available to all. (1) Have students outline on individual basis what they see as appropriate procedures in data gathering before starting game. Therefore could compare with procedures actually taken during game. (17)
- 8 Another hospital organization. (20) Put more telephones without the rule of "4 and plus" because of time shortened phone calls are more probable than "direct consultation". (12)
- 9 Put the cards in a bank so that everybody can come up to a decision in choosing the appropriate card. (1)
- 11 Instructions too lengthy. (18) Include more assessment cards. (3) Include psychiatric orientation. (21) Allow for trading of cards. (1)
- 12 I would have an initial evaluation card (5) as well I would keep all the cards in a central tray. (2) To be able to change cards. (1) Extra points for limiting number of assessments re: to discourage using or performing irrelevant assessments. (14)
- 14 Supplement info in medical chart on site of trauma with a little more specific information. (7)

- 15 Make some answers more detailed (8). Add a card for initial interview to establish a client's point of view or feelings i.e. perspective of own handicap/problem. (5)
- 16 Decision making of individual players is hampered by not having the required "Assessment" card available. (1)
- 19 Permit interchange of consultation cards (1). Initial interview and initial (vs individual) assessments as part of consultation. (5,6)
- 20 Format - use of cards accessible to all participants (1). Information- differentiate between telephone call, personal contact in consultation, and reading of consult report. (9)
- 21 Have all cards available for players to choose rather than dealing cards (1). Info on direct contact or by phone should be similar but with updated info added. (10)
- 22 No idea it is good.
- 23 Just develop further in the weak areas e.g. initial interview/assessment etc. (5)
- 24 Instructions can be a little complicating (18). Cards should belong to all three players interchangeable (1). Add more patient contact/info. (6)
- 25 I think it's excellent as it is.
- 26 One small suggestion. The decision to go somewhere on phone is not always clear. There seems to be little incentive to use the phone. By going you always get a response and no time is deducted. (12)
- 27 Give more informations.. (8)
- 28 Distribution of cards. (1)
- 29 The original comment- consolidate the chasing around and put more emphasis on assessment. (13)
- 30 Emphasize report writing (15) and selection of pertinent data for formulation of treatment plan, to a greater degree. (16)
- 31 Add more info cards (4), allow cards to be exchanged (1). Allow time to study the game board to know what is possible and what places exist. (19)
- 32 As stated - making all the cards available which eliminates chance (as to which cards one's been dealt). (1)
- 33 Let everyone choose from all cards available (1). Add more info in medical chart, etc.. (7) Add patient interview card (5).

- Emphasize priorities in data selection when writing up the assessments (16).
- 34 Add a psychiatry consult (22). Is there any way to speed up getting to the OT assessment?
- 35 Let anyone use any card at any time (1). Larger print in PIB (23).
- 36 More appropriate info in PIB (8). Presentation of directions - complete but very long to get through (18). Unfortunate I can't think of how better to do it.
- \*\*\*\*\*
- FROM QUESTION 2
- 26 [Maybe you could have a list of room numbers and departments.]
- \*\*\*\*\*
- FROM QUESTION 6
- 19 [Suggest psychiatry consult be available within the physical medicine version as well.] (22)
- \*\*\*\*\*
- FROM SUGGESTIONS CONCERNING CASE HISTORIES
- 13 [Have more info in medical chart. What is first provided on card is enough as usually not much more is available on an initial consult.] (7)

Table 1j: Outlines the number of subjects that responded yes or no to question 6.

SUBJECT	YES	NO	SUBJECT	YES	NO
1	X		20	X	
2	X		21	-	-
3	X		22	X	
4	X		23	X	
5	X		24	X	
6	X		25	X	
7	X		26	X	
8	X		27	X	
9	X		28	X	
10	X		29	X	
11	-	-	30	X	
12	X		31	X	
13	-	-	32	X	
14	X		33	X	
15	X		34	X	
16	X		35	X	
17	X		36	X	
18	-	-	TOTAL	32	00
19	X		PERCENT	89	00

TABLE 1k: outlines the different categories and their content for question 6. Included in this table are the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	09/25	psychiatry
2	03/08	paediatrics
3	01/03	geriatrics
4	02/06	community centre
5	01/03	school
6	01/03	long term
7	01/03	short term
8	07/19	all areas of OT
9	01/03	initial orientation to hospital

Table 11: provides a report of all the comments made for question 6 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

6) With the appropriate modifications can you see this game being used to help prepare students for work in other areas, e.g. psychiatry, paediatrics? Please explain.

SUB COMMENT

1. Oui, car je crois que les memes objectifs pourraient etre atteints. Des personnes ressources travaillant dans ses milieux pourraient peut-etre aidees a elaborer le jeu.
2. Oui ce serait interessant car l'approche est parfois differente.
4. Yes; simulate other institutional settings: community center (4), school (5) etc.
5. General medicine/paediatrics (2) is a wide ranging area, psychiatry is primarily compact. However I am so impressed with the diagnostic game that I'd like to take that concept and see how it could be applied for psychiatry students. (1)
6. Yes all areas need the realism and synthesis aspects of the game. (8)
7. Yes definitely. Game could be modified with aim to clarify diagnosis in psychiatry (1) or help establish goals of treatment.
8. Yes. Because we always have to get information in any kind of institution: long or short term or CLSC. (4,6,7)
9. Yes, no matter where you are working the process of gathering info and designing the treatment plan has to be done. (8)
10. I think that once the students understood the necessary strategies for the physically handicapped adult the game could be adapted for children. (2) (I'm not sure about psychiatry).



- 11 Can be used as an initial orientation to a hospital milieu. (9)
- 12 Yes, definitely in psychiatry for basically the same reasons as in physical medicine. (1)
- 15 Yes, definitely. Especially in psychiatry (and peds) where the theoretical training is so vague. (1,2)
- 16 Yes- assessment, consultation, problem solving and report writing are all necessary in every field. (8)
- 17 Yes, in geriatrics (3), mix of physical medicine and psychiatry problems.
- 19 Yes- virtually the same game but with appropriate departments, assessments, etc. [Suggest psychiatry consult be available within the physical medicine version as well.]
- 20 Yes in all areas (8). It may be of value to provide clinicians with a questionnaire in which they could respond in writing e.g. Departmental records? \_\_\_\_\_ Medical records? \_\_\_\_\_ Psychology consult (written)? \_\_\_\_\_
- 23 Yes, in all other areas (8). Basic treatment planning can be structured.
- 24 Yes. There is always (or almost) a team approach in other specialities and medical charts to go to therefore different speciality, similar problem solving approach. (8)
- 25 I feel the game could easily be adapted to other areas of OT application/treatment. However a physical medicine case history might have an easier logic pattern to follow for beginners.
- 26 Certainly. The services used need to be modified; but I think you could find similar benefits.
- 27 This could be applied in other areas.
- 28 Yes, it can be used in psychiatry (1) very well after a few changes.
- 29 I would think so- but harder in psychiatry. (1)
- 30 Yes, for the same reasons it works for phys med setting. I feel it would be applicable in other settings as well.
- 31 Yes I do - same steps in thinking required, e.g. "What do I need to know about this individual, where and how can I get this info and what do I do with info in order to plan treatment.
- 32 Yes definitely any type of condition - physical or psychiatric can be simulated. (1) Lots of work on developers part. Bravo to you!!

- 33 Yes. Psychiatry (1) may be more difficult to do but I feel it is workable.
- 34 I think you would need different stations if used for psychiatry, therefore a different board, cardset. (1)
- 35 Yes- definitely - simple cases and in third year complicated multi-problem cases as in Rehab Clinics.
- 36 I can't see any reason why this game couldn't be modified for any area of work. (8) The goals remain the same.

2. Checklist: Question 3 has three parts. First the subject is asked if they think that the simulation game can help prepare students for clinical work in a physical medicine setting. If the subject answers yes then they are asked to answer part a) in which they tick off during which years and under what conditions the simulation-game should be used. If they answer no then they are asked to proceed to part b) and provide an explanation for their answer.

TABLE 2a: outlines which subjects responded yes or no to question 3.

SUBJECT	YES	NO	SUBJECT	YES	NO
1	x		20	x	
2	x		21	x	
3	x		22	x	
4	x		23	x	
5	x		24	x	
6	x		25	x	
7	x		26	x	
8	x		27	-	
9	x		28	x	
10	x		29	x	
11	x		30	x	
12	x		31	x	
13	x		32	x	
14	x		33	x	
15	x		34	x	
16	x		35	x	
17	x		36	x	
18	x		TOTAL	35	00
19	x		PERCENT	97	00

TABLE 2b: outlines how each subject indicated the simulation-game should be used in the McGill OT program. Please note that the number 4 was used instead of the term intern.

SUBJECT	IN CLASS						OUTSIDE CLASS							
	GROUP			INDIV			GROUP				INDIV			
	1	2	3	1	2	3	1	2	3	4	1	2	3	4
1		x	x		x	x		x	x			x	x	
2	x	x				x								x
3		x				x		x					x	
4		x						x					x	
5						x				x			x	
6		x	x											
7		x	x		x	x								
8		x												
9	x	x				x	x	x					x	
10	x	x	x											
11	x			x			x				x			
12	x	x			x	x		x	x				x	
13		x						x					x	
14		x	x											
15	x							x					x	
16	x	x	x				x	x	x					
17		x							x					
18	x	x						x	x				x	x
19		x				x		x	x				x	
20	x			x	x		x	x				x	x	
21	x	x						x						
22	x	x				x		x					x	x
23		x			x	x							x	x
24	x	x						x	x				x	
25	x	x				x	x	x	x		x	x	x	
26		x							x					
28	x	x	x				x	x	x					
29	x	x	x				x	x	x					
30		x	x					x	x					
31		x	x		x	x		x	x			x	x	
32		x	x			x				x				x
33	x	x				x								
34	x						x	x	x					
35	x	x	x								x	x	x	
36	x	x	x		x	x				x		x	x	x
TOTAL	19	30	13	02	07	15	08	20	14	03	03	07	18	05
PERCENT	53	83	36	06	19	42	22	56	39	08	08	19	50	14

## Biographical Data

3. BIOGRAPHICAL DATA: Questions 7 through 9 solicit biographical data on each subject. Below are the questions asked, how they were scored, and the percentage of respondents falling into the various categories.

TABLE 3a: outlines the biographical information for each subject.

SUB	Present Job		Phys med			Areas Worked In Psych			Academe			Years of Experience			
	1+	1-	A	G	P	A	G	P	PM	PY	P	-1	1-3	3-5	5+
1	x		x											x	
2	x		x	x		x	x							x	
3	x		x	x		x									x
4	x								x						x
5	x					x									x
6	x								x						x
7	x							x					x		
8	x				x								x		
9		x			x								x		
10	x		x		x										x
11	x			x		x	x								x
12		x				x	x	x							x
13	x		x	x											x
14	x		x												x
15	x							x					x		
16	x					x	x								x
17	x			x			x								x
18	x								x						x
19	x			x	x	x	x	x							x
20	x								x				x		
21	x		x	x											x
22	x				x										x
23	x		x	x											x
24	x		x	x		x							x		
25	x		x											x	
26	x				x					x			x		
27	x					x									x
28		x		x								x			
29	x		x					x							x
30	x				x								x		
31	x					x	x			x					x
32	x		x	x											x
33	x		x	x											x
34	x					x	x								x
35	x								x	x					x
36	x				x										x
TOTAL	33	03	13	12	08	11	10	03	05	02	01	01	08	03	24
PERCENT	92	08	36	33	22	31	28	08	14	06	03	03	22	08	67

Please note: A = adults, G = geriatrics, P = Paediatrics, PM = physical medicine, PY = psychiatry.

#### CASE HISTORIES

Subjects were presented with a description of eight case histories and asked to rate them as elementary, intermediate, or advanced in terms of the difficulty they would present to OT students.

TABLE 4a: outlines the ratings clinicians gave for each case history. Please note that E refers to elementary, I for intermediate, and A for advanced. One subject (number 27) failed to answer these questions. Those subjects marked with an asterix (\*) have had experience in

physical medicine (adults, geriatrics, academia).

SUB	CASE NUMBER																							
	1		2		3		4		5		6		7		8									
	E	I	A	E	I	A	E	I	A	E	I	A	E	I	A	E	I	A	E	I	A	E	I	A
*1	/	/		x			/	/		/	/		x			/	/		x			/	/	
*2		x		x				x			x		x				x			x			x	
*3		x			x		/	/		/	/			x		/	/			x			x	
*4		x			x			x			x			x			x			x			x	
5		x			x			x			x			x			x			x			x	
*6		x		x				x			x			x			x			x			x	
7		x		x				x			x			x			x			x			x	
8		x		x				x			x			x			x			x			x	
9		x		x				x			x			x			x			x			x	
*10	/	/		x			/	/		x			/	/		x			x			x		
*11		x			x			x			x			x			x			x			x	
*12		x			x			x			x			x			x			x			x	
*13		x		x				x			x			x			x			x			x	
*14		x		x				x			x			x			x			x			x	
15		x		x				x			x			x			x			x			x	
16		x		x				x		-	-	-		x			x			x			x	
*17	x				x			x			x			x			x			x			x	
*18	x			x				x			x			x			x			x			x	
*19	x			x				x			x			x			x			x			x	
*20		x		x				x			x			x			x			x			x	
*21		x		x				x			x			x			x			x			x	
22	x			x				x			x			x			x			x			x	
*23		x		x				x			x			x			x			x			x	
*24		x		x				x			x			x			x			x			x	
*25	x			x				x			x			x			x			x			x	
26		x		x				x			x			x			x			x			x	
27	-	-		-	-		-	-		-	-		-	-		-	-		-	-		-	-	
*28		x		x				x			x			x			x			x			x	
*29		x		x				x			x			x			x			x			x	
30		x		x				x			x			x			x			x			x	
31		x		x				x			x			x			x			x			x	
*32		x		x				x			x			x			x			x			x	
*33		x		x				x			x			x			x			x			x	
34		x		x				x			x			x			x			x			x	
*35	x			x				x			x			x			x			x			x	
36		x		x				x			x			x			x			x			x	

/ = Subject gave two answers therefore answers given a value of half a percentage point.

Table 4b: Outlines the frequency and percentage of ratings for each of the cases. Please note that percentages were calculated out of 35.

CASE	ELEMENTARY f/%	INTERMEDIATE f/%	ADVANCED f/%
1	00/00	07/20	28/80
2	27/77	08/23	00/00
3	8.5/24	21.5/61	05/14
4	15/43	13/37	06/17
5	19.5/56	13.5/39	02/06
6	14/40	17/49	03/09
7	00/00	03/09	31/88
8	05/14	14.5/41	15.5/44

5. Open-Ended: Subjects were asked to record any suggestions they might have regarding the case histories. At the end of the questionnaire additional comments were invited.

TABLE 5a: outlines the different categories of comments and their content with respect to comments made concerning the case histories. As well as the number and percentage of subjects who made comments classified under a particular category.

CAT	#(%)	CONTENT
1	03/08	Good variety of cases
2	01/03	Include mental status of case 3 (MS).
3	01/03	Case 4 (RA) should include information on drugs patient is taken and for how long.
4	01/03	Include mobility protocol for case 5 (Flexor tendon repair).
5	02/06	Indicate the hospital setting ie acute care, neuro-unit or cardiac unit.
6	01/03	Include case on multi-handicapped child (C.P.) and family compliance problem.
7	01/03	Include case on mentally retarded adult, orientation to workshop and institutionally bound.
8	01/03	Include a geriatric case with multiple diagnoses.
9	01/03	Include two types of spinal cord injury, complete and incomplete.
10	01/03	Include CVA cases.
11	01/03	A simple fracture case for elementary level e.g. Colles, humerus.
12		Cases could be presented in a more elementary way to U1 and U2.
13	01/03	Cases should be more complicated for U3.
14	01/03	Difficult to rate cases depends on knowledge of the conditions, and how OT approach reflects a holistic view of patient.
15	01/03	Social history could strongly influence ease or difficulty of cases.
16	01/03	Complexity increases with decreased family support and decreased acceptance of disability by patient.
17	01/03	Complexity affected by patient's attitude and motivation.

Table 5b: provides a report of all the comments made for question 1 as well as who made them. In addition each comment has been coded, to

provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Comments placed in square brackets were found to be applicable to other questions posed rather than this one. Therefore they have been included under the appropriate heading.

Please record any suggestions you may have regarding the case histories.

SUB COMMENT

---

- 1 Assez diversifiés. (1)
- 3 (Case 4) Drugs if any. For how long administered. (3)
- 4 [Why are you focussing on physical medicine? Could the game have wider application if psychiatry, pediatrics, and geriatrics would be included?]
- 5 [My marking is possibly influenced by my awareness of the large psychological component/factor.]
- 8 Indicate the hospital setting i.e. acute care, neuro-unit, or cardiac unit. (5) Because after an accident a same patient can be sent to the orthopedic before the neuro.
- 9 Multi-handicapped child (C.P.) and family compliance problems (6). Mentally retarded adult, orientation to workshop and institutionally bound. (7)
- 10 [Case history should be more complete when consulting medical charts i.e. admission report.]
- 13 [Have more info in medical chart. What is first provided on card is enough as usually not much more is available on an initial consult.]
- 17 There is a geriatric case missing e.g. patient with multiple diagnoses (in our hospital they average 7-8!), where each one of the diagnoses permits OT intervention. The problem is: priority choice of OT treatment, even among practicing OTs still a problem at times. (8)
- 20 May be of value to have two types of SCI (complete and incomplete) (9) and different types of hemiplegia patients (mild/heavy, perceptual problems, sensory, receptive/expressive aphasia) (10).
- 23 A simple fracture case could be interesting for the elementary level e.g. collés fracture, fracture of humerus. (11)
- 25 I think you've chosen a good cross section of cases applicable to phys-med settings. (1) Maybe you should state which type of setting they are in? How much time the patient will be in hospital. This would affect the treatment plan. (5)

- 28 Good cases. (1)
- 29 Mental status of case three? (2) Case 5, early active mobility permitted by doctor will affect treatment planning. (4)
- 31 Difficult to indicate exactly which cases are elementary versus advanced. I think it depends how much knowledge you have about the conditions and how your approach reflects a holistic view of the individual. (14) The social history could strongly influence the ease or difficulty of fulfilling the cases. (15)
- 33 Complexity increases with decreased family support and decreased acceptance by the patient. (16) Also patient's ideas about sickness and his/her role in family are often very important. Although some conditions are more debilitating than others, it is often the patient's motivation and attitude that make difference in the treatment outcome and difficulty experienced by the OT. (17)
- 34 [Difficulty commenting because of predominantly psychiatric experience and not knowing what students are taught when.]
- 35 These cases could be presented in a more elementary way to U1 (same for U2 students) also the types of conditions they would learn at that level. (12) At U3 level could have any type of case but with more complications e.g. psychological/social/diabetic plus etc. (13).

TABLE 5c: outlines the different categories of comments and their content with respect to additional comments made. As well as the number and percentage of subjects who made comments classified under a particular category..

CAT	#(%)	CONTENT
1	04/11	Good teaching tool.
2	01/03	Covers many areas students have difficulty with ie data gathering, report writing, selecting priorities.
3	01/03	Debriefing process seems very important.
4	01/03	Game more interesting then books/notes for students!
5	03/08	Should incorporate other OT areas into game.
6	01/03	Maybe can be further progressed to include Rx planning as a Stage 2 game.
7	01/03	Results from second year could help plan third year course in Rehab Clinics.
8	01/03	Marking of case histories possibly influenced by awareness of the large psychological component.
9	01/03	Difficulty rating case histories as work experience is in psychiatry.
10	05/14	Good luck.
11	03/08	Congratulations.
12	03/08	Hard work to make the game.

Table 5d: provides a report of all the comments made as well as who made them. In addition each comment has been coded, to provide a count



of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

Additional Comments.

SUB COMMENT

- 
- 1 Felicitations pour votre bon travail. (11)
- 4 It would be very helpful to get your feedback after second year in order to plan out Rehab Clinics (third year course). (7)
- 7 Good luck. (10)
- 8 Very good tool. (1) Own feedback easily achievable. It will be interesting to get one game like that for psychiatry or mental retardation with complications in orthopedics. (5)
- 9 Very good learning game. (10)
- 13 Very ingenuous! (1)
- 16 Congratulations! (11) Good work, good luck with refinements. (10)
- 17 Good luck. (10)
- 22 Congratulations for the great game! (11)
- 23 I believe it's hard work (12) putting this game together but it's more interesting than the book notes for the students!! (4)  
Keep it up.
- 24 You put a lot of work in this project and I hope the university will support you and implement this "game". (12)
- 26 You've done an excellent job of putting it all together. (12) The only suggestion was the problems of telephoning.
- 28 You should also include psychiatry and pediatrics cases so that students in those clinical placements can also make use of this game. (5)
- 32 I think you have come up with a very good idea. I wish you lots of luck! (1,10)
- 33 I think the game is an excellent teaching tool (1) as it covers many areas students have difficulty with i.e. data gathering, report writing, selecting priorities (2). Maybe it can be further progressed to include treatment programming as a stage II game. (6).
- 35 The debriefing process sounds very important - easy to do at the group level (3). How would you foresee this on the individual level? Excellent idea - keep on with it!
-

## FROM CASE HISTORY QUESTION

- 4 [Why are you focussing on physical medicine? Could the game have wider application if psychiatry, pediatrics, and geriatrics would be included? ] (5)
- 5 [My marking is possibly influenced by my awareness of the large psychological component/factor.] (8)
- 34 [Difficulty commenting because of predominantly psychiatric experience and not knowing what students are taught when.] (9)

**Appendix E**  
**Protocols for Main Study**

Problem Oriented Record or SOAP Method of Report Writing

The process for recording the problem oriented record is called SOAP.

**S** stands for Subjective, what the patient tells the therapist. To avoid confusion in recording this information S can be introduced by the phrase, "The patient states ..."

**O** stands for Objective. This is where evaluation results and observations are recorded. Progress is recorded here.

**A** stands for Assessment. This is where the OT can give a professional opinion. Example: Patient will require post-hospital care as family states they cannot manage the patient in the home until he is at a minimal assist level of self-care." It is also the place to assess the effectiveness of the plan and recommend change in the treatment plan. Example: "Patient will not be able to ambulate to accomplish homemaking tasks. Recommend he be fitted with a wheelchair."

**P** stands for Plan. This part must reflect what services will be provided. As the patient progresses the therapist states program goals for other professionals to see. Examples: Announce a planning conference, state the follow-up that will be provided, or identify the objectives of the home program.

A traditional occupational therapy note might be written as follows:

1/26/77--Occupational Therapy

Patient was instructed in and shows an understanding of work simplification techniques. Patient's endurance for sitting is two hours but fatigues after ten minutes of standing. Patient should be able to independently prepare meals but will need assistance in cleaning and home maintenance tasks. Patient states she is ready to go home and try to maintain household. Patient's family will be informed of patient's abilities and their need to provide support. Recommend a home visit in one week to see how patient is implementing techniques and as needed if patient requires support or additional experiences.

Carolyn Baum, OTR 1-26-77

The problem oriented record would appear as follows

- S: Patient states she is ready to go home and try to implement learned techniques in managing her home responsibilities.
- O: Patient shows understanding of work simplification techniques. Sitting tolerance is two hours, fatigues after ten minutes of standing.
- A: Patient should be able to prepare meals independently but will need assistance in cleaning and home maintenance.
- P: Patient to demonstrate to family her abilities and limitations to gain support of her desire to be as independent as possible. Home visit by occupational therapist at one week after discharge and as needed until patient has made appropriate adjustment.

Carolyn Baum, OTR 1-26-77

Taken from Hopkins H.L. & Smith, H.D. (Eds.). (1978). Willard and Spackman's occupational therapy (5th ed.). (p. 683). Philadelphia: J.B. Lippincott.

## SOLICITATION OF VOLUNTEERS FROM SECOND YEAR

WEEK OF JANUARY 27, 1986.

Schedule a time when all class members are together and are not in a hurry to get somewhere.

TIME 15-20 minutes.

MATERIALS: 40 consent forms French and English, sign up sheet, 29 copies of tentative dates for the sessions.

- 1) INTRODUCTION: Looking for second year OT students willing to take part in a study to test and evaluate a sim-game.
- 2) SIM-GAME
  - a) Purpose: to help prepare OT students for clinical work.
  - b) Description: working in groups, players simulate the role of an OT working in an acute care general hospital in physical medicine. Given a referral for a particular patient, group must gather information and plan a treatment program. Group then writes an initial OT report, comparing it to a model report.
- 3) ADVANTAGES
  - a) Help in preparing for clinical placements.
  - b) Opportunity to become familiar with the full range of activities an OT engages in within a hospital setting; such as performing assessments, team work, and consulting with professionals, community services, patient and family.
  - c) Opportunity to study different case histories and plan treatment programs.
  - d) Practice in writing OT reports.
  - e) Studies to date indicate that the sim-game is interesting, challenging, and fun.
- 4) TESTING TO DATE
  - a) 3 OT U2 students.
  - b) 36 clinicians and academics.
  - c) 8 OT U3 students.
  - d) each testing has resulted in modifications to the game.
  - e) require as large a sample of OT U2 students as possible to evaluate the value of the sim-game as an educational tool for future OT students.
- 5) THESIS This all part of a thesis being carried out by Anne-Marie Poirier.
- 6) ETHICS Explain that since Anne-Marie Poirier is teaching 2nd year she will not be conducting the study herself. This is in order to protect second years. Explain that you will be running the simulation-game along with a teacher who does not teach second years. However, Anne-Marie Poirier will

supervise the study.

- 7) STUDY Total of four aspects to the study.
- a) PRETEST: takes 30 minutes.
  - b) Three sessions playing the sim-game and answering questionnaires. Length of time varies 2-3 hours per session.
- 8) SCHEDULE Although not conducted in class, times have been made available for those who wish to participate in the study. In addition a careful study has been made of the OT schedule as well as the dates of the midterms in order to avoid any conflicts.

SCHEDULE  
PRETEST

Feb 3 (Monday): 11:00 a.m. after class in same room  
or Feb 5 (Wednesday): 2:30 p.m. after class in same room

FIRST SESSION

LOCATION: all sessions in D5

Feb 26 (Wed): 9:00 or 2:30

SECOND SESSION

Mar 5 (Wed): 9:30 a.m.

THIRD SESSION

Mar 17 (Mon): 2:30

- 9) SIGN UP Have those students interested in participating sign up on the sign up sheet. Handout the list of dates for the sessions.

EITHER PASS AROUND SIGN UP SHEET OR DIRECT PEOPLE AS TO WHERE THE SHEET IS LOCATED

- 10) CONSENT FORMS Ask volunteers to sign the consents form and get a fellow student to witness it. Forms are available in both French and English.

DISTRIBUTE CONSENT FORMS. HAVE A FELLOW CLASSMATE WITNESS, AND ONE OF YOU SHOULD SIGN IT. TRY TO COLLECT THE CONSENT FORMS IMMEDIATELY.

RETURN THE SIGN UP SHEET AND CONSENT FORMS TO ANNE-MARIE POIRIER

Consent form

I, \_\_\_\_\_ consent to participate in a research study on the development of an educational simulation-game.

Purpose and design of study

The purpose of this study is to develop and evaluate a simulation-game to be used as an educational tool in the training of Occupational Therapy (OT) students. This game will attempt to simulate the process and activities undertaken by an Occupational Therapist in planning a patient treatment program.

Participation in the study will involve my playing the game in a small group in three sessions of two to three hours duration. Measurements will be taken at the beginning and completion of this study regarding the objectives of this game as well as attitudes about its usefulness as an educational tool. The data will be used to make necessary modifications to the simulation-game.

I understand that my participation in this study will have no bearing on my academic grades or standing.

Advantages

I understand that this simulation game may prove beneficial in the training of Occupational Therapy Students for future field work.

Enquiries concerning the study

I understand that any enquiries I may have concerning this study will be answered. Enquiries can be directed to Anne-Marie Poirier, who can be reached at 392-4307 (School of P&OT, Davis House, McGill University).

Withdrawal from the study

I understand that my participating in this study is voluntary, and that I may withdraw at any time without prejudice to myself.

Date \_\_\_\_\_ .

Signed \_\_\_\_\_ .

Witnessed by \_\_\_\_\_ .

I hereby certify that I have explained to the above mentioned person the nature of the research study and the known risks involved in participating in this study, and that the person has the option of withdrawing from the study at any time.

I have assured him/her that the information obtained will be held in confidence.

Date \_\_\_\_\_ .

Signed \_\_\_\_\_ .

Formule de consentement

Je soussigné(e), \_\_\_\_\_, consens à participer à une étude sur le développement d'un jeu-simulation éducatif.

But et protocole de l'étude

Le but de cette étude est de développer et évaluer un jeu-simulation pour utilisation en tant qu'outil éducatif pour fins d'apprentissage pour les étudiants en ergothérapie. Ce jeu tentera de simuler les activités et opérations rencontrées par un(e) ergothérapeute dans la planification et élaboration d'un plan de traitement.

Ma participation à cette étude consistera à prendre part, en petit groupe, à ce jeu-simulation pour trois sessions d'une durée approximative de deux à trois heures chacune. Des mesures seront prises au début et au terme de cette étude pour évaluer les objectifs de ce jeu et déterminer son utilité en tant qu'outil d'apprentissage. Ces données seront utilisées pour apporter, au besoin, les modifications nécessaires à ce jeu-simulation.

Je comprends que ma participation à cette étude n'affectera aucunement mes notes ou mon standing académique.

Avantages

Je comprends que ce jeu-simulation peut prouver être bénéficiel aux étudiants en ergothérapie, spécifiquement pour les préparer aux stages cliniques qu'ils doivent compléter ad cours de leur études.

Renseignements concernant l'étude

Il est entendu qu'on répondra à toute question que je pourrais avoir concernant cette étude. Les questions peuvent être adressées à Anne-Marie Poirier, que je peux rejoindre au 392-4307 (Ecole de physiothérapie et d'ergothérapie, Université McGill, Davis House).

Retrait de l'étude

Je comprends que ma participation à cette étude est volontaire, et que je peux me retirer de cette étude en tout temps, sans aucun préjudice.

Date \_\_\_\_\_ .

Signature \_\_\_\_\_ .

Témoïn \_\_\_\_\_ .

Je certifie avoir expliqué à la personne ci-haut mentionnée la nature de cette étude ainsi que les risques que sa participation à cette étude peut entraîner. De plus, la personne ci-haut mentionnée peut se retirer de cette étude en tout temps.

La personne est assurée que tous renseignements obtenus demeureront confidentiels.

Date \_\_\_\_\_ .

Signature \_\_\_\_\_ .



## Protocol for Pretest with Third Years

Materials: 9 pretests, 9 pencils, note pad, watch.

1. Have students fill out consent forms.
2. Collect consent forms.
3. Distribute copies of SOAP method with instructions to read it before the first gaming session.
4. Handout pretests and pencils.
5. Explain that the last four digits of their phone number is used as a means of coding their material, and that they must use the same number throughout the sessions. Tell them it doesn't matter what number they select as long as they use the same one from session to session.
6. Ask if any people in the class have the same number, if so ensure that they use different numbers.
7. Read instructions aloud while players read along silently.
8. Note time started.
9. Observe the students, answer any questions the students might have with respect to understanding the question however DO NOT provide answers.
10. Record on paper any questions the students ask.
11. Note how long it takes for students to answer first question, push to next question after 8 minutes.
12. Circulate, answer questions.
13. Announce time every 10 minutes.
14. Allow a maximum of 35 minutes to complete the pretest.
15. After 35 minutes have passed announce the following:  
"It's been over half an hour, please turn to question 9 on page 5 and answer it. Then stop, and remain seated while we collect your paper."
16. Collect papers, recording the time it takes each student to finish on his paper.
17. Ensure I.D. on paper.

## Protocol for Pretest with OT U2

**Materials:** 27 pretests, 27 pencils, note pad, watch, 27 envelopes containing: instructions for SOAP method of report writing, and tentative dates for gaming sessions.

1. Ask those who have not returned consent forms to do so as soon as possible.
2. Announce that each student should collect an envelope before they leave.
3. Handout pretests and pencils.
4. Instruct students not to start until they are told.
5. Explain that the last four digits of their phone number is used as a means of coding their material, and that they must use the same number throughout the sessions. Tell them it doesn't matter what number they select as long as they use the same one from session to session.
6. Ask if any people in the class have the same number, if so ensure that they use different numbers.
7. Have one person read the instructions aloud while the players read along silently.
8. Note time started.
9. Observe the students, answer any questions the students might have with respect to understanding the question however DO NOT provide answers.
10. Record on paper any questions the students ask.
11. Note how long it takes for students to answer first question, have students move to the next question after 8 minutes.
12. Announce time after 10 and 20 minutes have passed.
13. After 35 minutes have passed announce the following:  
"It's been over half an hour, please turn to question 9 on page 5 and answer it. Then stop, and remain seated while we collect your paper."
14. Collect papers, recording the time it takes each student to finish on his paper. For example: if a student finishes after 20 minutes record the length of time it took .
15. Ensure I.D. on paper.
16. Handout envelopes.

Group Composition for Second and Third Years for each Session

THIRD YEARS:

Session 1

Group		
A	B	C
9546	3349	4004
5249	6535	5461
2552	2692	1439

Session 2

Group		
A	B	C
3349	5249	2552
4004	2692	6535
	5461	1439

Session 3

Group	
A	B
2692	5249
1439	6535
2552	4004
5461	

SECOND YEARS:

Session 1

Group							
A	B	C	D	E	F	G	H
9136	5804	0271	0104	2254	8217	9546	5848
2013	5436	6830	9598	8819	6324	7197	6031
0808	8062	5404	2145	9062	6984	0980	2188
	4372						

Session 2

Group							
A	B	C	E	F	G	H	
6830	2254	5436	6031	5404	9062	2188	
9136	0271	8819	8217	0808	2145	0980	
5804	9546	2013	7197	8062	6324	4372	
	0104						

Session 3

Group							
A	B	C	D	E	F	G	H
9136	0104	9546	0808	6984	8062	6830	8217
5436	6324	6031	5804	5848	7197	2145	0980
5404	4372	2013	0271	9598	9062	2188	2254

## Protocol for First Gaming Session OT U3

January 16, 1986

Materials: Tape recorder, blank cassette, notebook, 5 pencils, orange and blue group cards, 3 complete games (see below), 9 copies of the rules, 9 copies of group dynamics questionnaires, debriefer breakdown of case history.

- 1) Three tables will be placed around the room an equal distance from each other.
- 2) Each table will have all the equipment necessary to play the game layed out on the table.
  - 1 game board, face-up
  - 1 Patient Information Booklet, closed
  - 3 or 4 copies of the rules.
  - 1 pencil
  - 1 pack of action cards
  - 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 6 blank information sheets, 1 blank OT report, 1 solution report.
  - 1 die
  - 1 OT token
- 3) Randomly assign students into groups of 3. 5 MINUTES
  - Each student picks a card which has the letter A,B, or C written on it.
  - Student sits down at the table which corresponds to the letter on his card.
- 4) Ask each player to pick up a copy of the rules. 1 MINUTE
- 5) Read rules aloud, have players read along silently. 15 MINUTES
  - note any points in the rules which need clarification.
- 6) Explanations 5 MINUTES
  - Explain will play for no more than 75 minutes.
  - game director will 1) observe how play is developing  
2) be a source of info
- 7) Game Play 75 MINUTES
  - director circulates and watches play of game,
  - ensures following rules
  - notes any problems, misunderstandings.
  - clarify technical questions, and note.
  - should a group finish before 75 minutes have them write the report.
- 8) Stop game play after 75 minutes
  - Give a 15 minute warning.
  - make sure teams finish within 10 minutes of each other
- 9) Instruct students to write their report as a group. 5 MINUTES
  - Explain that after their report is written they are to

compare it to the one in the envelope attached to the back of their game workbook /

- Tell them they have 30 minutes to write the report and 5-10 minutes to compare it.

10) Allow 30 minutes to write the report. 30 MINUTES

- Give a five minute warning.
- Observe how students write the note. Provide suggestions eg. one secretary.

11) Instruct all players to read the model report. 5-10 MINUTES

- ensure that they read the instructions first
- ensure all have read the report.
- ensure no one changes their report.

12) Conduct Debriefing Session TURN ON TAPE RECORDER 30 MINUTES

ANY QUESTIONS, COMMENTS CONCERNING YOUR REPORT AND/OR THE MODEL REPORT?

DID ANYONE CONDUCT TOO MANY ASSESSMENTS? If yes, select group and review their reason (defend), disagreements, explain why a waste of time. Emphasize importance of not performing unnecessary assessments.

DID ANYONE FORGOT TO CONDUCT SOME ASSESSMENTS? Ask why, ensure understand the necessity of the assessment.

DID ANYONE MISS ANY IMPORTANT INFORMATION? Explain what should have done to gain that information.

WOULD YOU PROCEED DIFFERENTLY NEXT TIME AND WHY? Select a group and review their logic. eg. did they follow up all referrals.

13) Have students fill out Group Dynamics Questionnaire 10 MINUTES

- Spread students out around room.
- Handout questionnaires.

14) Make arrangements for next session. 5 MINUTES

- Explain need to have them continue the sim-game sessions.
- Ask who will be able to attend next week.
- Explain need honesty.
- Set time for next gaming session.

## Protocol for Second Gaming Session OT U3

January 23, 1986

**Materials:** Tape recorder, blank cassette, notebook, 5 pencils, group assignment, 3 complete games (see below), 9 copies of the rules, 9 copies of group dynamics questionnaires, debriefer breakdown of case history.

- 1) Three tables will be placed around the room an equal distance from each other.
- 2) Each table will have all the equipment necessary to play the game layed out on the table.
  - 1 game board, face-up
  - 1 Patient Information Booklet, closed
  - 2,3 or 4 copies of the rules.
  - 1 pencil
  - 1 pack of action cards
  - 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 7 blank information sheets, 1 blank OT report, 1 solution report.
  - 1 die
  - 1 OT token
- 3) Assign students to groups. 5 MINUTES
- 4) Explanations 5 MINUTES
  - Explain will play for no more than 75 minutes.
  - game director will 1) observe how play is developing  
2) be a source of info.
- 5) Game Play 75 MINUTES
  - circulate watch a play of game, ensure following rules
  - note any problems, misunderstandings.
  - clarify technical questions, and note.
  - should a group finish before 75 minutes have them write the report.
- 6) Stop game play after 75 minutes
  - Give a 15 minute warning.
  - make sure teams finish within 10 minutes of each other
- 7) Instruct students to write their report as a group. 1 MINUTE
  - Explain that after their report is written they are to compare it to the one in the envelope attached to the back of their game workbook
  - Tell them they have 30 minutes to write the report and 5-10 minutes to compare it.
- 8) Allow 30 minutes to write the report. 30 MINUTES
  - Give a five minute warning.
  - Observe how students write the note. Provide suggestions eg. one secretary.

- 9) Instruct all players to read the model report. 5-10 MINUTES  
 - ensure that they read the instructions first  
 - ensure all have read the report.  
 - ensure no one changes their report.

- 10) Conduct Debriefing Session TURN ON TAPE RECORDER 30 MINUTES

ANY QUESTIONS, COMMENTS CONCERNING YOUR REPORT AND/OR THE MODEL REPORT?

DID ANYONE CONDUCT TOO MANY ASSESSMENTS? If yes, select group and review their reason (defend), disagreements, explain why a waste of time. Emphasize importance of not performing unnecessary assessments.

DID ANYONE FORGOT TO CONDUCT SOME ASSESSMENTS? Ask why, ensure understand the necessity of the assessment.

DID ANYONE MISS ANY IMPORTANT INFORMATION? Explain what should have done to gain that information.

WOULD YOU PROCEED DIFFERENTLY NEXT TIME AND WHY? Select a group and review their logic. eg. did they follow up all referrals.

- 11) Have students fill out Group Dynamics Questionnaire 10 MINUTES  
 - Spread students out around room.  
 - Handout questionnaires.
- 12) Make arrangements for next session. 5 MINUTES  
 - Explain need to have them continue the sim-game sessions.  
 - Ask who will be able to attend next week.  
 - Set a time.

## Protocol for Third Gaming Session OT U3

January 30, 1986

**Materials:** Tape recorder, blank cassette, notebook, 5 pencils, group assignment, 3 complete games (see below), 8 copies of the rules, 8 copies of group dynamics questionnaires, debriefer breakdown of case history, 8 posttests, 8 attitude questionnaires.

- 1) Three tables will be placed around the room an equal distance from each other.
- 2) Each table will have all the equipment necessary to play the game layed out on the table.
  - 1 game board, face-up
  - 1 Patient Information Booklet, closed
  - 3 or 4 copies of the rules.
  - 1 pencil
  - 1 pack of action cards
  - 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 7 blank information sheets, 1 blank OT report, 1 solution report.
  - 1 die
  - 1 OT token
- 3) Assign students to groups. 5 MINUTES
- 4) Explanations 5 MINUTES
  - Explain will play for no more than 75 minutes.
  - will move around 1) to observe how play is developing
  - 2) be a source of info
- 5) Game Play 75 MINUTES
  - circulate watch a play of game, ensure following rules
  - note any problems, misunderstandings.
  - clarify technical questions, and note.
  - should a group finish before 75 minutes have them write the report.
- 6) Stop game play after 75 minutes
  - Give a 15 minute warning.
  - make sure teams finish within 10 minutes of each other
- 7) Instruct students to write their report as a group. 5 MINUTES
  - Explain that after their report is written they are to compare it to the one in the envelope attached to the back of their game workbook
  - Tell them they have 30 minutes to write the report and 5-10 minutes to compare it.
- 8) Allow 30 minutes to write the report. 30 MINUTES
  - Give a five minute warning.
  - Observe how students write the note. Provide suggestions eg. one secretary.



- 9) Instruct all players to read the model report. 5-10 MINUTES  
 - ensure that they read the instructions first  
 - ensure all have read the report.  
 - ensure no one changes their report.

- 10) Conduct Debriefing Session TURN ON TAPE RECORDER 30 MINUTES

ANY QUESTIONS, COMMENTS CONCERNING YOUR REPORT AND/OR THE MODEL REPORT?

DID ANYONE CONDUCT TOO MANY ASSESSMENTS? If yes, select group and review their reason (defend), disagreements, explain why a waste of time. Emphasize importance of not performing unnecessary assessments.

DID ANYONE FORGOT TO CONDUCT SOME ASSESSMENTS? Ask why, ensure understand the necessity of the assessment.

DID ANYONE MISS ANY IMPORTANT INFORMATION? Explain what should have done to gain that information.

WOULD YOU PROCEED DIFFERENTLY NEXT TIME AND WHY? Select a group and review their logic. eg. did they follow up all referrals.

- 11) Have students fill out Group Dynamics Questionnaire 10 MINUTES  
 - Spread students out around room.  
 - Handout questionnaires.
- 12) Have students fill out posttest. 30 MINUTES
- 13) Handout attitude questionnaires.  
 - Try to get them to fill out in class.  
 - Make arrangements to collect.
- 14) Provide refreshments.

## Protocol for First Gaming Session OT U2

February 26, 1986

ANNE: ROOM D4  
 SHARON: ROOM D5  
 SONIA: ROOM D5

**MATERIALS:** Tape recorder, blank cassette, 3 notebooks, 9 pencils, 29 orange cards, 12 (G,H,I repeated twice) blue group cards, 9 complete games (see below), 32 copies of the rules, 29 copies of group dynamics questionnaires, 3 copies of debriefer breakdown of case history.

SET UP

1) Game will be conducted in rooms D4 and D5.

- Six tables will be placed around room D5 at an equal distance from each other.
- Three tables will be placed around room D4 an equal distance from each other.

**PLEASE NOTE:** ONE EXTRA TABLE WILL BE SET UP IN ROOM D5 FOR GROUPS G,H, AND I TO SIT AT TO HEAR THE RULES. THEY WILL THEN MOVE INTO ROOM D4 TAKING ANY EQUIPMENT IN ORDER TO PLAY THE GAME.

2) Each table will have all the equipment necessary to play the game layed out on the table.

- 1 game board, face-up
- 1 Patient Information Booklet, closed
- 3 or 4 copies of the rules.
- 1 pencil
- 1 pack of action cards
- 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 5 blank information sheets, 1 blank OT report, 1 solution report.
- 1 die
- 1 OT token
- Blue index card with the letter of the group.

**PLEASE NOTE:** THE EXTRA TABLE IN D5 WILL HAVE THREE BLUE INDEX CARDS G,H, AND I, 9 COPIES OF THE RULES, AS WELL AS ONE COMPLETE GAME.

ASSIGN STUDENTS TO GROUPS

3) Randomly assign students into groups of 3 or 4. 5 MINUTES

- Each card has a letter written on it which corresponds to a letter of a table. (4 A's, 4 B's, 3 - C,D,E,F,G,H, and I)
- Each student picks a card.
- Student sits down at the table which corresponds to the letter on his card, unless s/he is in group G, H, or I (room D4) in which case they should sit at the special table in room D5 until the rules have been read.

**PLEASE NOTE:** If 29 students participate there will be 7 groups of three and 2 groups of four. Therefore two of the tables in room D5 will be set up for groups of four. Should less than 29 students show up ensure that no group has less than 3 players this may mean moving around some of the players in the groups of four.

- 4) Ask each player to pick up a copy of the rules. 1 Minute
- 5) Read rules aloud, have players read along silently. 15 Minutes  
- note any points in the rules which need clarification
- 6) Explanations 5 MINUTES  
- Explain will play for no more than 75 minutes.  
- Explain the three of you will be observing to see how play is developing and also to answer any questions.  
- Sonia will record time on black board in each room.

GAME

- 7) Game Play 75 MINUTES  
- circulate watch a play of game, ensure following rules, ensure each group recording reason and disagreements, before look up information in PIB.  
- ensure recording ID.  
- note any problems, misunderstandings in writing.  
- clarify technical questions, and note.  
- should a group finish before 75 minutes have them write the report record time finished on their report.  
- announce time every 20 minutes.
- 8) Stop game play after 75 minutes  
- Give a 15 minute warning.  
- make sure teams finish within 10 minutes of each other

REPORT

- 9) Instruct students to write their report as a group. 1 MINUTE  
- Explain that after their report is written they are to compare it to the one in the envelope attached to the back of their game workbook  
- Tell them they have 35 minutes to write the report and 5-10 minutes to compare it.  
- Instruct them to record the letter of their group on their report.
- 10) Allow 35 minutes to write the report. 35 MINUTES  
- Give 10 minute warnings.  
- Observe how students write the note. Provide suggestions eg. one secretary.  
- Only answer questions which explain how SOAP is used.  
- Ensure that players only look at the model report after they have finished writing their own.
- 11) Instruct all players to read the model report. 5-10 MINUTES  
- Ensure that they read the instructions first.  
- Ensure all have read the report.  
- Make sure no one changes their report.

BREAK

- 10 MINUTES  
- Move people in D4 into D5, make sure they bring their report, the model report and information sheets (have them place it in the workbook).  
- Serve refreshments. This should be set up ahead of time.

## DEBRIEFING SESSION

TURN ON TAPE RECORDER

- 12) Michael will conduct the debriefing session 30 MINUTES
- one or two persons should record discussion.
  - if a technical question is asked which Michael can't answer but you can then answer it.
  - Should a question come up which none of you can answer then either send someone to ask me or tell them they will have the answer next week.

## QUESTIONNAIRE

- 13) Have students fill out Group Dynamics Questionnaire 5-10 MINUTES
- Mix and spread students out around room.
  - Handout questionnaires.
  - Answer any questions re: understanding the question.
  - Collect questionnaires make sure ID is on them.
- 14) Remind them about next session. 2 MINUTES
- Ask if there will be any problems re: attending.
  - note those who will have problems, tell them you will get back to them.
- 15) Materials.
- Do not mix materials between tables.
  - One of you should fetch me room D34
  - Leave papers, I will assemble them.

PLEASE NOTE YOU WILL BE PRESSED FOR TIME TO ENSURE THAT EVERYTHING IS COMPLETED TRY TO MOVE QUICKLY FROM POINT TO POINT. IF RUNNING OUT OF TIME SHORTEN GAME PLAY TO 70 MINUTES, MODEL REPORT TO 5 MINUTES, AND BREAK TO 5 MINUTES; INFORM MICHAEL OF TIME LIMIT SO THAT HE CAN MAKE THE DEBRIEFING SHORTER. THEY MUST COMPLETE THE QUESTIONNAIRE AND HAND IT IN BEFORE LEAVING.

ONE PERSON SHOULD ALWAYS REMAIN IN EACH OF THE ROOMS AT ALL TIMES, IT DOESN'T MATTER WHO.

## Protocol for Second Gaming Session OT U2

March 5, 1986

**MATERIALS:** Tape recorder, blank cassette, 3 notebooks, 8 pencils, group assignment sheet, 8 blue group cards, 8 complete games (see below), 32 copies of the rules, 25 copies of group dynamics questionnaires, 3 copies of debriefer breakdown of case history.

SET UP

- 1) Game will be conducted in rooms D4 and D5.
  - Five tables will be placed around room D5 at an equal distance from each other.
  - Three tables will be placed around room D4 an equal distance from each other.
- 2) Each table will have all the equipment necessary to play the game layed out on the table.
  - 1 game board, face-up
  - 1 Patient Information Booklet, closed
  - 1 copy of the rules.
  - 1 pencil
  - 1 pack of action cards
  - 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 6 blank information sheets, 1 blank OT report, 1 solution report.
  - 1 die
  - 1 OT token
  - Blue index card with the letter of the group.

ASSIGN STUDENTS TO GROUPS

- 3) Have students read their group assignment and locate their table. Groups F, G, and H should move immediately to room D4. 5 MINUTES
- 4) Explanations 5 MINUTES
  - Explain will play for no more than 75 minutes.
  - Explain the three of you will be observing to see how play is developing and also to answer any questions.
  - Sonia will record time on black board in each room.

GAME

- 5) Game Play 70-75 MINUTES
  - circulate watch a play of game, ensure following rules, ensure each group recording reason and disagreements, before look up information in PIB.
  - ensure recording ID.
  - note any problems, misunderstandings in writing.
  - clarify technical questions, and note.
  - should a group finish before 75 minutes have them write the report record time finished on their report.
  - announce time every 20 minutes.
- 6) Stop game play after 75 minutes
  - Give a 15 minute warning.
  - make sure teams finish within 10 minutes of each other

REPORT

7) Instruct students to write their report as a group. 1 MINUTE

- Explain that after their report is written they are to compare it to the one in the envelope attached to the back of their game workbook
- Tell them they have 35 minutes to write the report and 5-10 minutes to compare it.
- Instruct them to record the letter of their group on their report.

8) Allow 35 minutes to write the report. 35 MINUTES

- Give 10 minute warnings.
- Observe how students write the note. Provide suggestions eg. one secretary.
- Only answer questions which explain how SOAP is used.
- Ensure that players only look at the model report after they have finished writing their own.

9) Instruct all players to read the model report. 5-10 MINUTES

- Ensure that they read the instructions first.
- Ensure all have read the report.
- Make sure no one changes their report.

BREAK

5 MINUTES

- Move people in D4 into D5, make sure they bring their report, the model report and information sheets (have them place it in the workbook).
- Serve refreshments. This should be set up ahead of time.

DEBRIEFING SESSION

TURN ON TAPE RECORDER

10) Michael will conduct the debriefing session 30 MINUTES

- one or two persons should record discussion.
- if a technical question is asked which Michael can't answer but you can then answer it.
- Should a question come up which none of you can answer then either send someone to ask me or tell them they will have the answer next week.

QUESTIONNAIRE

11) Have students fill out Group Dynamics Questionnaire 5-10 MINUTES

- Mix and spread students out around room.
- Handout questionnaires.
- Answer any questions re: understanding the question.
- Collect questionnaires make sure ID is on them.

12) Remind them about next session. (Mar 17/ 2:30) 2 MINUTES

- Ask if there will be any problems re: attending.
- note those who will have problems, tell them you will get back to them.
- Emphasize this session crucial, and that refreshments will be more generous as a thank you and to stave off hunger pangs for supper.

## Protocol for Third Gaming Session OT U2

March 17, 1986

**MATERIALS:** Tape recorder, blank cassette, 3 notebooks, 8 pencils, group assignment sheet, 8 blue group cards, 8 complete games (see below), 8 copies of the rules, 25 copies of group dynamics questionnaires, 3 copies of debriefer breakdown of case history, 25 copies of posttest, 25 copies of attitude questionnaire.

SET UP

- 1) Game will be conducted in rooms D5 and D20.
  - Five tables will be placed around room D5 at an equal distance from each other.
  - Three tables will be placed around room D20 at an equal distance from each other.
  
- 2) Each table will have all the equipment necessary to play the game layed out on the table.
  - 1 game board, face-up
  - 1 Patient Information Booklet, closed
  - 1 copy of the rules.
  - 1 pencil
  - 1 pack of action cards
  - 1 game workbook containing: 3 or 4 copies of the referral, 1 sample information sheet, 6 blank information sheets, 1 blank OT report, 1 solution report.
  - 1 die
  - 1 OT token
  - Blue index card with the letter of the group.

ASSIGN STUDENTS TO GROUPS

- 3) Have students read their group assignment and locate their table. Groups F, G, and H should move immediately to room D20. 5 MINUTES
  
- 4) Explanations 5 MINUTES
  - Explain will play for no more than 75 minutes.
  - Explain the three of you will be observing to see how play is developing and also to answer any questions.
  - Sonia will record time on black board in each room.

GAME

- 5) Game Play 70-75 MINUTES
  - circulate watch a play of game, ensure following rules, ensure each group recording reason and disagreements, before look up information in PIB.
  - ensure recording ID.
  - note any problems, misunderstandings in writing.
  - clarify technical questions, and note.
  - should a group finish before 75 minutes have them write the report record time finished on their report.
  - announce time every 20 minutes.
  
- 6) Stop game play after 75 minutes

- Give a 15 minute warning.
- make sure teams finish within 10 minutes of each other

**REPORT**

7) Allow 35 minutes to write the report. 35 MINUTES

- Give 10 minute warnings.
- Observe how students write the note. Provide suggestions eg. one secretary.
- Only answer questions which explain how SOAP is used.
- Ensure that players only look at the model report after they have finished writing their own.

8) Instruct all players to read the model report. 5-10 MINUTES

- Ensure that they read the instructions first.
- Ensure all have read the report.
- Make sure no one changes their report.

**BREAK**

2 MINUTES

- Move people in D20 into D5, make sure they bring their report, the model report and information sheets (have them place it in the workbook).

**DEBRIEFING SESSION**

TURN ON TAPE RECORDER

9) Michael will conduct the debriefing session 30 MINUTES

- one or two persons should record discussion.
- if a technical question is asked which Michael can't answer but you can then answer it.
- Should a question come up which none of you can answer then either send someone to ask me or tell them they will have the answer next week.

**QUESTIONNAIRE**

10) Have students fill out Group Dynamics Questionnaire 5-10 MINUTES

- Mix and spread students out around room.
- Handout questionnaires.
- Answer any questions re: understanding the question.
- Collect questionnaires make sure ID is on them.

**POSTTEST**

11) Handout posttests. 35 MINUTES

- Instruct students not to start until they are told.
- Have one person read the instructions aloud while the players read along silently.
- Note time started. TIME STARTED \_\_\_\_\_
- Observe the students, answer any questions the students might have with respect to understanding the question however DO NOT provide answers.
- Record on paper any questions the students ask.
- Note how long it takes for students to answer first question, have students move to the next question after 8 minutes.
- Announce time after 10 and 20 minutes have passed.
- Should a student finish early, record time finished on their posttest and give student the attitude



- questionnaire to fill out.
- Stop after 35 minutes.
  - Ensure I.D. on paper.

**ATTITUDE**

- 12) Handout Attitude questionnaires.
- Instruct students to answer quietly and not discuss with others.
  - Ensure they record their I.D.
  - Collect all papers.

**REFRESHMENTS**

- 13) Serve refreshments.
- Thank students, handout certificates.

### Protocol for Debriefing Session

**MATERIALS:** Taperecorder, blank tape, notebook, pen, model report, debriefer breakdown of case history.

**TIME:** Debriefing session should last a maximum of 30 minutes

a) **CASE FAMILIARIZATION:** Before conducting the debriefing you should familiarize yourself with the case by reading the the breakdown of the case history as well as the model report.

b) **TURN ON TAPE RECORDER**  
- note any problems, or comments

c) **PROCEDURE**

ANY QUESTIONS, COMMENTS CONCERNING YOUR REPORT AND/OR THE MODEL REPORT?

DID ANYONE CONDUCT TOO MANY ASSESSMENTS? If yes, select group and review their reason (defend), disagreements, explain why a waste of time. Emphasize importance of not performing unnecessary assessments.

DID ANYONE FORGOT TO CONDUCT SOME ASSESSMENTS? Ask why, ensure understand the necessity of the assessment.

DID ANYONE MISS ANY IMPORTANT INFORMATION? Explain what should have done to gain that information.

WOULD YOU PROCEED DIFFERENTLY NEXT TIME AND WHY? Select a group and review their logic. eg. did they follow up all referrals.

POINTS TO MENTION

1) The first time you play this game you are trying to figure out the rules as well as how the hospital system works. Therefore you are very likely to feel pressure and waste moves. This is expected and it is part of the learning process; however, as you become more familiar with the game you should find it easier.

2) In the game each place and assessment has been identified and requires a distinct decision on your part to gather the information connected with the particular location or assessment. Therefore, it is misleading in that you may feel that it takes a long time to carry out each action. However, in reality it may take an OT only an hour to perform three assesments or talk to three different people. The game is meant to force you to think about what you should do step by step.

3) A weakness of the game is that you can not ask questions; therefore, you must figure out where you are most likely to have your questions answered.

4) Should keep in mind that each hospital is different, so that some

services may be provided by a different person or department. This game attempts to simulate a hospital setting but that does not mean that all hospitals will function in the same way.

5) Assessments can be both formal and informal. Whether or not an assessment is formal it should be carried out should you suspect it is an area which needs to be investigated, and the results included in your report. (You may want to provide an example of formal and informal assessments.)

6) If you do not have time to perform all the assessments which you feel are necessary or you feel that certain assessments should be carried out at a later date than this should be included in your plan.

## Debriefing Breakdown

Name of Patient: Paul Reese

Type of Disability: Amputee

\*\*c = information accessed via consultation/taxi, p = accessed via telephone

## INFORMATION

## LOCATION

A 35 year old male who suffered a traumatic amputation of the left hand November 17, 1985.

Referral  
(Staff Dr.)

Reason for Referral: Please assess and provide appropriate treatment. (Date of referral Dec 4, 1985, admitted 17 Nov 85.)

- |  |                       |
|--|-----------------------|
| 1. O.T. Supervisor states that the social worker would like to speak to you about Mr. Reese.<br>Secretary left a message that there is a rehab meeting concerning Mr. Reese today in the Rehabilitation Conference Room.   | OT Dept<br>c<br>p     |
| 2. Physiatrist unable to attend meeting left a message that patient to receive conventional below-elbow prosthesis, with both hook and hand attachments, and that a referral has been sent to psychology to have the patient assessed. Physiotherapist states that patient's endurance is low. | Rehab. Room<br>c      |
| 3. Message on desk: Mrs. Reese would like you to call her at home.   | OT Desk<br>c          |
| 4. Referral received by Physiatrist from patient's ward. Patient to be assessed.   | Rehab Charts<br>c     |
| 5. Patient on program to increase endurance and strengthen upper limbs. c.   | Physio Gym            |
| 6. Secretary tells you that there will be a meeting to discuss Mr. Reese in the rehabilitation conference room.  | Rehab Secretary<br>c  |
| Secretary says your notes will be ready tomorrow, and not to forget the rehab meeting regarding Mr. Reese.   | p                     |
| 7. Patient receives physio daily, to increase endurance and strengthen upper limbs.<br>Ms. Marlow is treating Mr. Reese, she should be in the gym.   | Physio Desk<br>c<br>p |
| 8. Mr. Reese's stump is healing nicely. He should be taught to wrap his own stump. A request has been put in with Prosthetics and Orthotics for a temporary prosthesis.  | Physiatrist<br>c      |
| I will be referring Mr. Reese to the psychologist. I don't have time to talk could you see me later on in my office regarding Mr. Reese's treatment.   | p                     |
| 9. I'm not treating him.   | Speech, c + p         |
| 10. Lounge being painted.<br>I'm sorry Dr. Simpson just left. He's probably on the ward.   | Staff Lounge, c<br>p  |
| 11. Cafeteria almost empty. Is everybody sick?   | Staff Caf, c          |
| 12. Social worker states that she has only just received the referral for Mr. Reese but that if you call her later she will be able to give you some information.  | Social Work, c        |
| Patient has a 34 year old wife who works part time as a real estate agent and two daughters aged 8 and 10. Wife states she is having difficulty coping and would like to   | p                     |

Speak to those involved in his rehabilitation. Patient is a University professor in chemistry, and is presently receiving workmens compensation.

13. Patient on a regular diet.
14. Chart is on the ward.
15. Have not yet received a referral for Mr. Reese.
16. Unless he has a cardiac problem, we haven't treated him.
17. No request for a consultation received.
18. We usually don't deal with amputees in this hospital. Try Plastics and Surgery.
19. We didn't receive a neurology consult on Mr. Reese.
20. Don't have any record of such a patient.
21. Given a full examination. No damage to internal organs.
- Yes, he was seen by this department. You'll have to come to the department to get the information you want.
22. Arrived at hospital 17 November 1985. Left hand and wrist badly damaged. Had to amputate above the wrist. Limbs.
- I think Dr. Gibson did the operation on Mr. Reese. He'll be in this afternoon if you want to try and talk to him.
23. Chest x-ray indicates pieces of glass in stomach, no apparent danger. Left upper limb: proximal two thirds of radius and ulna present, amputation below.
- We can't give that kind of information over the phone.
24. Patient above average intelligence. Refusing to discuss feelings. Wife worried, confides she doesn't know if she can cope. Children are upset and difficult to handle.
25. Doctor who was on duty that day is on holiday.
- I wasn't on duty that night. The information should be in the chart.
26. I've never treated an upper limb amputee. Could you tell me if Mr. Reese is a good candidate for a prosthesis?
- Patient will be followed by outpatient department once discharged.
27. It doesn't sound like he'll need Home Care services, however, I can inquire about any support groups for amputees.
- I haven't heard about Mr. Reese.
28. Patient doing well medically, he'll be discharged from hospital sometime next week, and will be followed as an outpatient.
- I'll be following Mr. Reese from now on. His progress is satisfactory and he should be discharged next week. Could you please keep me informed of his progress in OT, I assume you will be following him as an outpatient.
29. The Doctor who referred Mr. Reese is the staff doctor;

Dietary, c+p  
Medical Records  
c+p

Outpatients

c+p

Cardiology, c+p

Rheumatology

c+p

Orthopaedics

c+p

Neurology, c+p

ENT, c+p

Internal Med

c

p

Plastics + Surg

c

p

Radiology

c

p

Psychology

c

Emergency, c

p

Medical Intern

c

p

Comm Liason

c

p

Resident Doctor

c

p

Head Nurse

however he is supposed to be going on vacation. By the way, the ward meeting is cancelled.

c

Patient is medically stable, but the attending nurses are having some trouble with him. You will have to talk to them to get more details. By the way the Resident will be following Mr. Reese from now on.

p

30. Wife with patient, she seems eager to talk to you but husband cuts her off. Mr. Reese says he wants one of those "bionic hands" like on the T.V. program. You observe patient having difficulty manipulating objects with right hand, becomes easily frustrated. He asks you to leave because he would like to talk to his wife privately.

Pt's Room

c

31. Patient playing cards with two other patients. Seems involved in the game.

Pt's Lounge

c

32. 17 November 1985: Patient involved in a chemistry explosion at Carleson University where he works. Suffered extensive damage to left hand. Amputation was necessary two inches proximal to the wrist. Suffered lacerations to face, torso, and upper limbs. Patient in shock upon arrival to hospital. Patient to be referred to Occupational Therapy, Physiotherapy, Physiatrist, and Social Work.

Patient Medical Chart, c

33. Meeting cancelled.

Ward Conference

c

34. Patient's attending nurse reports patient doing little for himself. Frequently requesting help for all activities.

Nursing Station

c

Patient is receiving physio daily and should be able to receive OT daily. He certainly needs OT because he isn't doing a thing for himself.

p

35. I'm leaving on vacation. Dr. Simpson, the Resident, will be following Mr. Reese's case, you should talk to him if you have any questions.

Staff Doctor

c

Glad you received the referral. Please assess and provide treatment as you see fit.

p

36. Perhaps we can help Mr. Reese once he has his prosthesis, but usually below elbow amputees don't need much assistance from us, other than a special gadget of some kind.

Rehab Engineer

c

We haven't received a referral.

p

37. His temporary prosthesis should be ready in a week.

P+0

c

The temporary prosthesis should be ready next week. He will be getting a conventional below elbow prosthesis with hook and hand attachments.

p

38. Spot potential trouble spots in the home, but unable to assess thoroughly until patient has prosthesis.

Patient's Home

c

I'm very concerned about my husband. He seems so helpless and depressed. He can't seem to do anything for himself. If only he could do something. Will he ever be able to go back to work? I know I should be doing things for him but

p

I get so tired.

39. Patient's responsibilities as a University professor include lecturing and research, he has tenure so that his job is secure. Work c

He is a chemistry professor whose responsibilities include teaching and research. He has tenure, so his job is safe. p

40. Mr. Reese is not an appropriate candidate for our program as he is fairly independent. Home Care c
40. It doesn't sound like Mr. Reese is an appropriate candidate for our services. p

Assessments	Type
1. Full ROM, except for pronation/supination of left arm. 40 degrees active and 50 degrees passive for both movements.	ROM
2. Normal except for: all right shoulder muscles = 4; all left shoulder muscles = 4-, left elbow flexion/extension = 3+; left supination and pronation 3-.	Musc Strength
3. Normal.	M. Tone
4. Balance very good. Right hand dominant for gross motor activities. Patient protecting left arm.	Coor/Balance
5. Hypersensitive to light touch, pin prick, and unable to tolerate rough material to bottom of stump. Experiencing a cramping sensation which appears periodically throughout the day. Phantom sensation present.	Sensation
6. Normal.	Perception
7. Independent walker.	Mobility
8. Left hand dominant. Dexterity fair for right hand. Normal pinch and grasp of right hand.	Hand function
9. Fair. Breathing hard after walking to therapy.	Endurance
10. Normal.	Cognition
11. Verbal-intact. Written- writes slowly but legibly with left stump using a universal cuff. Writes poorly with right hand.	Communication
12. Independent.	Transfers
13. Patient would like to wait until he has his prosthesis before attempting this.	Kitchen
14. Patiently completely mobile in bed. Able to make the bed.	Bedroom
15. Difficulty manipulating soap, shampoo, and towel when washing.	Bathroom
16. Difficulty cutting meat, buttering bread, and opening small containers. Otherwise independent.	Eating
17. Difficulty manipulating small fastenings, and zippers. Unable to tie shoelaces.	Dressing
18. Independent, but slow.	Grooming
19. Patient is a University professor of chemistry, he is left hand dominant. Reports hypersensitivity in stump, has not been using his stump. Wishes to get out of hospital as soon as possible. Does not want to discuss the accident or how he is coping.	Pt. Interview

## Debriefing Breakdown

Type of Disability: Multiple Sclerosis

Pt. Janice Lott

## INFORMATION

## LOCATION

A 35 year old female, diagnosed as having M.S. 3 years ago. Completed one month on bedrest during which she received corticosteroid treatment. (D.ofA. 23 Oct, Referral Dec 1/85) Assess and increase level of independence.

1. A fellow OT tells you that she saw Mrs. Lott being pushed in her wheelchair, by a young girl. OT Dept consult  
Supervisor tells you that Mrs. Lott was a patient here in 1982, but she was never referred to OT. phone
2. Meeting regarding a Mr. Ellor who is not one of your patients. Rehab. Room consult
3. Message on desk to call Dr. Masson in neurology dept. OT Desk, p+c
4. Speech therapy note dated April 1982. Patient referred for assessment. Some slurring of speech due to M.S. Received therapy for two months speech improved dramatically. Therapy discontinued. Received physio in 1982 to increase muscle strength, teach transfers, and wheelchair mobility. Rehab Charts consult  
PT note dated 19 Nov. 1985, presently being seen by physio for ROM exercises, while pt. confined to bed rest.
5. Spot Mrs. Lott and physio working on increasing upper arm strength. Physio too busy to talk. Physio Gym, c
6. Secretary reminds you that there is a ward conference meeting this week. Rehab. Sec. c+p.
7. Physio informs you that she is working on standing tolerance and balance, ROM exercises for lower limbs, and increasing upper extremity strength. Reports full upper extremity ROM and proximal upper extremity and trunk weakness with the left side being more affected. Has mild spasticity in lower limbs only. Results of muscle test are:  

	LEFT	RIGHT	LEFT	RIGHT		
NECK					SHOULDER	
Flexors	4	4			Adductors	5 5
Extensors	5	5			Rotators	4- 5
Rotators	4-	4-			ELBOW	
TRUNK					Flexors/Extensors	4 4
Flexors/Extensors	3	3+			Pronators/Supinators	5 5
Lateral Flexors	4-	4			WRIST	
SHOULDER					Flexors	5 5
Flexors/Extensors	3	3+			Extensors	4 5
Abductors	3	3				
8. Physiatrist states he has not received a referral for Mrs. Lott. Physiatrist c+p
9. Speech therapist states she treated Mrs. Lott in 1982, and that her notes should be in the Rehab Charts. Speech Therapy c,p
10. You bump into the social worker who tells you she has Mrs. Lott as a patient. Staff Lounge c

The staff Dr. answers the phone and mentions that Dr. Masson p



works in the neurology department.

11. They are serving pork chops and macaroni today.  
 12. Janice is presently living with her parents and 2 daughters aged 10 + 12. She receives alimony and a disability pension and is financially secure. Her family is overly protective. She divorced her husband in 1982. She has a high school education and worked as a secretary intermittently, until three years ago when her M.S. progressed to the point where she could no longer fulfill her duties.

Staff Caf  
 Social Work  
 c+p

13. On a regular diet.

Dietary, p,c  
 Med. Records  
 c

14. Patient followed by neurology department since February 1977. Experienced symptoms of weakness and pain in back and lower extremities, blurred vision, decreased rectal tone, and some slurring of speech intermittently for five years prior to diagnosis of M.S. Inpatient for 3 months from February to April 1982. CAT scan Feb 23, 1982 revealed plaques spread diffusely throughout white matter. Patient became dependent on wheelchair for mobility. Received physio in 1982 to increase muscle strength, teach transfers, and wheelchair mobility. Patient divorced in 1981, has two children. Rest of patient's chart on ward.

The chart was thinned on Nov. 18, 1985, so we have part of it. The most up to date information is up on the ward.

15. Not one of our patients.

phone

16. Does she have a cardiac problem?

Outpatients  
 p,c

17. We don't have a patient by that name.

Cardiology  
 p,c  
 Rheumatology  
 p,c

18. We haven't received a referral for a Mrs. Lott.

Orthopaedics  
 p,c

19. Symptoms of weakness and pain in back and lower extremities, blurred vision, decreased rectal tone, and some slurring of speech occurred intermittently for 5 years prior to diagnosis. She was diagnosed in 1982. Prior to this admission pt. dependent on w/c for mobility. Could you assess her ADL skills I suspect she is functioning below her capacity.

Neurology  
 c,p

20. We haven't received a referral for Mrs. Lott.

ENT, p,c,  
 Internal Med  
 p,c.

21. We don't have any pt by that name.

Plastics+Surg  
 p,c  
 Radiology  
 c

23. A CAT scan performed Oct 26/85 shows MS plaques dispersed throughout the white matter, as well as two plaques located in the gray matter of the cerebral cortex.

There is a copy of the CAT scan in the department.

24. Janice has had difficulty adjusting to her divorce, as it was her husband who left her. Her biggest concern is being a burden to her children, and parents. She perceives herself as an invalid.

p  
 Psychology  
 c+p

25. She was not admitted through emergency.

Emergency, p+c  
 Medical Intern

26. I have not been assigned to Mrs. Lott.

27. I am familiar with Mrs. Lott, although I Haven't yet received a referral. If you feel she requires any community services upon discharge would you discuss them with me. I know she has received home care services in the past you may want to give them a call. p,c  
Comm Liason N  
p+c
28. She is Dr Masson's patient. He is a neurologist. Resident Dr  
p+c  
Head Nurse  
p
29. There will be a ward meeting this week. Please attend. If you want information about how Mrs. Lott is doing you should talk to her attending nurse. p
- The patient's family is in the lounge and would like to speak with you, Don't forget the ward meeting. c
30. Janice reports that for the past three years she has spent the majority of her days reading, listening to the radio, or watching T.V. She states that she has never been seen by an OT. She asks you if you will be by later as her family will be visiting. Pt's Room, c
31. Janice's parents and two daughters are present. They ask about OT and seem very interested in the treatment you will provide. However, they express reservations about Janice becoming more active as they fear this may trigger an attack. Throughout the interview you notice that the parents and children do everything for Janice. Pt's Lounge  
c
32. A 35 year old female, occupation-homemaker. Chart thinned on 18 Nov 1985. Patient spent a four month period in exacerbation of the disease. Admitted to hospital 23 Oct. 1986 by Dr. Masson (neurologist). During exacerbation, had decreased endurance and muscle strength with difficulty breathing, and optic neuritis. CAT scan performed Oct. 26, 1985 showed MS plaques dispersed throughout white matter, as well as two plaques located in the gray matter of the cerebral cortex. Pt. Medical  
Chart, c
- Referred to OT, PT, psychology, and Social Work.  
PT note: received breathing and ROM exercises while on bed rest.  
To attend PT daily once off bed rest.
- Nursing notes: Patient compliant, sleeping poorly, often constipated. Parents and children visiting daily.
33. Dr. Masson reports that Mrs. Lott will not be discharged until she is much stronger and able to do her ADL. Would like OT to do a home visit a few weeks before discharge. Ward Conf Room  
c
- Attending nurse reports that Janice is dependent in dressing, bathing, transfers, and mobility. Physio is concentrating on muscle strengthening; reports that pt can stand for a minute with support of one person. Psychologist is starting counselling and plans to do some psychological testing. Social worker unable to attend meeting.
34. Attending nurse not here. However, she will be at the ward meeting. Nursing Station  
p,c.
35. The neurology department is following Mrs. Lott. Staff Doctor  
p,c
36. We are not familiar with Mrs. Lott. Does she require any special equipment. Rehab Engineer  
p,c

- 37. We have not had Mrs. Lott referred to us. P+O, p,c
- 38. Your supervisor asks you to delay the home visit, until the pt. is closer to discharge, as she feels that the pt. may make considerable progress. Home  
c

Mrs. Lott's father answers the phone. He informs you that there is no wc accessible entrance to their home. He also explains that Janice has difficulty manoeuvring her wc in the home. He tells you that he would be happy to make any necessary adjustments to the home; however he requires some guidance. p

- 39. Mrs. Lott hasn't work for us for the past three years. Work p,c.
- 40. Mrs. Lott has had a PT visiting her once a week for the past three years. Her family has provided any other care, needed. Home Care  
p+c

Assessments				Type	
1. Full ROM bilaterally in upper extremities.				ROM	
2.				Strength	
	LEFT	RIGHT		LEFT	RIGHT
NECK SHOULDER					
Flexors	4	4	Adductors	5	5
Extensor	5	5	Rotators	4-	5
Rotators	4-	4-	ELBOW		
TRUNK					
Flexors/Extensors	3	3+	Flexors/Extensors	4	4
Lateral Flexors	4-	4	Pronators/Supinators	5	5
SHOULDER					
Flexors/Extensors	3	3+	Flexors	5	5
Abductors	3	3	Extensors	4	5
3. Mild spasticity throughout lower limbs only.				M. Tone	
4. Standing balance-very poor. Sitting balance-fair, tends to fall forward and back particularly when engaged in bilateral activities. No ataxia in upper extremities.				Coor/Balance	
5. U.E. tested. Intact except for 2 pt discrimination, impaired at ¼ inch, and diminished at 2 inches on dorsal and volar surfaces of both U.E. Complained of paresthesia in hands.				Sensation	
6. Normal.				Perception	
7. Able to propel a wc for 75 meters on a flat surface only. Requires 2 brief rest periods.				Mobility	
8. Right hand dominant. Coordination for small objects fair. Gross grasp: R-58 lb, L-29 lb. Able to pick up objects 1 inch in diameter. MRMT results:				Hand function	
Test		Percentile for age and sex			
Placing		3%			
Turning		63%			
Displacing		59%			
1 hand turning + placing		5%			
2 hand turning + placing		3%			
9. Fair. Can only work for 30 minute periods on activities requiring moderate exertion before tires.				Endurance	
10. Difficulty problem solving and planning with respect to ADL. eg. planning a shopping list for the week. Difficulty planning short term goals.				Cognition	
11. Handwriting legible. Slight slurring of speech.				Communication	

12. Requires minimal assistance for transfers from wc to bed, commode, and chair and vice versa. Requires moderate assistance to transfer from wc to bathtub and vice versa. Transfers
13. Requires 10 to 15 minutes to maneuver wc around kitchen in order to retrieve or place an item in or out of stove, fridge, or cabinets. Difficulty planning simple meals. Past year has been responsible for most of the meal preparation. Relies on others to do all other aspects of kitchen work. Kitchen
14. Independent in bed mobility and positioning. Great difficulty in cleaning bedroom and making the bed, due to poor planning. Bedroom
15. Requires assistance to transfer into tub as well as a bath chair. Able to wash self using a hand held shower with supervision as she is prone to losing her balance. Uses a commode for toileting, requires minimal assistance to transfer. Bathroom
16. Independent. Eating
17. Able to dress upper body. Unable to maintain balance to get clothes over feet. Dressing
18. Independent. Grooming
19. Janice would like to remain a homemaker, however she wishes she could take a more active role. She would like to have social contact with others besides her family. She states that she feels very helpless, and she is worried about her role as a parent. Pt. Interview

## Debriefing Breakdown

Pt: Carol Riat

Type of Disability: Grade 4 head injuryINFORMATIONLOCATION

- A 19 year old female involved in a car accident Jan 11, 1986. Suffered a grade four closed head injury with occipital scalp lacerations and left intracerebral hemorrhage. Patient continues to be comatose. Splint to prevent contractures. Assess and provide a graded rehabilitation program.  
(Admitted 11 Jan 1986. Date of referral 18 Jan 1986.)
1. A fellow OT explains that a grade IV closed head injury refers to the patient's initial status in the emergency room and means that she needed full cardiorespiratory support and exhibited no signs of brain function. OT Dept  
c+p
  2. Psychiatrist states that patient is remaining in ICU until medically stable. Patient starting to respond. A nurse representing ICU reports that patient thrashes around and has almost fallen out of bed, and is therefore being restrained in the bed. Nurses are positioning her every two hours and she is on a special water mattress to reduce the threat of pressure sores. They are able to position her hips in abduction with pillows but each day it becomes more difficult. Having great difficulty positioning her upper extremities. Rehab Conf
  3. You look up the meaning of grade IV closed head injury and note that it refers to the pt's initial status in the emergency room as being one in which the pt needed full cardiorespiratory support and exhibited no signs of brain function. OT Desk, c
  4. Psychiatrist note dated Jan 16, 1986. Received referral. Patient exhibiting decorticate positioning and generalized response to stimuli. Requires correct positioning and splinting to prevent contractures. Pt to be more fully assessed, and started on a graded rehabilitation program. To be referred to PT, OT, and Speech Therapy. Rehab Charts  
consult
  5. PT states that she has just received the referral and has not yet seen the patient. Physio Gym
  6. The staff Doctor referred Miss Riat to Dr. Krebs. Rehab Sec.  
c+p.
  7. PT states that she has not yet seen the patient. Physio Desk  
c+p
  8. Psychiatrist states that his most important concern is to prevent Carol from developing contractures particularly of the hands, elbows, hips, and feet. He asks you to attend the ward meeting and report back to him as he will not be able to attend due to a prior commitment. Psychiatrist  
c,p
  9. Speech therapists states that she hasn't seen the pt yet. She suspects that there may be definite speech impairment as a result of the left intracerebral hemorrhage. Speech Therapy  
p,c
  10. You talk to one of Carol's attending nurses. She reports that Carol is completely dependent for self care. She states that the family visits daily and that you will probably catch them in her room. Staff Lounge
  11. The speech therapist asks you if you have spoken to Carol's Staff Caf

- family yet.
12. The family appears to be close knit and are very concerned about Carol surviving. They do not appear to be fully aware of the ramifications of Carol's injury. They describe Carol as an enthusiastic girl who enjoys sports and socializing. They explain that she is in her first year of University studying anthropology, describing her as an average student. Social Work
  13. Patient being fed via a nasogastric tube with a fluid preparation containing all dietary requirements. Dietary, p,c
  14. Patient's chart is on the ward (ICU). Medical Rec.  
p+c  
Outpatients
  15. Not one of our patients. p,c  
Cardiology
  16. Does she have a cardiac problem? p,c  
Rheumatology
  17. We don't have a patient by that name. p,c  
Orthopaedics
  18. We haven't received a referral for a Miss Riat. p,c  
Neurology
  19. Neurology consult requested Jan 12, 1986. Report on chart. c,p  
ENT, c,p
  20. Not one of our patients. Internal Med,  
p,c.
  21. We have not received any referral. Plastics + Surg  
p,c
  22. One of our residents performed surgery to remove the blood clot and control the bleeding in her brain. Radiology
  23. A CAT scan was performed 11 JAN 86 and revealed a left intracerebral hemorrhage.p+c
  24. Have not received a referral. Suspect I will receive one, once she is out of coma. Psychology  
p+c
  25. We saw her the evening of 11 Jan she required life support systems and a resident from surgery operated on her. The p,c report should be in the charts. Emergency
  26. She will remain in ICU until we feel she is medically stable however she can receive treatment of a stimulatory type in her bed. Medical Intern
  27. It is too early for me to get involved in this case. Comm-Liason  
Nurse, p,c  
Resident Dr.
  28. The staff doctor and intern are treating Miss Riat. p,c  
Head Nurse  
p+c
  29. The staff Dr. and Intern are treating Miss Riat, you should check with them if there are any contraindications. Carol is a heavy care patient she is completely dependent. She seems to be recognize her parents, that is they can sometimes get her to quiet down. The family is very anxious and visit daily.
  30. Carol's two brothers and a girlfriend are visiting. They inform you that Mr.+ Mrs Riat are at home. Both brothers have been living away from home for at least five years. The brothers remember that Carol used to enjoy horseback riding and singing but do not know if she still does. They describe her as a cheerful person always full of energy. Her friend has known her for the past year where they both work together part-time as waitresses for a small restaurant. Pt's Room - c

Her friend mentions that Carol is very active in the Savoy Society which puts on Gilbert and Sullivan plays and has had a few parts in the chorus.

- 32. A 19 year old female involved in a car accident Jan 11, 86 in which she was driving alone without a seat belt. Patient rushed to hospital via ambulance, suffering from a closed head injury with right occipital scalp lesions. Emergency Note: required full cardiorespiratory support. CAT Scan indicated left intracerebral hemorrhage. Patient underwent surgery to evacuate clot and control the bleeding point.  
Seen by neurology: exhibits decorticate position, suffering from right hemiparalysis, and possibility of aphasia. Patient to remain in ICU until medically stable.  
Nurses Notes: Patient agitated requires restraints as she is thrashing around in bed.  
Patient on IV, NG tube, and has a Foley catheter. Pt Med Charts
- 33. We don't generally hold ward meetings in ICU. Ward Meeting
- 34. Carol's attending nurse is in the staff lounge. Nursing, Stat
- 35. She is starting to develop contractures. She must remain in ICU but can start receiving therapy in bed. Staff Doctor
- 36. Have not received a referral. p+c
- 37. No referral received. Rehab Engineer
- 38. Parents inform you that Carol still involved in horseback riding, and enjoys all types of music, particularly jazz. She also paints, and knits and was learning how to ski downhill. She was saving up her money from her part time job as a waitress to travel to Europe with a friend of hers this summer. She enjoys her studies but has always had difficulty applying herself. She was still unsure about what kind of career she wanted. P+O, p,c
- 39. Carol was leaving work when she had the accident. She had been working with us as a waitress for one year, and was always very pleasant and hard working. Home
- 40. It doesn't sound like she will be discharged for a while. However, we should be able to provide services for her should she require them. c+p

Assessments		Type	
I. UNABLE TO TEST ACTIVE ROM		ROM	
PASSIVE ROM:	LEFT    RIGHT	LEFT    RIGHT	
SHOULDER		THUMB	
FLEXION	0-120    0-40	ABDUCTION	N    N
EXTENSION	0-30    0-9	OPPOSITION	N    N
ABDUCTION	0-90    0-30	INDEX FINGER	
ADDUCTION	N    N	MCP FLEXION	N    5-90
INTERNAL ROT.	0-60    0-25	PIP FLEXION	N    5-90
EXTERNAL ROT.	0-50    0-5	DIP FLEXION	N    5-80
ELBOW/FOREARM		MIDDLE FINGER	
FLEXION	8-150    60-150	MCP FLEXION	N    10-85
SUPINATION	N    0-10	PIP FLEXION	N    25-95
PRONATION	N    0-50	DIP FLEXION	N    5-75
WRIST		RING FINGER	
FLEXION	0-65    5-40	MCP FLEXION	N    10-85
EXTENSION	0-60    --	PIP FLEXION	N    5-95

ULNAR DEV.	N	0-15	DIP FLEXION	N	5-75
RADIAL DEV.	N	0-10	LITTLE FINGER		
THUMB			MCP FLEXION	N	7-80
MCP FLEXION	N	N	PIP FLEXION	N	5-100
IP FLEXION	N	5-45	DIP FLEXION	N	5-70

PASSIVE ROM:	LEFT	RIGHT		LEFT	RIGHT
HIP			KNEE		
FLEXION	0-110	0-45	FLEXION	0-120	0-45
EXTENSION	N	N	ANKLE		
ABDUCTION	0-35	0-15	DORSIFLEX	0-10	--
ADDUCTION	N	N	PLANTARFLEX	N	5-50
INTERNAL ROT.	0-30	0-20	INVERSION	N	0-20
EXTERNAL ROT.	0-30	0-5	EVERSION	0-10	0-5

2. Unable to test accurately at this point in time. Musc strength
3. In decorticate position, legs maintained in hip adduction and extension with plantar flexion. Arms adducted and internally rotated at the shoulder, held in full elbow flexion, both hands held in  $\frac{1}{2}$  wrist and finger flexion. Marked spasticity in all extremities. Musc Tone
4. Patient comatose. Coor/Balance
5. Responsive to pain and kinesthetic stimulation. Response delayed, takes the form of gross movements, and moans. Sensation
6. Unable to assess. Perception
7. Completely dependent. Mobility
8. Unable to assess at this point in time. Parents state that Carol is right handed. Hand function
9. Patient comatose. Endurance
10. Specific yet inconsistent response to auditory stimuli only. Responses take form of voluntary movements of the head and upper limbs. Patient unable to follow one step commands. Cognition
11. Patient has made no attempt to speak. Only vocalizations have been moans. Patient does not appear to be comprehending others. Communication
12. Completely dependent. Transfers
13. Patient comatose. Kitchen
14. Completely dependent for bed positioning and mobility. Bedroom
15. Patient has a Foley catheter. Completely dependent Bathroom
16. Patient has a nasogastric tube. Eating
17. Completely dependent. Dressing
18. Completely dependent. Grooming
19. Patient lying in bed with an IV, Nasogastric tube, and Foley catheter. Patient restrained in bed, she does not respond to you. Patient's mother in room. She is distraught and very tired. She reports that her daughter sometimes seems to hear her. She tells you that her daughter lives at home and is in her first year of University studying Anthroplogy. She describes her as being the youngest, with two brothers aged 26 and 28. Pt. Interview



## Debriefing Breakdown

Disability: Left hip Fracture.

Pt: Lyne Dieppe

## INFORMATION

## LOCATION

Case History: A 59 year old female admitted to hospital with a diagnosis of loosening of the femoral component of a hip joint replacement which the patient had received five years ago. Underwent surgery Jan 23, 1986 for a new left total hip replacement.

Referral  
(Ortho Dept)

Reason for Referral: Patient to be discharged to home in two to three weeks. Please assess function and provide treatment in ADL. Patient is to avoid hip flexion beyond 90 degrees, hip adduction past body midline, internal rotation of the hip, and full weight bearing. (Date of admission Jan 19/86, date of referral Jan 30/86)

- |   |                          |
|---|--------------------------|
| 1. Your supervisor informs you that she doesn't think a home visit will be necessary, that these activities can be simulated in the department.   | OT Dept<br>c,p           |
| 2. Team meeting concerning one of your coworkers patients is being conducted.   | Rehab. Room<br>(consult) |
| 3. There is a message on your desk from the head nurse, asking if you will be attending the ward meeting.   | OT Desk                  |
| 4. Referral received January 29, 1986 from Orthopaedic Surgeon. Assessment to follow. (Physio Note).  | Rehab Charts<br>Consult  |
| 5. I haven't had time to complete my assessments. However, I will be focusing on mobility and will be loaning her a walker.   | Physio Gym               |
| 6. Secretary informs you that social worker would like to see you concerning Mrs. Dieppe.   | Rehab Secretary          |
| 7. Sally is treating Mrs. Dieppe. You'll find her in the gym.   | Physio Desk<br>c+p       |
| 8. I am not treating Mrs. Dieppe.   | Physiatrist              |
| 9. She doesn't require my services.   | Speech Therapist<br>c,p  |
| 10. There is no one in the staff lounge.<br>A nurse informs you that she is alone in the lounge.  | Staff Lounge, c<br>p     |
| 11. You bump into Dr. Jenson who tells you that his office is located in the Orthopaedic Dept.  | Staff Caf                |
| 12. I haven't met her family yet. She is recently remarried and has two married sons and one granddaughter. She is a homemaker and her husband works as a draftsman for an Engineering firm. Financially they are secure but do not have much money in savings. I think she has been referred to the community liaison nurse. | Social Work<br>c+p       |
| 13. Patient on a regular diet.  | Dietary, p,c.            |
| 14. Her chart is on the ward.   | Medical Records          |
| 15. She hasn't been referred to us. Is she in hospital?   | Outpatients, p,c         |
| 16. We haven't received any referral.   | Cardiology, p,c          |
| 17. Not one of our patients.  | Rheumatology, pc         |
| 18. Many people who undergo a hip replacement are able to resume former activities, with minor limitations to hip movement, within three or four months. I feel that Mrs. Dieppe prognosis is good as long as she cooperates in her   | Orthopaedics, pc         |

rehabilitation program.

19. She hasn't been referred to us. It doesn't sound like she requires our services. Neurology  
C, P
20. I'm sorry but we don't seem to have a record of that patient. ENT 20, p, c,
21. I'm new here, maybe if you call later someone can help you. Internal Med  
C.
- No she doesn't appear to be one of our patients. p
22. We have not treated Mrs. Dieppe. Try the orthopaedic department. Plastics + Surg  
p
- I don't have time to talk now. C
23. The report should be on the chart. However, if you want you can come and take a look at the X-Rays. Radiology.  
p

X-Ray taken Dec. 13, 1986 reveals that the femoral component c of the left hip joint replacement has loosened.

24. No, I am not treating anyone by that name. Should I be? Psychology, p, c
25. She wasn't admitted through Emergency. Emergency, p+ c
26. I am working with the staff Dr. so I don't have Mrs. Dieppe as a patient. Medical Intern  
p, c
27. I am working with home services to arrange to have a homemaker come in once a week to help out with the heavy cleaning and some cooking until Mrs. Dieppe can find someone else or resume these activities herself. Comm. Liason  
Nurse p, c
28. You will have to speak with Dr. Jenson, she isn't my patient. Resident Dr.  
p, c.
29. She reports that the attending nurses are performing most of Mrs. Dieppes self-care activities. The patient is requiring considerable assistance for transfers and positioning. She reports that Mr. Dieppe visits in the evenings, but can be reached at home at lunch time. Both of Mrs. Dieppe's sons live in Calgary, Alberta and have not been able to visit their mother. Head Nurse  
p, c.
30. Patient is alone in her room, she expresses concern that she will not be able to resume her homemaking activities when she is discharged. She explains that she will be alone in the house and there is no one to help out. Pt's Room - c
31. You see Mrs. Dieppe sitting in a wheelchair and playing bridge with three other patients. Pt's Lounge
32. A 59 year old housewife admitted for a total left hip replacement. Three months prior to admission she was experiencing severe pain on weight bearing. Past medical history: experienced incapacitating pain of left hip in 1979 and was diagnosed as having osteoarthritis of the left hip joint. A left cup arthroplasty was done at that time. Patient returned to full function. Nine months later patient began to experience pain on weight bearing, and fifteen months following her first surgery, she was readmitted for a left total hip replacement. Patient Med.  
Charts -c
- X-Ray Report: (December 13, 1986). Loosening of femoral component of left hip joint replacement.
- Patient to be referred to OT, PT, and social work.
33. Attending nurse and physio report that Mrs. Dieppe is very apprehensive about moving her leg which is delaying Ward Conf

her progress. The attending nurse reports that Mrs. Dieppe is requiring assistance for almost all activities and remains in bed for the majority of the day. The social worker reports that Mrs. Dieppe has been recently remarried and is very concerned that she not appear disabled to her husband.

34. Mrs. Dieppe's attending nurse is busy, however she will be attending the ward meeting later on today. Nursing Stat p,c.  
Staff Doctor, p,c  
Rehab Engineer
35. I am not her Doctor.
36. We haven't received a referral for a Mrs. Dieppe. It doesn't sound as if she needs our services.
37. No, we have never seen Mrs. Dieppe. P+0  
Patient's Home
38. Husband answers the phone he reports that the home has one flight of stairs going to the bedrooms upstairs and a flight going down to the basement. He reports that the bathroom has been adapted for his wife, but that she could explain how better than he. He understands that she will require his assistance when she is discharged and is very happy to give it. However, he works from 8:00 a.m. to 4:00 p.m. Monday through Friday, usually coming home for lunch between 12:00 and 1:00 p.m.  
Patient unable to get a pass to go out of the hospital, and your supervisor informs you that she doesn't think a home visit is absolutely necessary, she suggests you call instead. consult
39. Patient is not employed. Work p,c.  
Home Care
40. Yes, we are working with the Community Liason Nurse to arrange to have a homemaker go into her home one day a week. Do you think she will need any other services? p,c

### Assessments

- |  | Type                                     |
|--|--|
| 1. Full, except for left hip.  | ROM                                      |
| Hip  | Active/Passive                           |
| Flexion  | 20°/90° (must avoid movement past 90°)   |
| Extension  | 10°/30°                                  |
| Abduction  | 15°/45°                                  |
| Adduction  | not tested as pt to avoid this movement  |
| Exter/Rot  | 20°/45°                                  |
| Inter/Rot  | not tested as pt to avoid this movement. |
| 2. Normal except for:<br>All muscles of right leg are 4.<br>Muscles of left ankle and knee are 4-<br>Muscles of left hip are severely weakened as can be seen by active ROM. Patient using both hands to move and position her left leg. | Musc. Strength                           |
| 3. Normal.   | M. Tone                                  |
| 4. Good sitting balance. Standing balance poor to fair needs to hold on to something. Has a fear of falling.   | Coord/Balance                            |
| 5. Proprioception, kinesthesia, light touch, pressure, and pain of left lower limb tested and found intact.  | Sensation                                |
| 6. Normal.   | Perception                               |
| 7. Using a semi-reclining wheelchair independently for mobility. Requires someone to hold her and move left leg forward when using a walker.   | Mobility                                 |
| 8. Normal!   | Hand function                            |
| 9. Poor to fair for any activity involving use of lower limbs.   | Endurance                                |

- |  |               |
|--|---------------|
| 10. Not impaired.  | Cognition     |
| 11. Not impaired.  | Communication |
| 12. Requires assistance for all transfers. Patient stands and pivots on right leg.   | Transfers     |
| 13. Patient finds it awkward to perform kitchen assessment from wheelchair, she argues that she will not have a wheelchair at home and finds this activity to be unrealistic.  | Kitchen       |
| 14. Requires assistance with rolling and getting in and out of of bed. Also requires some assistance to come to a seated position.   | Bedroom       |
| 15. Dependent for toileting, using a bed pan. Able to sponge bathe upper body and front of thighs, dependent otherwise. Patient reports that she has a raised toilet seat, a bath bench, and a grab bar in her bathtub at home. These were acquired after her first operation.   | Bathroom      |
| 16. Independent.   | Eating        |
| 17. Independent for upper extremity dressing. Requires maximal assistance to dress lower extremities. Unable to reach past knees.  | Dressing      |
| 18. Independent except for shaving her legs.   | Grooming      |
| 19. A slim, pleasant women who appears relaxed and open to questions. She lives with her husband in a two storey condominium. She is responsible for all the cooking and housekeeping. She enjoys gardening, doing puzzles, and playing bridge. She is actively involved in church activities. She expresses a desire to be independent, however she is very apprehensive about moving her leg and is unsure about what she should and shouldn't be doing. | Pt. Interview |

## Debriefing Breakdown

Type of Disability: Rheumatoid Arthritis

Patient: Julie Nice

INFORMATIONLOCATION

A 37 year old female school teacher recently dx'd as having R.A., suffering past 4 mos. Sero positive. Presently in flare up. Hands and wrists affected. Please evaluate and provide treatment in preparation for eventual discharge. (Admitted 10 Dec 1985. Date of referral 16 Dec, 1985)

Referral (from Rheumatology)

- |   |                                      |
|---|--------------------------------------|
| 1. Supervisor suggests you make arrangements with home care to have an OT who works in the community perform a home visit.  | OT Dept<br>p+c                       |
| 2. No meeting this week.  | Rehab Conf Room                      |
| 3. Note that Mrs. Nice should have a sphygmomanometer reading of 300/20 for her age and sex.  | OT Desks, c                          |
| 4. A chart hasn't yet been made up for Mrs. Nice.   | Rehab Med Charts                     |
| 5. Too busy to talk, see me or call me at my desk later.  | Physio Gym                           |
| 6. I can type your report this week.  | Rehab Secretary<br>p+c               |
| 7. Providing gentle ROM and exercise daily. Rotating ice to hands, and wrists.  | Physio Desks<br>(phone+consult)      |
| 8. I'm not treating Mrs. Nice try one of the Doctor's on the ward or maybe the rheumatology department.   | Physiatrist<br>p+c                   |
| 9. I rarely treat anybody suffering from R.A.   | Speech Therapy<br>p+c                |
| 10. Sorry, the social worker just left.   | Staff Lounge<br>p+c                  |
| 11. The social worker asks if she can talk to you later.  | Staff Caf<br>p+c                     |
| 12 Two daughters aged 8 and 11. Lives on a farm 55 miles from the city centre. Husband is a farmer. Pt is on sick leave. Community-liason nurse arranging home-care.  | Social Worker<br>p,c                 |
| 13 Loss of appetite. Patient has lost fifteen pounds in past four months. On a salt-free diet, receiving iron supplements and sustical (protein drink).   | Dietary<br>p +c                      |
| 14. The chart should be on the ward.  | Med Rec Office<br>p + c              |
| 15. No she is not being followed by our department.   | Outpatients<br>p+c                   |
| 16. We aren't treating anyone by that name.   | Cardiology<br>p+c                    |
| 17 No previous rehabilitation. She'll be in hospital for at least 3-4 weeks for management of flare-up. Eventually to receive gold treatment and be managed at home. Yes, Mrs. Nice was referred to our dept. by her family Doctor. The rheumatologist is not in at the moment. | Rheumatology<br>consult<br><br>phone |
| 18. No she's not one of our patients.   | Orthopaedics<br>p,c                  |
| 19. The only Mrs. Nice we are treating is suffering from a CVA I don't think she has R.A.   | Neurology<br>p,c.                    |
| 20. We haven't received any referral.   | ENT p,c,                             |
| 21. I don't think she is being treated by anyone in this dept.  | Internal Med<br>p,c                  |

22. No we haven't seen her in this department.      Plastics + Surg  
p,c  
Radiology  
phone
- 23 No joint damage. Periarticular swelling and demineralization in hands, and wrists present.  
The X-Ray report has been sent up to the ward, however we have a copy of the report in the department.      Psychology  
p+c  
Emergency
24. I have not received a consultation, but from what I hear she seems to be coping well.      Medical Intern
25. No one by that name was admitted through emergency last week. p,c
26. She isn't one of my patients.      Commun-Liason  
Nurse, phone
- 27 Investigating support services in community. I may have more information later.      consult
- Can get a nurse in to bathe once a week, as well as an OT and PT once a week for treatment.
28. She is being followed by the rheumatology department.      Resident Doctor  
p,c  
Head Nurse  
phone  
Patient's Room
29. There is a ward meeting today. I have been away on leave the past two weeks so I am not familiar with Mrs. Nice.
- 30 Complains of pain in morning, concerned about loss of independence. Wants to return to work. Mentions that she occasionally experiences tingling in some of her finger.
31. Mr. Nice asks you when his wife can come home because their are a lot of chores to be done and he can't be expected to do the cleaning and cooking.      Patients Lounge
- 32 Grandmother had R.A., details vague. Patient suffering morning stiffness which lasts approximately two hours. Effusions and tenderness in hands, and wrists. On steroids, prednizone, and anti-inflammatory drugs. WBC + SER elevated, slightly anemic.      Patient Medical  
Charts  
X-Ray appointment Dec. 15, 1985.
33. Head nurse reports that rheumatologist admitted pt. to the ward. Social worker reports that daughter was very ill before Mrs. Nice was admitted. Husband is concerned about losing the farm.      Ward Conference
34. Attendant nurse reports that pt having trouble sleeping due to pain. States she is a very cooperative pt. and that presently she is in the patients lounge with her family.      Nursing Station  
consult
- Mrs. Nice's nurse is with a patient now.
35. She is being followed by someone in rheumatology.      phone  
Staff Doctor  
p,c  
Rehab Engineer  
p,c.  
P & O  
p+c
36. No we haven't received a referral.
37. No we Have not received a referral for Mrs. Nice. We often fabricate special footwear for people with R.A. and occasionally hand orthoses, although generally we work with the more rigid plastics.
38. Husband says he doesn't understand what's wrong with his wife she looks fine. It must all be in her head.      Patient's Home  
phone

Patient still in flare-up, not allowed to have a day pass. consult Supervisor suggests you make arrangements with home care as you she can't afford to have you gone for almost an entire day.

39. Mrs. Nice is on paid sick leave until the end of the school year. She'll have to come back next year if she wants to keep her job; however, we might be able to arrange for her to work part time. Patient's Work p+c
40. Could you send us a discharge note should you want Mrs. Nice to receive OT in the home. Home Care p+c

#### ASSESSMENTS

01. Functional ROM (fluctuates daily): Wrists limited flex/ext positioned in radial deviation. Limited finger extension of PIP and finger flexion at MCP, PIP, and DIP. Thumb opposition to D4. ROM
02. 60/20 on sphygmomanometer. Intrinsic tightness, and atrophy of intrinsics, thenar, and hypothenar eminence. Muscle Strength
03. Normal. M. Tone
04. Gross coordination of upper extremities affected due to pain, movements slow and cautious. Coord/Balance
05. Experiences tingling and numbness intermittently in thumb, index, and middle finger. Has occasional pain at night in these three digits. Sensation
06. Normal. Perception
07. Ambulates independently. Mobility
08. Right hand dominant. Difficulty grasping small objects often drops them. Uses lateral pinch as tip to tip is poor. Spherical and cylindrical grasp limited by pain and ROM. Hand Function
09. Poor, fatigues easily. Requires a 1-2 hour nap every afternoon. Endurance.
10. Not impaired. Cognition
11. Pen slips from grasp, writing is wobbly. Can type slowly on electric typewriter for five minutes. Tires when holding a phone. Can't write on chalk board. Communication
12. Independent. Transfers Kitchen
13. Responsible for all cooking. Can't lift heavy pots, peel vegetables, or remove pots from the oven. Difficulty washing pots, transporting items, stirring, pouring liquid from a large or heavy container, and cutting food.
14. Able to move around slowly in bed, using elbows and shoulders instead of hands. Difficulty making the bed, blankets too heavy, and trouble putting on draw sheets. Fatigues quickly. Bedroom
15. Can't wash back or scrub hair. Difficulty washing hair and drying herself. Bathroom
16. Difficulty cutting, opening containers, needs two hands to hold a cup. Cutlery slips from grasp. Fatigues during meal. Eating
17. Difficulty doing up zipper on tight clothing, and tying shoelaces (wears slip-ons). Needs assistance to put on coat, and boots. Can't fasten small buttons on sleeve and collar, can't do up back fastenings on bra and clothing. Difficulty putting on, tight pants, pantyhose, and snug gloves. Dressing

18. Difficulty putting on makeup and combing hair uses only right hand. Can't curl hair. Fatigues quickly.
19. Patient reports that she must return to work once her sick leave runs out because the family needs her income. She teaches grade 6 and is responsible for planning all lessons, teaching from 8:30 to 3:30, and evaluating the students. She also is responsible for supervising all the students (grades 1-6) during recess and lunch twice a week. She reports that her children help out at home and are generally very cooperative. However, her has very definite ideas about the roles of men and women and is unlikely to help in areas he feels are women's work.

Grooming

Pt Visit/Inter



Appendix F  
Answers to Pretest and Posttest

PRETEST ANSWER SHEET  
Section A

1. The passage below provides you with a case history of a patient with a particular disability. There are three types of information available in this case history:

- a) information which is a Major Factor to consider when planning an OT treatment program for this patient, that is, it will have a major influence on one's treatment plan;
- b) information which is Potentially Significant, that is, it may or may not have an affect on planning this patient's OT treatment program, but it needs to be investigated further;
- c) information which is Unimportant in terms of planning an OT treatment program for this patient, that is, the information is irrelevant.

Directions: Read the passage on the following page carefully. Circle all the pieces of information which you feel are major factors in planning an OT treatment program for this patient. Underline all the pieces of information which you feel are potentially significant to the planning of an OT program for this patient. Leave blank any information which you feel is unimportant.

Eg. Mr. Hines is a talkative man suffering from osteoarthritis of the left hip and both knees, he mentions to you that he and his wife are experiencing marital difficulties.

PLEASE NOTE: for purposes of scoring, all information outlined in a BOX is considered unimportant information. That is, it should have been left blank by the subject. Any words or phrases left blank in the answer sheet are considered neutral and therefore not considered in the scoring procedure.

Case History:

Mary Singer is a 53 year old female suffering from carpal tunnel syndrome of her dominant right hand for the past two months. She has had diabetes mellitus for 15 years. She has been admitted to hospital for purposes of assessing her diabetes which is no longer being controlled by diet alone. She has been referred to O.T. to assess hand function and independence in ADL and provide the appropriate treatment.

Reading her medical chart you note that she is having trouble sleeping and is constipated. She is receiving steroid injections for her hand which is not responding well to treatment. You visit Mary in her room, she tells you that she is a homemaker and loves to cook, joking that her husband has the stomach to prove it. She talks about her two children who are grown and live away from home. You ask her about her activities, she shrugs saying that she likes to stay at home and play the piano. She complains that her hand is very painful particularly at night and that she can only use it for light activities. You set up an appointment for the next day which she records on a piece of paper.

At lunch you mention to your supervisor that you have just received a referral for Mary Singer. The dietician overhears your remark and comments that recently she has been having a terrible time trying to get Mary to stick to her diet, in fact Mary has gained 20 pounds in the past few months. She has confronted Mary about this, but Mary denies cheating on her diet.

The next day Mary is late for her appointment. She apologizes stating that she wasn't aware she had one. Her husband and two grandchildren have accompanied her. Mr. Singer is a plumber who enjoys

his work, and he talks excitedly about the trip to California he and Mary are planning this year where they will stay with their son. The children tease Mary, accusing her of not remembering their names. Mary smiles and tells them they shouldn't tell fibs. The children deny that they are lying. At that point, the ward clerk phones to tell you that Mary must return immediately to the ward to get her injection. The appointment is cut short.

## Section B

Referring back to the case history, determine and indicate all the OT assessments which are:

- Necessary to perform on the patient in question for purposes of planning a treatment program.
- Potentially Important to perform on the patient for purposes of planning a treatment program; that is, although not always indicated in similar cases, you suspect that in this particular case the patient's function or performance may be affected.

In your answer list each specific assessment and why you think it is necessary, or potentially significant to perform. Limit your answer to one line per assessment. For example: Necessary - muscle test lower limbs - paresis in legs.

2. Necessary Assessments:

- 1) Hand Function - carpal tunnel syndrome or requested in referral
- 2) Sensation of right hand - pain, possible compression of median nerve
- 3) Muscle Strength of hands - strength affected by CTS
- 4) Communication, written - dominant hand impaired
- 5) ROM of right hand - affected by CTS (impaired circulation, nerve)
- 6) Girth/Edema - circulation impaired
- 7) Eating Assessment - dominant hand impaired
- 8) Dressing - dominant hand affected
- 9) Grooming - dominant hand affected
- 10) Kitchen - homemaker
- 11) Housekeeping - homemaker
- 12) Pt Interview/Interest Check List - investigate other activities affected.

3. Potentially Significant Assessments:

- 1) Memory - patient may be suffering memory loss
- 2) Cognition/Mental Status - may have problems in cognition or orientation in conjunction with or mimicking memory loss

4. You have just received a referral to assess and treat a 35 year old male who has recently suffered a laceration to his Right wrist extensor tendons, ECRL & ECRB. What would be the first three steps you would do in order to gain information to help in planning your treatment program. List the three steps, citing your reason for each step. Restrict your answer to two lines per step; eg. a. talk to psychologist - to find out how patient is adjusting to the accident

a. Consult Medical Chart - past, present medical history, information regarding accident, surgery, tests performed, professionals involved and their reports.

b. Consult referring Dr. - discuss contraindications, protocol for treatment (give half a mark if step is to go to Ward or Team meeting do not give any marks for reason)

c. Patient Interview - establish rapport, gain further information not available from chart

5. Compare the advantages and disadvantages of using a phone versus visiting a person in order to gain information from others about a patient, you as an OT are treating. Feel free to use point form.

Advantages - 1) quicker, no travelling; 2) anonymity, person may reveal more; 3) less likely to waste time (i.e. don't need to set up a time).

Disadvantages - 1) often difficult to get through eg. lines busy; 2) Impersonal or cannot see nonverbal communication; 3) some people may be reluctant to reveal patient information over the phone.

6. Describe the function and contents of medical charts (phys. med.). Include in your description the problems and limitations of its use. Feel free to use point form.

Function: A collection of reports from various professionals which serves to keep a permanent record of medical information which is used as a reference by a variety of professionals.

Content: patient's medical history, social/family history, medication, referrals, reports of various professionals, tests performed, results of tests, lab results, patient's behaviour, patient's progress. (It is acceptable for the student to name a specific report or referral. eg. Psychologist's report).

Problems/limitations: not up to date, incomplete, hand writing illegible, subjective: reflects one person's opinion and may bias one's attitude towards the patient) that is information may bias a professional, reports too brief requiring further detail, sometimes reports are too long i.e. not concise, entire chart difficult to go through, and repetitive.

7. Cite three distinct factors or situations in which an OT will receive (from the patient or others) unreliable information about a patient he/she is treating. Provide examples. Feel free to use point form.

1) Incomplete Information (Information which is missing because it has not been obtained): information not collected from all sources; or missing from reports; or information not up to date; or patient confused; patient has memory loss; or patient drugged and therefore can't provide complete information; or professional not seen pt so unable to give complete information.

2) Misinformation (information which is false): someone deliberately withholding information; or patient/family/professional lying; or patient/family/ professional doesn't understand what is being asked and gives the wrong information; or patient confused; or patient drugged and gives wrong information; or patient has memory loss and gives wrong information; or patient tells you what he thinks you want to hear; or tests carried out are invalid eg. not done properly or done in the wrong environment.

3) Conflicting or Inconsistent Information (information which is cloudy, unclear, varying reports): patient, family, professionals have different interpretations of information/condition.

8. Referring back to question 7, describe strategies and criteria which an OT can use for evaluating the reliability of information received from others. -Feel free to use point form.

1) Collect information regarding patient from all sources available eg. patient, family, friends, professionals involved, medical chart, assessments.

2) Check for coroboration between sources.

3) Consider source get information from (assess their reliability, tests or people).

4) Pursue any information which is inconsistent: via research, confrontation to see if information is correct, or clarification of questions to ensure patient (or other) understands what is being asked.



POSTTEST ANSWER SHEET  
Section A

1. The passage below provides you with a case history of a patient with a particular disability. There are three types of information available in this case history:

- a) information which is a Major Factor to consider when planning an OT treatment program for this patient, that is, it will have a major influence on one's treatment plan;
- b) information which is Potentially Significant, that is, it may or may not have an affect on planning this patient's OT treatment program, but it needs to be investigated further;
- c) information which is Unimportant in terms of planning an OT treatment program for this patient, that is, the information is irrelevant.

Directions: Read the passage on the following page carefully. Circle all the pieces of information which you feel are major factors in planning an OT treatment program for this patient. Underline all the pieces of information which you feel are potentially significant to the planning of an OT program for this patient. Leave blank any information which you feel is unimportant.

Eg. Mr. Hines is a talkative man suffering from osteoarthritis of the left hip and both knees, he mentions to you that he and his wife are experiencing marital difficulties.

PLEASE NOTE: for purposes of scoring, all information outlined in a BOX is considered unimportant information. That is, it should have been left blank by the subject. Any words or phrases left blank in the answer sheet are considered neutral and therefore not considered in the scoring procedure.

Case History:

Carl Hunt is a quiet man who has been married for 26 years. He was admitted to emergency two weeks ago with the following symptoms: drooling, loss of balance, and left sided weakness. He has been diagnosed as suffering from a right cerebral vascular accident. During a ward meeting you are given a referral to assess and treat him in order to increase functional independence. The physiotherapist for Mr. Hunt's ward is leaving on vacation. The social worker mentions that Mr. Hunt is an architect with the government. While reading his medical chart you note that he was admitted on a Saturday evening, accompanied by his wife. The chart indicates that Mr. Hunt is disoriented to time. Previous medical history includes an appendectomy in 1954. This is Mr. Hunt's first CVA. Radiology report indicates that pt. suffered a cerebral hemorrhage in the area of the right parietal lobe.

You visit Mr. Hunt in his room, he voices his eagerness to commence therapy. He is propped up in bed with pillows, when all of a sudden he starts to fall to the left, he is able to catch and right himself using both arms. You make an appointment to see Mr. Hunt the following day. You meet his wife as you are about to leave, she introduces herself. She explains that she runs her own business and is able to schedule her hours. You explain that her husband has been referred to OT, describing what an Occupational Therapist does, Mr. Hunt's doctor accosts you, as you are leaving and asks if you have received a referral yet for Mr. Hunt. You run into Mr. Hunt's attending nurse who tells you that he is having trouble eating. She describes how he seems to have difficulty manipulating his utensils with his hands. In fact he often ends up

using his hands to eat. Upon further questioning she reports that they are having difficulty restraining Mr. Hunt, in that he does not like to be helped and will try to get out of bed on his own. In fact he has fallen twice, fortunately he hasn't been hurt.

## Section B

Referring back to the case history, determine and indicate all the OT assessments which are:

- Necessary to perform on the patient in question for purposes of planning a treatment program.
- Potentially Important to perform on the patient for purposes of planning a treatment program; that is, although not always indicated in similar cases, you suspect that in this particular case, the patient's function or performance may be affected.

In your answer list each specific assessment and why you think it is necessary, or potentially significant to perform. Limit your answer to one line per assessment. For example: Necessary - muscle, test lower limbs - paresis in legs.

2. Necessary Assessments:

- 1) ROM - paresis on left side or Right CVA \_\_\_\_\_
- 2) Muscle Tone - paresis on left side or Right CVA \_\_\_\_\_
- 3) Muscle Strength - paresis, or CVA \_\_\_\_\_
- 4) Gross Coordination/Balance - poor balance indicated, paresis \_\_\_\_\_
- 5) Sensation - CVA \_\_\_\_\_
- 6) Perception - parietal lobe damage \_\_\_\_\_
- 7) Mobility - paresis or CVA \_\_\_\_\_
- 8) Hand Function - hand impairment, CVA \_\_\_\_\_
- 9) Cognition - disorientation, brain damage \_\_\_\_\_
- 10) Endurance - CVA \_\_\_\_\_
- 11) Transfers - paresis \_\_\_\_\_
- 12) Bed Mobility - paresis \_\_\_\_\_
- 13) Eating - difficulty manipulating utensils \_\_\_\_\_
- 14) Dressing - paresis, and possible perceptual problems \_\_\_\_\_
- 15) Grooming - paresis, and possible perceptual problems \_\_\_\_\_

### 3. Potentially Significant Assessments:

1) Interest Check List/Motivation/ Psychological - investigate other interests, see if will be a good rehab candidate

2) Communication - brain damage

### Section C

4. You have just received a referral which requests you to assess and treat a 19 year old male who has recently suffered a crush injury of the right hand. What would be the first three steps you would do in order to gain information to help in planning your treatment program. List the three steps, citing your reason for each step. Restrict your answer to two lines per step; eg. a. talk to psychologist - to find out how patient is adjusting to the accident

a. Consult Medical Chart - past, present medical history, information regarding accident, surgery, tests performed, professionals involved and their reports.

b. Consult referring Dr. - discuss contraindications, protocol for treatment (give half a mark if step is to go to Ward or Team meeting do not give any marks for reason)

c. Patient Interview - establish rapport, gain further information not available from chart

5. Compare the advantages and disadvantages of using a phone versus visiting a person in order to gain information from others about a patient, you as an OT are treating. Feel free to use point form.

Advantages - 1) quicker, no travelling; 2) anonymity, person may reveal more; 3) less likely to waste time (i.e. don't need to set up a time).

Disadvantages - 1) often difficult to get through eg. lines busy; 2) Impersonal or cannot see nonverbal communication; 3) some people may be reluctant to reveal patient information over the phone.

6. Describe the function and contents of medical charts (phys. med.). Include in your description the problems and limitations of its use. Feel free to use point form.

Function: A collection of reports from various professionals which serves to keep a permanent record of medical information which is used as a reference by a variety of professionals.

Content: patient's medical history, social/family history, medication, referrals, reports of various professionals, tests performed, results of tests, lab results, patient's behaviour, patient's progress. (It is acceptable for the student to name a specific report or referral. eg. Psychologist's report).

Problems/limitations: not up to date, incomplete, hand writing illegible, subjective: reflects one person's opinion and may bias one's attitude towards the patient, that is information may bias a professional, reports too brief requiring further detail, sometimes reports are too long i.e. not concise, entire chart difficult to go through, and repetitive.

7. Cite three distinct factors or situations in which an OT will receive (from the patient or others) unreliable information about a patient he/she is treating. Provide examples. Feel free to use point form.

1) Incomplete Information (Information which is missing because it has not been obtained): information not collected from all sources; or missing from reports; or information not up to date; or patient confused; patient has memory loss; or patient drugged and therefore can't provide complete information; or professional not seen pt so unable to give complete information.

2) Misinformation (information which is false): someone deliberately withholding information; or patient/family/professional lying; or

patient/family/ professional doesn't understand what is being asked and gives the wrong information; or patient confused; or patient drugged and gives wrong information; or patient has memory loss and gives wrong information; or patient tells you what he thinks you want to hear; or tests carried out are invalid eg. not done properly or done in the wrong environment.

3) Conflicting or Inconsistent Information (information which is cloudy, unclear, varying reports): patient, family, professionals have different interpretations of information/condition.

8. Referring back to question 7, describe strategies and criteria which an OT can use for evaluating the reliability of information received from others. Feel free to use point form.

1) Collect information regarding patient from all sources available eg. patient, family, friends, professionals involved, medical chart, assessments.

2) Check for coroboration between sources.

3) Consider source get information from (assess their reliability, tests or people).

4) Pursue any information which is inconsistent: via research, confrontation to see if information is correct, or clarification of questions to ensure patient (or other) understands what is being asked.

**Appendix G**  
**"Model" Reports**



CORRECT PIECES OF INFORMATION FOR OCCUPATIONAL THERAPY REPORTS

OT U3 SESSION 1; and OT U2 SESSION 3

AMPUTEE CASE

CASE HISTORY: A 35 year old male involved in a chemistry explosion at work (Carleson University) on November 17, 1985. Underwent surgery to amputate left limb two inches proximal to wrist. Fragments of glass removed from face, chest, and upper limbs. Presently patient is medically stable. Stump healing well. Referral to OT received December 4, 1985.

(7 pieces of correct information obtained from referral, patient medical chart, plastics and surgery/radiology.)

SOCIAL HISTORY: Married to a 34 year old wife who works part time as a real estate agent. Has two daughters aged 8 and 10. Patient employed as a University professor in Chemistry at Carleson University. Presently receiving workmen's compensation.

(8 pieces of correct information obtained from social work, patient medical chart.)

SUBJECTIVE: Patient states he wants a "bionic" hand similar to one portrayed on a television program. He reports that his stump is hypersensitive, and that he has not been using it. He expresses a wish to be discharged from hospital as soon as possible.

(4 pieces of correct information obtained from patient room, patient interview)

OBJECTIVE:

ROM: Full, except for pronation/supination of left arm, 40° active/50° passive for both movements.

Muscle Strength: Normal except for: all right shoulder muscles = 4; all left shoulder muscles = 4-, left elbow flexion/extension = 3+; left supination and pronation = 3-.

Gross Coordination/Balance: Balance very good. Right hand dominant for gross motor activities. Patient protecting left arm.

Sensation: Hypersensitive to light touch, pin prick, and unable to tolerate rough material to bottom of stump. Experiencing a cramping sensation which appears periodically throughout the day. Phantom sensation present.

Hand Function: Left hand dominant. Dexterity fair for right hand. Normal pinch and grasp of right hand.

Endurance: Fair. Breathing hard after walking to therapy.

Communication: Verbal-intact. Written- writes slowly but legibly with left stump using a universal cuff. Writes poorly with right hand.

Bathroom: Difficulty manipulating soap, shampoo, and towel when washing.

Eating: Difficulty cutting meat, buttering bread, and opening small containers. Otherwise independent.

Dressing: Difficulty manipulating small fastenings, and zippers.

Unable to tie shoelaces.

Grooming: Independent, but slow.

(11 assessments)

Observations: Attending nurse reports patient doing little for himself,

frequently requesting help. Patient not discussing feelings. Wife expressing concern about husband claims he is depressed and helpless. Wife confides that she is having difficulty coping and the children are getting into trouble.

(5 pieces of information obtained from social work, psychology, nursing station, patient's home, and patient interview.)

ANALYSIS: Patient and family appear to be having difficulty adjusting to the patient's amputation. Although Mr. Reese is independent in most self care activities he is frequently requesting help for activities which he does not require.

(2 pieces of correct information)

PLAN: Patient to be seen daily in OT for treatment.

Short Term Goals:

- 1) Encourage use of stump via bilateral activities, stressing the retainment of normal movement patterns.
- 2) Increase independence in self care activities. Provide a universal cuff, and any appropriate aids as required.
- 3) Educate patient and family regarding patient's present and future capabilities.
- 4) Provide psychological support to patient and family.
- 5) Increase stump shrinkage by teaching patient to wrap own stump with ace bandages.
- 6) Desensitization of stump.
- 7) Increase active ROM of pronation and supination of left arm.
- 8) Increase dexterity of right hand.
- 9) Encourage patient to retain left hand dominance for writing.
- 10) In conjunction with the Physiotherapist increase upper limb strength and endurance.
- 11) To train patient in use of temporary prosthesis once he receives it.

Long Term Goals:

- 1) To follow patient on an outpatient basis upon discharge.
- 2) To train patient in care and use of conventional prosthesis.
- 3) Maximize independence.
- 4) Vocational Assessment.

(15 goals)

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OT U3, SESSION 2

MULTIPLE SCLEROSIS CASE

CASE HISTORY: A 35 year old female diagnosed as having multiple sclerosis in 1982. Admitted to hospital 23 Oct. 1985 in exacerbation of the disease x 3 months. Received corticosteroid treatment and placed on bed rest for a month. During exacerbation had decreased endurance and muscle strength with difficulty breathing, and optic neuritis.

(12 pieces of correct information, obtained from referral and patient medical chart.)

SOCIAL HISTORY: Divorced since 1982, lives with parents and two daughters aged 10 and 12. Retired from secretarial job in 1982 due to disability, presently a homemaker. Has a high school education. Receives alimony and a disability pension.

(7 pieces of correct information, obtained from social work and patient medical chart.)

SUBJECTIVE: Patient states that she feels very helpless, and is worried about her role as a parent. For the past three years she has spent the majority of her time reading, listening to the radio, and watching T.V. She expresses a desire to take a more active role as a homemaker. She would also like to increase her social contact with others.

(8 pieces of correct information, obtained from Pt interview and Pt room..)

OBJECTIVE:

ROM: Full bilaterally for upper extremities.

Gross coord/balance: Standing balance-very poor. Sitting balance-fair, tends to fall forward and back particularly when engaged in bilateral activities. No ataxia in upper extremities.

Sensation: Intact except for 2 pt discrimination, impaired at  $\frac{1}{4}$  inch, and diminished at 2 inches on dorsal and volar surfaces of both U.E. Complains of paresthesia in hands.

Perception: Normal.

Mobility: Able to propel a wc for 75 meters on a flat surface only. Requires 2 brief rest periods.

Hand Function: Right hand dominant. Coordination for small objects fair. Gross grasp: R-58 lb, L-29 lb. Able to pick up objects 1 inch in diameter. MRMT results:

Test	Percentile for age and sex
Placing	3%
Turning	63%
Displacing	59%
1 hand turning + placing	5%
2 hand turning + placing	3%

Endurance: Fair. Can only work for 30 minute periods on activities requiring moderate exertion before tires.

Cognition: Difficulty problem solving and planning with respect to ADL and short term goals.

Communication: Handwriting legible. Slight slurring of speech.

Transfers: Requires minimal assistance for transfers from wc to bed, commode, chair and vice versa. Requires moderate assistance to transfer from wc to bathtub and vice versa.

Kitchen: Requires 10 to 15 minutes to maneuver wc around kitchen in order to retrieve or place an item in or out of stove, fridge, or cabinets. Difficulty planning simple meals. Past year has been responsible for most of the meal preparation. Relies on others to do all other aspects of kitchen work.

Bedroom: Independent in bed mobility and positioning. Great difficulty in cleaning bedroom and making the bed, due to poor planning.

Bathroom: Requires a bath chair for safety in tub. Able to wash self using a hand held shower with supervision as she is prone to losing her balance. Uses a commode for toileting.

Dressing: Able to dress upper body. Unable to maintain balance to get clothes over feet.

(14 assessments)

Observations: Family aiding patient too much, not allowing her to do

things for herself. Family concerned that patient may over exert herself and trigger an attack.

(2 correct pieces of information obtained from pt lounge and/or social work.)

ANALYSIS: Patient not realizing her full potential possibly due to assumption of invalid role and overprotectiveness of family. Would benefit from a full ADL program to increase independence and aid her in assuming a more active role as homemaker and parent.

(4 pieces of correct information.)

PLAN: Patient to be seen daily in OT.

Short Term Goals:

- 1) Increase endurance.
- 2) In conjunction with PT increase upper extremity strength.
- 3) Improve sitting balance.
- 4) Increase independence in transfers.
- 5) Increase independence in wheelchair mobility; eg. ascending and descending ramps, maneuvering around obstacles.
- 6) Educate pt and family regarding nature of disability.
- 7) Increase independence in dressing, providing any necessary aids.
- 8) Teach work simplification and energy conservation techniques which specifically apply to MS.
- 9) Aid pt in determining which tasks she will assume as homemaker.
- 10) Provide opportunities for problem solving and planning particularly with reference to ADL.

Long Term Goals:

- 1) Perform a home visit to assess architectural barriers and provide recommendations.
- 2) Assist pt in reorganizing furniture, cupboards, etc., for greater efficiency.
- 3) Explore pt's interests, for purposes of increasing socialization.
- 4) Aid patient in planning a schedule which balances work and play.

(14 goals)

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OT U3, SESSION 3

HEAD INJURY CASE

CASE HISTORY: A 19 year old female involved in a car accident Jan 11, 1986 in which she was driving alone without a seatbelt. Suffered a grade four closed head injury with occipital lacerations and left intracerebral hemorrhage. Underwent emergency surgery to remove blood clot and control bleeding point. Patient comatose, exhibiting decorticate rigidity and right hemiparalysis, possibility that patient may be aphasic.

(13 pieces of information obtained from referral and patient medical chart.)

SOCIAL HISTORY: First year university student studying anthropology. Prior to accident worked part-time for one year as a waitress in a small restaurant. Lives with parents, has two brothers aged 26 and 28 who have lived away from home for the past five years.

(7 pieces of information, obtained from social work, patient's room,

and patient visit).

**OBJECTIVE:**

ROM: UNABLE TO TEST	ACTIVE ROM	ROM			
PASSIVE ROM:	LEFT	RIGHT		LEFT	RIGHT
<b>SHOULDER</b>			<b>THUMB</b>		
FLEXION	0-120	0-40	ABDUCTION	N	N
EXTENSION	0-30	0-9	OPPOSITION	N	N
ABDUCTION	0-90	0-30	<b>INDEX FINGER</b>		
ADDUCTION	N	N	MCP FLEXION	N	+5-90
INTERNAL ROT.	0-60	0-25	PIP FLEXION	N	+5-90
EXTERNAL ROT.	0-50	0-5	DIP FLEXION	N	+5-80
<b>ELBOW/FOREARM</b>			<b>MIDDLE FINGER</b>		
FLEXION	+8-150	+60-150	MCP FLEXION	N	+10-85
SUPINATION	N	0-10	PIP FLEXION	N	+25-95
PRONATION	N	0-50	DIP FLEXION	N	+5-75
<b>WRIST</b>			<b>RING FINGER</b>		
FLEXION	0-65	+5-40	MCP FLEXION	N	+10-85
EXTENSION	+10	+10	PIP FLEXION	N	+5-95
ULNAR DEV.	N	0-15	DIP FLEXION	N	+5-75
RADIAL DEV.	N	0-10	<b>LITTLE FINGER</b>		
<b>THUMB</b>			MCP FLEXION	N	+7-80
MCP FLEXION	N	N	PIP FLEXION	N	+5-100
IP FLEXION	N	+5-45	DIP FLEXION	N	+5-70
<b>PASSIVE ROM:</b>			<b>LEFT RIGHT</b>		
<b>HIP</b>			<b>KNEE</b>		
FLEXION	0-110	0-45	FLEXION	0-120	0-45
EXTENSION	N	N	<b>ANKLE</b>		
ABDUCTION	0-35	0-15	DORSIFLEX	0-10	-5
ADDUCTION	N	N	PLANTARFLEX	N	5-50
INTERNAL ROT.	0-30	0-20	INVERSION	N	0-20
EXTERNAL ROT.	0-30	0-5	EVERSION	0-10	0-5

**Muscle Tone:** In decorticate position, legs maintained in hip adduction and extension with plantar flexion. Arms adducted and internally rotated at the shoulder, held in full elbow flexion, both hands held in 1/4 wrist and finger flexion. Marked spasticity in all extremities.

**Sensation:** Responsive to pain and kinesthetic stimulation. Response delayed, takes the form of gross movements, and moans.

**Cognition:** Specific yet inconsistent response to auditory stimuli only.

Responses take form of voluntary movements of the head and upper limbs.

Patient unable to follow one step commands.

**Communication:** Patient has made no attempt to speak. Only vocalizations have been moans. Patient does not appear to be comprehending others.

(5 assessments)

**Observations:** Patient completely dependent for all ADL activities, mobility, and positioning. Patient confined to bed, \*[requires restraints as she is thrashing around. Patient has an IV, Nasogastric tube, and Foley catheter.]

**Hobbies, Interests:** (as reported by family) enjoys sports, particularly horseback riding. Prior to accident was learning how to downhill ski.

Enjoys music, especially jazz and singing. Actively involved in Savoy Society which puts on Gilbert and Sullivan and has had a few roles in

the chorus. Enjoys socializing, and was planning to travel to Europe with a friend this summer.

\* may also be reported under Case History

(14 pieces of correct information-obtained from Staff lounge, patient's room, patient visit, social work, and patient's home.)

ANALYSIS: Patient appears to be at the generalized response level of cognitive functioning. However, there are indications that she is progressing to the next level of functioning which is localized response. Patient requires positioning and splinting to prevent contractures particularly prone areas are elbow, wrist, and finger flexors; hip adductors, and ankle plantarflexors.

(7 correct pieces of information)

PLAN: To see patient 3-4 times daily for fifteen minute periods.

Short Term Goals:

- 1) Commence a stimulation program to prevent sensory deprivation, and attempt to elicit responses the patient is capable of making, as well as heighten those responses and channel them into activity. Program to be centered on patient's past interests.
- 2) Provide sensory stimulation using all modalities. However not more than two modalities will be used for each session.
- 3) Educate family regarding patient's condition and importance of stimulation program.
- 4) Involve family, friends and staff in stimulation program.
- 5) Reality orientation.
- 6) Fabricate bilateral foot drop splints, resting hand splints, and elbow extension splints.
- 7) Monitor splints, and status of hip adduction as a hip abduction splint may be required.
- 8) Provide passive ROM to all joints.

Long Term Goals:

To provide an active, graded treatment program focusing on attaining maximum independence. Program to follow patient's recovery process.

(9 goals)

OT U2, SESSION 1

HIP FRACTURE CASE

CASE HISTORY: A 59 year old female \*[homemaker] admitted to hospital with a diagnosis of loosening of the femoral component of a left hip joint replacement. Three months prior to admission experiencing severe pain on weight bearing. Underwent surgery Jan 23, 1986 for a new total left hip replacement. Past medical history: experienced incapacitating pain of left hip in 1979, diagnosed as having osteoarthritis of left hip joint. A left cup arthroplasty performed and patient returned to full function. Nine months later patient began to experience pain on weight bearing, and fifteen months following her first surgery, was readmitted for a left total hip replacement.

\* may also be reported in Social History

(12 pieces of correct information obtained from referral, patient

medical chart, social work/or patient's room.)

SOCIAL HISTORY: Patient recently remarried and lives with husband. She has two married sons, both living in Calgary, and one granddaughter. Her husband works full-time as a draftsman for an Engineering firm. Financially they are secure but do not have much money saved. (6 pieces of correct information obtained from social work, head nurse, patient's home.)

SUBJECTIVE: Patient states that she is responsible for all the cooking and housekeeping and is concerned that she will not be able to resume these activities upon discharge. She further states that that she will be alone in the house and that there is no one to help out. Patient enjoys gardening, doing puzzles, playing bridge, and is actively involved in church activities. She wishes to be independent, however she states that she is very apprehensive about moving her leg and is unsure about what she should and shouldn't be doing. (8 pieces of correct information obtained from patient room, and patient interview.)

OBJECTIVE:

ROM: Full, except for left hip.

Hip	A/P
Flexion	20°/90° (must avoid movement past 90°)
Extension	10°/30°
Abduction	15°/45°
Adduction	not tested as pt to avoid this movement
Exter/Rot	20°/45°
Inter/Rot	not tested as pt to avoid this movement.

Muscle Strength: Normal except for: all muscles of right leg are 4; muscles of left ankle and knee are 4-. Muscles of left hip are severely weakened as can be seen by active ROM. Patient using both hands to move and position left leg.

Balance: Good sitting balance. Standing balance poor to fair needs to hold on to something. Has a fear of falling.

Mobility: Using a semi-reclining wheelchair for mobility. Requires someone to hold her and move left leg forward when using a walker.

Endurance: Poor to fair for any activity involving use of lower limbs.

Transfers: Requires assistance for all transfers. Patient stands and pivots on right leg.

Bed Positioning/Mobility: Requires assistance with rolling and getting in and out of bed. Also requires some assistance to come to a seated position.

Bathroom/Hygiene: Dependent for toileting, using a bed pan. Able to sponge bathe upper body and front of thighs, dependent otherwise. Patient reports that she has a raised toilet seat, a bath bench, and a grab bar in her bathtub at home. These were acquired after her first operation.

Dressing: Independent for upper extremity dressing. Requires maximal assistance to dress lower extremities. Unable to reach past knees.

Grooming: Independent except for shaving her legs.

(10 assessments)

Observations: Attending nurse reports that Mrs. Dieppe is remaining in

bed for the majority of the day and depending on nurse for most of her self-care activities and positioning. The social worker reports that Mrs. Dieppe is very concerned that she not appear disabled to her husband. The husband states that he is willing to provide assistance to his wife when she is discharged. \* [Home Care Services to provide a homemaker once a week once patient is discharged.]  
\*may also be reported in Plan.

(5 pieces of correct information obtained from ward conference, patient home, community liason nurse/home care services.)

ANALYSIS: Three factors appear to be delaying Mrs. Dieppe's progress:

- 1) a lack of knowledge concerning the condition of her left hip replacement;
  - 2) apprehensiveness about moving her left leg;
  - 3) the fear that she will not be able to resume her former activities as a homemaker upon discharge.
- (3 pieces of correct information.)

PLAN:

Short Term Goals:

- 1) To train patient to protect the hip joint while engaging in normal activity.
- 2) To encourage patient to lift and move her left leg on her own by providing a leg lifter.
- 3) To increase independence in positioning in bed, and sitting up in bed.
- 4) Increase independence in transfers.
- 5) Encourage Mrs. Dieppe to perform those self-care activities which she can achieve thereby increasing endurance and muscle strength.

Long Term Goals:

Once the above goals have been achieved the following goals will be emphasized:

- 1) To increase independence in dressing, hygiene, and toileting through training and provision of adapted equipment such as: a long handled sponge, reacher, extended shoe horn, and stocking aide.
- 2) In conjunction with PT to increase mobility via the use of a walker.
- 3) To assess independence in the kitchen once patient is mobile using a walker.
- 4) To teach work simplification and energy saving techniques particularly with respect to her role as a homemaker.
- 5) To aid patient in planning a schedule for housework, meals, and resting periods which will allow maximum independence and require assistance from her husband, and homemaker only at times when they will be present.

(10 goals)

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OT U2, SESSION 2

RHEUMATOID ARTHRITIS CASE

CASE HISTORY: A 37 year old female recently diagnosed as having Rheumatoid Arthritis, sero-positive, suffering past 4 months. Symptoms include morning stiffness lasting two hours, effusions and tenderness in



hands and wrists. Presently in flare up. Radiology report indicates no joint damage. Periarticular swelling and demineralization present in hands, and wrists. WBC + SER elevated, slightly anemic. On steroids, prednizone, and anti-inflammatory drugs.

(13 pieces of correct information obtained from referral, radiology, and patient medical chart.)

SOCIAL HISTORY: Married, living with husband and two daughters aged 8 and 11. Lives on a farm 55 miles from the city centre. Husband is a farmer. Patient works full-time as a grade 6 teacher, presently on sick leave.

(6 pieces of correct information obtained from social work, and patient interview.)

SUBJECTIVE: Complains of pain in morning, occasionally experiencing tingling in some digits. Concerned about loss of independence. Wants to return to her work as the family needs her income. Reports that children are helpful with homemaking activities but not her husband.

(7 pieces of correct information obtained from patient room, and patient interview.)

OBJECTIVE:

Functional ROM: (fluctuates daily): Wrists limited flex/ext positioned in radial deviation. Limited finger extension of PIP and finger flexion at MCP, PIP, and DIP. Thumb opposition to D4.

Muscle Strength: 60/20 on sphygmomanometer. Intrinsic tightness, and atrophy of intrinsic, thenar, and hypothenar eminence.

Gross Coordination: Gross coordination of upper extremities affected due to pain, movements slow and cautious.

Hand Function: Right hand dominant. Difficulty grasping small objects often drops them. Uses lateral pinch as tip to tip is poor. Spherical and cylindrical grasp limited by pain and ROM.

Sensation: Experiences tingling and numbness intermittently in thumb, index, and middle finger. Has occasional pain at night in these three digits.

Endurance: Poor, fatigues easily. Requires a 1-2 hour nap daily.

Communication: Pen slips from grasp, writing is wobbly. Can type slowly on electric typewriter for five minutes. Tires when holding a phone. Can't write on chalk board.

Bedroom: Able to move around slowly in bed, using elbows and, shoulders instead of hands. Difficulty making the bed, blankets too heavy, and trouble putting on draw sheets. Fatigues quickly.

Bathroom/Hygiene: Can't wash back or scrub hair. Difficulty washing hair and drying herself.

Grooming: Difficulty putting on makeup and combing hair uses only right hand. Can't curl hair. Fatigues quickly.

Dressing: Difficulty doing up zipper on tight clothing, and tying shoelaces (wears slip-ons). Needs assistance to put on coat, and boots. Can't fasten small buttons on sleeve and collar, can't do up back fastenings on bra and clothing. Difficulty putting on tight pants, and snug gloves, and pantyhose.

Eating: Difficulty cutting, opening containers, needs two hands to hold a cup. Cutlery slips from grasp. Fatigues during meal.

Kitchen: Responsible for all cooking. Can't lift heavy pots, peel

vegetables, or remove pots from the oven. Difficulty washing pots, transporting items, stirring, pouring liquid from a large or heavy container, and cutting food.  
(13 assessments)

Observations: Dietary reports that patient suffering from loss of appetite, and has lost fifteen pounds in the past four months. On a salt free diet, receiving iron supplements and sustical. Community Liason-nurse states that upon discharge Mrs. Nice is entitled to the services of a nurse, an OT, and a PT one day per week. Husband states he doesn't understand what is wrong with his wife and suspects that "it is all in her head".

(4 correct pieces of information obtained from dietary, community liason nurse, and patient's home.)

ANALYSIS: Patient in flare-up requires splinting. Suspect patient may have carpal tunnel syndrome because of tingling and numbness in first three digits, as well as problems with prehension. Husband does not appear to be very supportive.

(3 pieces of correct information)

#### PLAN:

##### Short Term Goals

- 1) To provide hand splints to be worn at night and during naps. Patient to be splinted as follows: wrist in neutral, MCP in 5-10° flexion, splint to end proximal to PIP joints.
- 2) To provide leather gauntlets to be worn during the day.
- 3) Gentle active non-resistive hand activities to maintain active ROM and increase strength and opposition.
- 4) Activities to increase prehension of light objects.
- 5) To investigate further possibility of Carpal Tunnel Syndrome and report findings to rheumatologist.
- 6) Teach joint protection and energy conservation.
- 7) Provide aids such as rocker knife, large hand grips, and a light weight mug to increase independence in eating.
- 8) Slowly introduce ADL training as patient can tolerate, provide any necessary aids and adaptations.
- 9) To educate family concerning the disease and treatment.

##### Long Term Goals

- 1) Provide ADL training in all areas of dysfunction.
- 2) Aid patient in planning a work/rest schedule in conjunction with family.
- 3) Monitor hand function.
- 4) Vocational assessment and training incorporating work simplification techniques.
- 5) Arrange for community OT to perform a home visit.
- 6) To follow patient upon discharge in order to monitor RA and splints, this will be combined with appointments with the rheumatologist.

(15 goals)

Appendix H

Raw Data for Occupational Therapy Reports

OT U3

## RESULTS OF OCCUPATIONAL THERAPY REPORTS

GROUP COMPOSITION:SESSION 1

A = 1,2,3  
 B = 7,8,9  
 C = 4,5,6

SESSION 2

A = 4,7  
 B = 2,5,9  
 C = 3,6,8

SESSION 3

A = 3,5,6,9  
 B = 2,4,8

1. CASE HISTORY: Involves a brief description of the patient's medical history both past and present, age, sex, date of admission to hospital (if applicable), and any information pertaining to his medical condition.

a) Count: Table 1a outlines the number of times each group included or failed to include necessary information.

SESS 1 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	07	100	07	100	07	100	21	100
MISS	00	000	00	000	00	000	00	000
TOTAL	07	100	07	100	07	100	21	100

SESS 2 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	09	75	11	92	06	50	26	72
MISS	03	25	01	08	06	50	10	28
TOTAL	12	100	12	100	12	100	36	100

SESS 3 INFO	A		B		TOTAL	
	#	%	#	%	#	%
CORR	13	100	11	85	24	92
MISS	00	000	02	15	02	08
TOTAL	13	100	13	100	26	100

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it; 2) the group reported the information under the wrong heading (a heading other than Case History eg. Objective, Plan, etc.), or 3) the group never obtained the information. Table 1b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESS 1 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
NR	00	00	00	00	00	00	00	00
WH	00	00	00	00	00	00	00	00
NO	00	00	00	00	00	00	00	00
TOTAL	00	00	00	00	00	00	00	00

SESS 2 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
NR	03	100	01	100	06	100	10	100
WH	00	000	00	000	00	000	00	000
NO	00	000	00	000	00	000	00	000
TOTAL	03	100	01	100	06	100	10	100

SESS 3 INFO	A		B		TOTAL	
	#	%	#	%	#	%
NR	00	000	02	100	02	100
WH	00	000	00	000	00	000
NO	00	000	00	000	00	000
TOTAL	00	000	02	100	02	100

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

\*\*NOT APPLICABLE TO SESSION 1

SESSION 2 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
exacerbation of disease	B,C		
during exacerbation	C		
decreased endurance	A,C		
muscle strength	A,C		
difficulty breathing	A,C		
optic neuritis	C		

SESSION 3 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
19 year old	B		
female	B		

d) Unnecessary/Misplaced: Table 1d outlines the number of times a group included unnecessary information in the Case History which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Case History).

SESS 1 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	00	00	00	00	00	00	00
MISPL	00	00	01	100	00	00	01	100
TOTAL	00	00	01	100	00	00	01	100

SESS 2 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	01	100	00	00	00	00	01	100
MISPL	00	000	00	00	00	00	00	000
TOTAL	01	100	00	00	00	00	01	100

SESS 3 UNNEC	A		B		TOTAL	
	#	%	#	%	#	%
IRREL	00	00	00	00	00	00
MISPL	00	00	00	00	00	00
TOTAL	00	00	00	00	00	00

e) Score: This section titled Case History has been given a score of 5 points, as much of the information included in this section is given to the group on the referral. For each piece of correct information reported (see section 1a) the group gets one point. For each piece of information which is irrelevant or misplaced (see section 1d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 5.

SESSION 1 GROUP	SCORE		SESSION 2 GROUP	SCORE		SESSION 3 GROUP	SCORE	
	INITIAL ( /7)	FINAL ( /5)		INITIAL ( /12)	FINAL ( /5)		INITIAL ( /13)	FINAL ( /5)
A	07	5	A	08	3	A	13	5
B	06	4.3	B	11	5	B	11	4
C	07	5	C	06	3			

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 1f outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	2	A	2	A	3
B	2	B	2	B	2
C	2	C	2		

2. SOCIAL HISTORY: Involves a brief description of the patient's social history, such as his marital status, work status, living arrangements, and description of family members.

a) Count: Table 2a outlines the number of times each group included or failed to include necessary information.

SESSION 1 INFORMATION	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORRECT	08	100	04	50	*07.5	94	19.5	81
MISSING	00	000	04	50	*00.5	06	04.5	19
TOTAL	08	100	08	100	08	100	24	100

\* Please note that a mark of 0.5 is given when a group has failed to report all of the information obtained in a given move.

SESS 2	A		B		C		TOTAL		SESS 3	A		B		TOTAL	
INFO	#	%	#	%	#	%	#	%	INFO	#	%	#	%	#	%
CORR	06	86	06	86	07	100	19	90	CORR	06	86	07	100	13	93
MISS	01	14	01	14	00	000	02	10	MISS	01	14	00	000	01	07
TOTAL	07	100	07	100	07	100	21	100	TOTAL	07	100	07	100	14	100

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Social History eg. Objective, Plan, etc.), or 3) the group never obtained the information. Table 2b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESS 1	A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%
NR	00	00	00	000	00.5	100	00.5	11
WH	00	00	00	000	00	000	00	00
NO	00	00	04	100	00	000	04	89
TOTAL	00	00	04	100	00.5	100	04.5	100

SESS 2	A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%
NR	01	100	01	100	00	000	02	100
WH	00	000	00	000	00	000	00	000
NO	00	000	00	000	00	000	00	000
TOTA	01	100	01	100	00	000	02	100

SESS 3	A		B		TOTAL	
INFO	#	%	#	%	#	%
NR	01	100	00	000	01	100
WH	00	000	00	000	00	000
NO	00	000	00	000	00	000
TOTAL	01	100	00	000	01	100

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
34 year old wife			B
part-time real estate agent/			B
aged 8 and 10			B
workmen's comp.			B

SESSION 2 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
homemaker	B		
high school education	A		

SESSION 3 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
brothers live away	A		

\* Please note all letters circled indicate that the group failed to record part not all of the necessary information. Thus half a mark was given.

d) Unnecessary/Misplaced: Table 2d outlines the number of times a group included unnecessary information in the Social History which was either irrelevant (inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Social History).

SESS 1 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	00	01	100	01	100	02	100
MISPL	00	00	00	000	00	000	00	000
TOTAL	00	00	01	100	01	100	02	100

SESS 2 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	00	00	000	00	000	00	000
MISPL	00	00	05	100	03	100	08	100
TOTAL	00	00	05	100	03	100	08	100

SESS 3 UNNEC	A		B		TOTAL	
	#	%	#	%	#	%
IRREL	01	50	00	000	01	50
MISPL	01	50	00	000	01	50
TOTAL	02	100	00	000	02	100

e) Score: This section marked Social History has been given a score of 10 points, as players must gather the necessary information from one or two sources. For each piece of correct information reported (see section 2a) the group gets one point. For each piece of information which is unnecessary or misplaced (see section 2d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 10.

SESSION 1 GROUP	SCORE		SESSION 2 GROUP	SCORE		SESSION 3 GROUP	SCORE	
	INITIAL ( /8)	FINAL ( /10)		INITIAL ( /7)	FINAL ( /10)		INITIAL ( /7)	FINAL ( /10)
A	8	10	A	6	09	A	7	10
B	3	04	B	4	06	B	4	06
C	6.5	08	C	4	06			

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section

of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 2f outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	2	A	3	A	2
B	1	B	2	B	2
C	2	C	2		

3. SUBJECTIVE: Refers to that information which the patient tells the therapist.

a) Count: Table 3a outlines the number of times each group included or failed to include necessary information.

SESS 1	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	04	100	02	50	02	50	08	67
MISS	00	00	02	50	02	50	04	33
TOTAL	04	100	04	100	04	100	12	100

SESS 2	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	03	38	01	13	07	88	11	46
MISS	05	63	07	88	01	13	13	54
TOTA	08	101	08	101	08	100	24	100

SESS 3	A		B		TOTAL	
	#	%	#	%	#	%
CORR	01	100	00	000	01	000
MISS	00	000	01	100	00	100
TOTAL	01	100	01	100	02	100

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Subjective eg. Objective, Plan, etc.); or 3) the group never obtained the information. Table 3b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESS 1	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
NR	00	00	01	50	01	50	02	50
WH	00	00	01	50	00	00	01	25
NO	00	00	00	00	01	50	01	25
TOT	00	00	02	100	02	100	04	100

SESS2	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
NR	05	100	04	57	01	100	10	77
WH	00	000	03	43	00	000	03	23
NO	00	000	00	00	00	000	00	00
TOT	05	100	07	100	01	100	13	100

SESSION 3 NOT APPLICABLE

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.



SESSION 1 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
not using stump		B-objective	
stump hypersens	B,C		
wants bionic hand			C

SESSION 2 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
feels helpless		B-Obj	
worried about role	A	B-Obj	
past three years	A,B,C		
reading	A,B		
radio	A,B		
T.V.	A,B		
more active homemaker		B-Obj	

SESSION 3 NOT APPLICABLE

d) Unnecessary/Misplaced: Table 3d outlines the number of times a group included unnecessary information in Subjective which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Subjective).

SESS 1 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	000	02	50	00	000	02	33
MISPL	01	100	02	50	01	100	04	67
TOTAL	01	100	04	100	01	100	06	100

SESS 2 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	000	00	000	00	000	00	00
MISPL	04	100	05	100	02	100	11	100
TOTAL	04	100	05	100	02	100	11	100

SESS 3 UNNEC	A		B		TOTAL	
	#	%	#	%	#	%
IRREL	00	000	00	000	00	000
MISPL	00	000	04	100	04	100
TOTAL	00	100	04	100	04	100

e) Score: This section marked Subjective has been given a score of 10 points, as players must gather the necessary information from one or two sources. For each piece of correct information reported (see section 3a) the group gets one point. For each piece of information which is unnecessary or misplaced (see section 3d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 10.

SESSION 1 GROUP	SCORE		SESSION 2 GROUP	SCORE		SESSION 3 GROUP	SCORE	
	INITIAL ( /4)	FINAL ( /10)		INITIAL ( /8)	FINAL ( /10)		INITIAL ( /1)	FINAL ( /10)
A	3	8	A	0	00	A	1	10
B	0	0	B	0	00	B	0	00
C	1	3	C	5	06			

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.  
 1 = Fair. Both clarity and method of presentation require improvement.  
 2 = Good. Either method of presentation or clarity could be improved.  
 3 = Excellent. Well written, and concise. No improvement required.

Table 3f outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	1	A	2	A	3
B	1	B	1	B	2
C	2	C	2		

4. OBJECTIVE: Under this heading evaluation (assessment) results and observations are recorded, as well as patient's progress in therapy. (Please note that Patient Interview is not reported under the heading Objective).

a) Count: The following table outlines the number of correct assessments (as determined by the model report) that each group reported. If a group failed to perform a necessary assessment, however they included this in their plan than it has been recorded in the table.

SESS 1	A		B		C		TOTAL	
NECESSARY	#	%	#	%	#	%	#	%
REPORTED	06.5	59	02	18	03	27	11.5	35
IN PLAN	01	09	00	00	00	00	01	03
MISSING	03.5	32	09	82	08	73	20.5	62
TOTAL	11	100	11	100	11	100	33	100

SESS 2	A		B		C		TOTAL		SESS 3	A		B		TOTAL	
NECESS	#	%	#	%	#	%	#	%	NEC	#	%	#	%	#	%
REP	05	38	8.5	65	11	85	24.5	63	REP	03	60	04	80	07	70
IN P	00	00	0.0	00	00	00	00.0	00	IN P	00	00	00	00	00	00
MISS	08	62	4.5	35	02	15	14.5	37	MISS	02	40	01	20	03	30
TOTAL	13	100	13	100	13	100	39.0	100	TOTAL	05	100	05	100	10	100

b) MISSING: Among those necessary assessments missing, a group may have: 1) failed to perform it (NP); 2) performed it but failed to report it (NR); or 3) reported it under the wrong heading (WH).

SESS 1	A		B		C		TOTAL	
MISSING	#	%	#	%	#	%	#	%
NR	00.5	14	00	00	00	000	00.5	02
WH	00	00	01	11	00	000	01	05
NP	03	86	08	89	08	100	19	93
TOTAL	03.5	100	09	100	08	100	20.5	100

SESS 2	A		B		C		TOTAL		SESS 3	A		B		TOTAL	
MISSING	#	%	#	%	#	%	#	%	MISSING	#	%	#	%	#	%
NR	00	000	2.5	56	01	50	3.5	24	NR	00	000	00	00	00	000
WH	00	000	000	00	00	00	000	00	WH	00	000	00	00	00	000
NP	08	100	2.0	44	01	50	11	76	NP	02	100	01	100	03	100
TOTAL	08	100	4.5	100	02	100	14.5	100	TOTAL	02	100	01	100	03	100

c) DESCRIPTION: Table 4c outlines those missing assessments performed



SESS 2		A		B		C		TOTAL	
UNNEC	#	%	#	%	#	%	#	%	
REPORT	01	100	00	00	04	100	05	100	
NOT	00	000	00	00	00	000	00	00	
TOTAL	01	100	00	00	04	100	05	100	

SESS 3		A		B		TOTAL	
UNNEC	#	%	#	%	#	%	
REPORT	01	100	00	00	01	100	
NOT	00	000	00	00	00	000	
TOTAL	01	100	00	00	01	100	

e) Observations of others: Included under the heading of Objective is important observations noted by others. Table 4e outlines the number of times each group included or failed to include important information.

SESS 1		A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%	
CORR	01	20	03	5	70	00	000	04	5
MISS	04	80	01	5	30	05	100	10	5
TOTAL	05	100	05	100	05	100	15	100	

SESS 2		A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%	
CORR	00	000	01	50	00	000	01	17	
MISS	02	100	01	50	02	100	05	83	
TOTAL	02	100	02	100	02	100	06	100	

SESS 3		A		B		TOTAL	
INFO	#	%	#	%	#	%	
CORR	13	93	14	100	27	96	
MISS	01	07	00	000	01	04	
TOTAL	14	100	14	100	28	100	

f) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading, or 3) the group never obtained the information. Table 4f outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NQ).

SESS 1		A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%	
NR	03	75	01	5	100	00	00	04	5
WH	00	00	00	000	02	40	02	19	
NO	01	25	00	000	03	60	04	38	
TOTAL	04	100	01	5	100	05	100	10	5

SESS 2		A		B		C		TOTAL	
INFO	#	%	#	%	#	%	#	%	
NR	01	50	00	000	01	50	02	33	
WH	01	50	00	000	00	00	01	17	
NO	00	00	02	100	01	50	03	50	
TOTAL	02	100	02	100	02	100	06	100	

SESS 3		A		B		TOTAL	
INFO	#	%	#	%	#	%	
NR	01	100	00	000	01	100	
WH	00	000	00	000	00	000	
NO	00	000	00	000	00	000	
TOTAL	01	100	00	000	01	100	

g) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
PT doing little	A		C
pt won't discuss feelings			C
Wife concerned ab pt	A,B		C
Wife can't cope	A,B	C-Subjective	
children acting out		C-Subjective	A

SESSION 2 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
family too helpful	C	A-Subj	B
concerned trigger attack	A		B,C

SESSION 3 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
Dependant in ADL	A		

\* Please note all letters circled indicate that the group failed to record part not all of the necessary information. Thus half a mark was given.

h) Unnecessary/Misplaced: Table 4h outlines the number of times a group included unnecessary information under Objective which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Objective).

SESS 1 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	00	02	67	02	67	04	67
MISPL	00	00	01	33	01	33	02	33
TOTAL	00	00	03	100	03	100	06	100

SESS 2 UNNEC	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
IRREL	00	00	00	000	00	00	00	000
MISPL	00	00	04	100	00	00	04	100
TOTAL	00	00	04	100	00	00	04	100

SESS 3 UNNEC	A		B		TOTAL	
	#	%	#	%	#	%
IRREL	01	100	00	000	01	100
MISPL	00	000	00	100	00	000
TOTAL	01	100	00	100	01	000

i) Score: This section marked Objective has been given a score of 20 points as players must report the assessments performed and any important observations which will have a bearing on treating the patient. Although players must choose which assessments are necessary, it is very simple to report those assessments; since all the group has to do is to copy the results of each assessment. Some discrimination and decision is required in deciding which observations to report. The score for this section is calculated as follows:

- 1) For each correct assessment reported or planned the group gets one point. See section 4a.
- 2) For each reported assessment which is unnecessary or misplaced 1 point is subtracted from the score. See section 4d.
- 3) For each correct observation (not assessment) reported the group gets one point. See section 4e.
- 4) For each observation which is unnecessary or misplaced, 1 point is subtracted from the score. See section 4h.

SESSION 1 SCORE			SESSION 2 SCORE			SESSION 3 SCORE		
GROUP	INITIAL (/16)	FINAL (/20)	GROUP	INITIAL (/15)	FINAL (/20)	GROUP	INITIAL (/19)	FINAL (/20)
A	8.5	11	A	5.0	7	A	14	15
B	2.5	03	B	4.5	6	B	18	19
C	000	00	C	7.0	9			

j) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.  
 1 = Fair. Both clarity and method of presentation require improvement.  
 2 = Good. Either method of presentation or clarity could be improved.  
 3 = Excellent. Well written, and concise. No improvement required.

Table 4j outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	3	A	2	A	2
B	1	B	3	B	2
C	1	C	2		

5. ANALYSIS: This is where the occupational therapist can give a professional opinion based on information obtained and results of assessments. It is also the place to assess the effectiveness of the plan and recommend change in the treatment plan.

a) Count: Table 5a outlines the number of times each group included or failed to include a necessary point.

SESS 1 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	01	50	00	000	00	000	01	17
MISS	01	50	02	100	02	100	05	83
TOTAL	02	100	02	100	02	100	06	100

SESS 2 INFO	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	1.5	38	00	000	00	000	1.5	13
MISS	2.5	63	04	100	04	100	10.5	88
TOTAL	4.0	101	04	100	04	100	12.0	101

SESS 3 INFO	A		B		TOTAL	
	#	%	#	%	#	%
CORR	00	000	03	43	03	21
MISS	07	100	04	57	11	79
TOTAL	07	100	07	100	14	100

b) Insight: Each occupational therapist has his/her own style of writing and may stress certain factors more than others. This is particularly true for the section marked Analysis. Thus many different variations of this section are acceptable. Groups may have had important insights into the patient which have not been reported in the model report. THESE INSIGHTS HAVE THE POTENTIAL TO CHANGE THE MODEL REPORT. Therefore the table below provides a count of the number of excellent points a group may have put forward which were not included in the model report.

SESS 1	A		B		C		TOTAL	
INS	#	%	#	%	#	%	#	%
	00	00	01	100	01	100	02	100

SESS 2	A		B		C		TOTAL	
INS	#	%	#	%	#	%	#	%
	00	00	00	000	00	000	00	000

SESS 3	A		B		TOTAL	
INS	#	%	#	%	#	%
	00	000	00	000	00	000

c) Unnecessary/Misplaced: Table 5c outlines the number of times a group included unnecessary information which was either irrelevant/unclear/incorrect or reported under the wrong heading (i.e. should have been reported under a heading other than Analysis).

SESS 1	A		B		C		TOTAL	
UNNEC	#	%	#	%	#	%	#	%
IRREL	01	25	01	33	00	000	02	20
MISPL	03	75	02	67	03	100	08	80
TOTAL	04	100	03	100	03	100	10	100

SESS 2	A		B		C		TOTAL	
UNNEC	#	%	#	%	#	%	#	%
IRREL	00	00	00	00	00	00	00	00
MISPL	00	00	00	00	00	00	00	00
TOTAL	00	00	00	00	00	00	00	00

SESS 3	A		B		TOTAL	
UNNEC	#	%	#	%	#	%
IRREL	00	00	00	00	00	00
MISPL	00	00	00	00	00	00
TOTAL	00	00	00	00	00	00

d) Score: This section titled Analysis has been given a score of 10 points, since the group must analyze the information obtained and provide a concise professional opinion concerning the patient, his treatment, and his potential as a rehabilitation candidate. The score for this section is calculated as follows:

- 1) For each correct/important point put forward the group gets one point. See section 5a.
- 2) For each insightful point put forward the group is given one point. These are counted as bonus points. See section 5b.
- 3) For each observation which is unnecessary (incorrect) or misplaced, 1 point is subtracted from the score. See section 5c.

SESSION 1	SCORE		SESSION 2	SCORE		SESSION 3	SCORE	
	INITIAL	FINAL		INITIAL	FINAL		INITIAL	FINAL
GROUP	( /2)	( /10)	GROUP	( /4)	( /10)	GROUP	( /7)	( /10)
A	0	0	A	1.5	4	A	00	0
B	0	0	B	0	0	B	03	4
C	0	0	C	0	0			

e) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 5e outlines the rating each group received for this section.





SESS 2 GOALS	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
INAPPR	00	00	00	00	00	00	00	00
DANGER	00	00	00	00	00	00	00	00
MISPL	00	00	00	00	00	00	00	00
TOTAL	00	00	00	00	00	00	00	00

SESS GOALS	A		B		TOTAL	
	#	%	#	%	#	%
INAPPR	00	00	01	100	01	100
DANGER	00	00	00	00	00	00
MISPL	00	00	00	00	00	00
TOTAL	00	00	00	00	01	100

d) Score: This section titled Plan has been given a score of 30 points, since the group must analyze the information obtained and develop an OT treatment plan outlining the goals of treatment. The score for this section is calculated as follows:

- 1) For each necessary treatment goal put forward the group gets one point. See section 6a.
- 2) For each additional goal put forward the group is given one point. These are counted as bonus points. See section 6b.
- 3) For each goal which is inappropriate, dangerous, or misplaced information 1 point is subtracted from the score. See section 6c.

SESSION 1 GROUP	SCORE	
	INITIAL ( /15)	FINAL ( /30)
A	08	16
B	07	14
C	05	10

SESSION 2 GROUP	SCORE	
	INITIAL ( /14)	FINAL ( /30)
A	8.5	18
B	7.5	16
C	6.0	13

SESSION 3 GROUP	SCORE	
	INITIAL ( /09)	FINAL ( /30)
A	3.5	12
B	5.5	18

e) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 6e outlines the rating each group received for this section.

SESSION 1 GROUP	RATING
A	1
B	1
C	1

SESSION 2 GROUP	RATING
A	2
B	1
C	1

SESSION 3 GROUP	RATING
A	1
B	2

**OVERALL SCORE**

An overall score has been computed for each group for their report. The following marking scheme has been devised for the OT report.

90-100%	EXCELLENT
80-89%	VERY GOOD
70-79%	SATISFACTORY
60-69%	FAIR
0-59%	UNSATISFACTORY

The table below outlines the final score each group achieved. The score is calculated by adding up the scores each group obtained for each section. The final score is calculated out of 85.

<u>SESSION 1</u>	FINAL SCORE		RANK
<u>GROUP</u>	( /85)	PERCENTAGE	
A	50	59	UNSATISFACTORY
B	25	29	UNSATISFACTORY
C	26	31	UNSATISFACTORY

<u>SESSION 2</u>	FINAL SCORE		RANK
<u>GROUP</u>	( /85)	PERCENTAGE	
A	41	48	UNSATISFACTORY
B	33	39	UNSATISFACTORY
C	37	44	UNSATISFACTORY

<u>SESSION 3</u>	FINAL SCORE		RANK
<u>GROUP</u>	( /85)	PERCENTAGE	
A	52	61	FAIR
B	51	60	FAIR

OT U2

## RESULTS OF OCCUPATIONAL THERAPY REPORTS

<u>GROUP COMPOSITION:</u>	<u>SESSION 1</u>	<u>SESSION 2</u>	<u>SESSION 3</u>
	A = 32,23,28	A = 18,32,24	A = 32,17,38
	B = 24,17,36,19	B = 13,22,25,10	B = 10,30,19
	C = 22,18,38	C = 17,35,23	C = 25,33,23
	D = 10,26,11	E = 33,37,20	D = 28,24,22
	E = 13,35,31	F = 38,28,36	E = 16,15,26
	F = 37,30,16	G = 31,11,30	F = 36,20,31
	G = 25,20,12	H = 29,12,19	G = 18,11,29
	H = 15,33,29		H = 37,12,13

1. CASE HISTORY: Involves a brief description of the patient's medical history both past and present, age, sex, date of admission to hospital (if applicable), and any information pertaining to his medical condition.

a) Count: Table 1a outlines the number of times each group included or failed to include necessary information. (CORR = CORRECT, MISS = MISSING)

<u>SESS 1</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>TOTAL</u>
<u>INFO</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>
CORR	5.5/46	5.5/46	06/50	01/08	06/50	09/75	09/75	07/58	49/51
MISS	6.5/54	6.5/54	06/50	11/92	06/50	03/25	03/25	05/42	47/49
TOT	12 100	12 100	12 100	12 100	12 100	12 100	12 100	12 100	96 100

<u>SESS 2</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>TOTAL</u>
<u>INFO</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>
CORR	10/77	6.5/50	08/62	12/92	6.5/50	13/100	03/23	59/65
MISS	03/23	6.5/50	05/38	01/08	6.5/50	00/000	10/77	32/35
TOT	13 100	13 100	13 100	13 100	13 100	13 100	13 100	91 100

<u>SESS 3</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>TOTAL</u>
<u>INFO</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>
CORR	07/100	07/100	6.5/93	06/86	07/100	3.5/50	5.5/79	07/100	49.5/88
MISS	00/000	00/000	0.5/07	01/14	00/000	3.5/50	1.5/21	00/000	06.5/12
TOT	07 100	07 100	07 100	07 100	07 100	07 100	07 100	07 100	56 100

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Case History eg. Objective, Plan, etc.), or 3) the group never obtained the information. Table 1b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

<u>SESS 1</u>	<u>A</u>	<u>B</u>	<u>C</u>	<u>D</u>	<u>E</u>	<u>F</u>	<u>G</u>	<u>H</u>	<u>TOTAL</u>
<u>INFO</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>	<u># / %</u>
NR	6.5/100	6.5/100	06/100	05/45	06/100	03/100	03/100	05/100	41/87
WH	000/000	000/000	00/000	00/00	00/000	00/000	00/000	00/000	00/00
NO	000/000	000/000	00/000	06/55	00/000	00/000	00/000	00/000	06/13
TOT	6.5 100	6.5 100	06 100	11 100	06 100	03 100	03 100	05 100	47 100

SESS 2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/000	3.5/54	02/40	01/100	3.0/46	00/00	07/100	16.5/52
WH	00/000	000/00	00/00	00/000	0.5/08	00/00	00/000	00.5/02
NO	03/100	3.0/46	03/60	00/000	3.0/46	00/00	03/000	15.0/47
TOT	03 100	6.5 100	05 100	01 100	6.5 100	00 100	10 100	32.0 101

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/00	00/00	.5/100	01/100	00/00	3.5/100	1.5/100	00/00	6.5/100
WH	00/00	00/00	00/000	00/000	00/00	000/000	000/000	00/00	000/00
NO	00/00	00/00	00/000	00/000	00/00	000/000	000/000	00/00	000/00
TOT	00 00	00 00	.5 100	01 100	00 00	3.5 100	1.5 100	00 00	6.5 100

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
59 year old	D		
female	D		
homemaker	B,E,G		
diagnosis of loosening	D		
3 mos prior	A,B,C,E,F,G,H D		
Jan 23, 1986	A,D		
new total left hip	(A),D		
1979 osteoarthritis	B,C,E,F		D
L cup arthroplasty	A,B,C,E,H		D
full function	A,B,C,E,G,H		D
9 mos later	A,B,C,E,F,H		D
readmitted 15 mos	A,C,H		D

SESSION 2 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
37 years old	H		
female	H		
sero positive	H		
am stiffness	B,F,H	F-Sub	
effusions + tenderness	B,F,H		
XRAY no jt damage			A,B,C,F,H
periarticular swelling	E		A,B,C,F,H
demineralization			A,B,C,F,H
WBC + SER	(B),C,F,H		
steroids, etc.	B,C,F,H		

SESSION 3 INFORMATION	OBTAINED		
	NOT REPORTED	WRONG HEADING	NOT OBTAINED
chemistry explosion	(C),D,F		
Nov. 17, 1985	F,G		
surgery to amputate	F,G		
two inches proximal	F		

\* N.B. all letters circled indicate that the group failed to record part / not all of the necessary information. Thus half a mark was given.

d) Unnecessary/Misplaced: Table 1d outlines the number of times a group included unnecessary information in the Case History which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Case History).

SESS1	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
MISPL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
TOTAL	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00/00	00 00

SESS2	A	B	C	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
MISPL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
TOTAL	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00/00

SESS3	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	01/100	00/00	00/00	01/100	00/00	01/100	00/00	03/100
MISPL	00/00	00/000	00/00	00/00	00/000	00/00	00/000	00/00	00/000
TOTAL	00 00	01 100	00 00	00 00	01 100	00 00	01 100	00/00	03 100

e) Score: This section titled Case History has been given a score of 5 points, as much of the information included in this section is given to the group on the referral. For each piece of correct information reported (see section 1a) the group gets one point. For each piece of information which is irrelevant or misplaced (see section 1d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 5.

SESSION 1	SCORE		SESSION 2	SCORE		SESSION 3	SCORE	
	INITIAL	FINAL		INITIAL	FINAL		INITIAL	FINAL
GROUP	( /12)	( /5)	GROUP	( /13)	( /5)	GROUP	( /7)	( /5)
A	5.5	2	A	10.0	4	A	7	5
B	5.5	2	B	06.5	3	B	6	4
C	6.0	3	C	08.0	3	C	6.5	5
D	1.0	0	E	12.0	5	D	6	4
E	6.0	3	F	06.5	3	E	6	4
F	9.0	4	G	13.0	5	F	3.5	3
G	9.0	4	H	03.0	1	G	4.5	3
H	7.0	3				H	7	5

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 1f outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	1	A	3	A	2
B	1	B	3	B	1
C	1	C	2	C	2
D	0	E	2	D	3
E	3	F	3	E	3
F	3	G	2	F	1
G	2	H	2	G	2
H	3			H	3

2. SOCIAL HISTORY: Involves a brief description of the patient's social history, such as his marital status, work status, living arrangements, and description of family members.

a) Count: Table 2a outlines the number of times each group included or failed to include necessary information. (CORR = CORRECT, MISS = MISSING)

SESS1	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	2.5/42	0.5/08	3.5/58	0.5/08	0.5/08	00/000	3.5/58	05/83	16/33
MISS	3.5/58	5.5/92	2.5/42	5.5/92	5.5/92	06/100	2.5/42	01/17	32/67
TOT	6 100	6 100	6 100	6 100	6 100	6 100	6 100	6 100	48 100

SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	5.5/92	06/100	04/67	06/100	4.5/75	05/83	04/67	35/83
MISS	0.5/08	00/000	02/33	00/000	1.5/25	01/17	02/33	07/17
TOT	6.0 100	06 100	06/100	06/100	6 100	06 100	06/100	42 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	08/100	08/100	08/100	3.5/44	07/88	6.5/81	08/100	7.5/94	56.5/88
MISS	00/000	00/000	00/000	4.5/56	01/12	1.5/19	00/000	0.5/06	07.5/12
TOT	08 100	08 100	08 100	08 100	08 100	08 100	08 100	08 100	64 100

\* Please note that a mark of 0.5 is given when a group has failed to report all of the information obtained in a given move.

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Social History eg. Objective, Plan, etc.), or 3) the group never obtained the information. Table 2b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESSION 1	GROUP								
INFO	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	2.5/71	000/000	.5/20	000/000	000/000	0.5/08	0.5/20	00/000	04/12
WH	000/00	000/000	00/00	000/000	000/000	000/00	000/00	00/000	00/00
NO	1.0/29	5.5/100	2 /80	5.5/100	5.5/100	5.5/92	2.0/90	01/100	28/88
TOT	3.5 100	5.5 100	2.5 100	5.5 100	5.5 100	6 100	2.5 100	01 100	32 100

SESSION 2 INFO	GROUP								TOTAL
	A	B	C	E	F	G	H		
# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	0.5/100	00/00	02/100	00/00	1.5/100	01/100	0.5/25	5.5/79	
WH	000/000	00/00	00/000	00/00	000/000	00/000	000/00	000/00	
NO	000/000	00/00	00/000	00/00	000/100	00/000	1.5/75	1.5/21	
TOT	0.5 100	00 00	02 100	00 00	1.5 100	01 100	2 100	7.0 100	

SESSION 3 INFO	GROUP									TOTAL
	A	B	C	D	E	F	G	H		
# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/00	00/00	00/00	000/000	01/100	1.5/100	00/00	.5/100	03/40	
WH	00/00	00/00	00/00	000/000	00/000	000/000	00/00	00/000	00/00	
NO	00/00	00/00	00/00	4.5/100	00/000	000/000	00/00	00/000	4.5/60	
TOT	00 00	00 00	00 00	4.5 100	01 100	1.5/100	00/00	.5 100	7.5 100	

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1 INFORMATION	OBTAINED			NOT OBTAINED
	NOT REPORTED	WRONG HEADING		
recently remarried	(A)(C)(F)(G)			B, D, E, F
two sons				B, D, E, F
Calgary				A, B, D, E, F, G, H
husband works full time				B, C, D, E, F, G
draftsman	A			B, C, D, E, F
financially secure	A			B, D, E, F

SESSION 2 INFORMATION	OBTAINED			NOT OBTAINED
	NOT REPORTED	WRONG HEADING		
2 daughters	F			H
husband farmer	(F)			H
full time	C, G			
grade 6 teacher	(A)(C)(H)			

SESSION 3 INFORMATION	OBTAINED			NOT OBTAINED
	NOT REPORTED	WRONG HEADING		
34 year old wife	(E)(H)			D
real estate agent	F			D
two daughters				D
aged 8 and 10				D
workmen's comp.				D
University professor	E			

\* N.B. all letters circled indicate that the group failed to record part not all of the necessary information. Thus half a mark was given.

d) Unnecessary/Misplaced: Table 2d outlines the number of times a group included unnecessary information in the Case History which was either irrelevant (inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Social History).

SESS1	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/000	01/100	01/100	01/33	01/33	00/000	01/33	01/100	06/43
MISPL	01/100	00/000	00/000	02/67	02/67	01/100	02/67	00/000	08/57
TOTAL	01 100	01 100	01 100	03 100	03 100	01 100	03 100	01 100	14 100

SESS2	A	B	C	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	01/33	00/000	00/00	00/000	00/000	00/00	00/00	01/13
MISPL	02/67	02/100	00/00	01/100	02/100	00/00	00/00	07/88
TOTAL	03 100	02 100	00 00	01 100	02 100	00 00	00 00	08 101

SESS3	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	01/100	00/00	00/00	00/00	00/00	00/00	00/00	00/00	01 100
MISPL	00/000	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00 000
TOTAL	01 100	00/00	00 00	00 00	00 00	00 00	00 00	00 00	01 100

e) Score: This section marked Social History has been given a score of 10 points, as players must gather the necessary information from one or two sources. For each piece of correct information reported (see section 2a) the group gets one point. For each piece of information which is unnecessary or misplaced (see section 2d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 10.

SESSION 1 SCORE			SESSION 2 SCORE			SESSION 3 SCORE		
GROUP	INITIAL ( /6)	FINAL ( /10)	GROUP	INITIAL ( /6)	FINAL ( /10)	GROUP	INITIAL ( /8)	FINAL ( /10)
A	1.5	3	A	2.5	4	A	7	9
B	0.0	0	B	4.0	7	B	8	10
C	2.5	4	C	4.0	7	C	8	10
D	0.0	0	E	5.0	8	D	3.5	4
E	0.0	0	F	2.5	4	E	7	9
F	0.0	0	G	5.0	8	F	6.5	8
G	0.5	1	H	4.0	7	G	8	10
H	4.0	7				H	7.5	9

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
- 1 = Fair. Both clarity and method of presentation require improvement.
- 2 = Good. Either method of presentation or clarity could be improved.
- 3 = Excellent. Well written, and concise. No improvement required.

Table 2f outlines the rating each group received for this section.



SESSION 1	
GROUP	RATING
A	1
B	1
C	1
D	2
E	1
F	1
G	2
H	3

SESSION 2	
GROUP	RATING
A	2
B	2
C	2
E	2
F	2
G	2
H	3

GROUP	RATING
A	2
B	3
C	2
D	2
E	3
F	1
G	2
H	2

3. SUBJECTIVE: Refers to that information which the patient tells the therapist.

a) Count: Table 3a outlines the number of times each group included or failed to include necessary information. (CORR = CORRECT, MISS = MISSING)

SESS1	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	02/25	03/38	03/38	03/38	02/25	03/38	03/38	05/62	24/37
MISS	06/75	05/62	05/62	05/62	06/75	05/62	05/62	03/38	40/63
TOT	08 100	08 100	08 100	08 100	08/100	08 100	08 100	08 100	64 100

SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	04/57	04/57	04/57	3.5/50	01/14	02/29	02/29	19.5/40
MISS	03/43	03/43	03/43	3.5/50	06/86	05/71	05/71	29.5/60
TOT	07 100	07 100	07 100	07 100	07/100	07 100	07 100	49.0 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	02/50	01/25	03/75	02/50	03/75	0.5/13	03/75	02/50	16.5/52
MISS	02/50	03/75	01/25	02/50	01/25	3.5/88	01/25	02/50	15.5/48
TOT	04 100	04 100	04 100	04 100	04/100	4.0 101	04 100	04/100	32 100

b) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Subjective eg. Objective, Plan, etc.), or 3) the group never obtained the information. Table 3b outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESS1	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/00	02/40	02/40	00/00	01/17	01/20	00/00	00/000	06/15
WH	03/50	00/00	00/00	02/40	02/33	01/20	02/40	00/000	10/25
NO	03/50	03/60	03/60	03/60	03/50	03/60	03/60	03/100	24/60
TOT	06 100	05 100	05 100	05 100	06 100	05 100	05 100	03 100	40 100

SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	01/25	00/000	00/000	0.5/14	01/17	00/00	02/40	4.5/15
WH	00/00	00/000	00/000	000/00	02/33	02/40	00/00	4.0/14
NO	03/75	03/100	03/100	3.0/86	03/50	03/60	03/60	21.0/71
TOT	04 100	03 100	03 100	3.5 100	06 100	05 100	05 100	29.5 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/00	02/67	01/100	00/00	01/100	1.5/43	00/00	01/50	6.5/42
WH	01/50	00/00	00/000	01/50	00/000	1.0/29	00/000	00/00	3.0/19
NO	01/50	01/33	00/000	01/50	00/000	1.0/29	01/100	01/50	6.0/39
TOT	02 100	03 100	01 100	02 100	01 100	3.5 101	01 100	02 100	15.5 100

c) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1	INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
	resp for cooking, et	C	A-O, D-S, E-O G-SH,	
	can't resume alone			A, B, C, D, E, F, G, H A, B, C, D, E, F, G, H
	no one to help hobbies	C	A-S+O, D-S+O, E-SH +O, F-SH, G-SH,	A, B, C, D, E, F, G, H
	scared to move leg unsure what can do	B B, E, F	A-O,	

SESSION 2	INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
	complains of pain			A, B, C, E, F, G, H
	tingling			A, B, C, E, F, G, H
	loss of independence			A, B, C, E, F, G, H
	return to work	A,		
	need income	(E), F, H		
	children helpful	H	F-SH, G-SH+Obj	
	husband not helpful		F-SH, G-Obj	

SESSION 3	INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
	not using stump	B, H	F-Obj, D-Obj	
	stump hypersens/	C, F	A-Obj	
	wants bionic hand	E		A, B, D, F, G, H
	d/c from hosp ASAP	B, (F)		

d) Unnecessary/Misplaced: Table 3d outlines the number of times a group included unnecessary information in Subjective which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Subjective).

SESS1	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/000	00/00	00/00	00/00	00/00	00/00	00/00	00/000
MISPL	00/00	01/100	00/00	00/00	00/00	00/00	00/00	00/00	01/100
TOTAL	00 00	01 100	00 00	00 00	00 00	00 00	00 00	00 00	01 100

SESS2	A	B	C	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/000	00/00	00/00	00/000	00/00	00/00	00/000
MISPL	00/00	00/000	00/00	00/00	01/100	00/00	00/00	01/100
TOTAL	00 00	00 000	00 00	00 00	01 100	00 00	00 00	01 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
MISPL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
TOTAL	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00	00 00

e) Score: This section marked Subjective has been given a score of 10 points. For each piece of correct information reported (see section 3a) the group gets one point. For each piece of information which is unnecessary (see section 3d) 1 point is subtracted from their score (lowest score is zero). The score is then calculated over 10.

SESSION 1 SCORE			SESSION 2 SCORE			SESSION 3 SCORE		
GROUP	INITIAL ( /8)	FINAL ( /10)	GROUP	INITIAL ( /7)	FINAL ( /10)	GROUP	INITIAL ( /4)	FINAL ( /10)
A	2	3	A	4.0	6	A	2	5
B	2	3	B	4.0	6	B	1	3
C	3	4	C	4.0	6	C	3	8
D	3	4	E	3.5	5	D	3	8
E	2	3	F	0.0	0	E	3	8
F	3	4	G	2.0	3	F	0.5	1
G	3	4	H	2.0	3	G	3	8
H	5	6				H	2	5

f) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.
  - 1 = Fair. Both clarity and method of presentation require improvement.
  - 2 = Good. Either method of presentation or clarity could be improved.
  - 3 = Excellent. Well written, and concise. No improvement required.
- Table 3f outlines the rating each group received for this section.

SESSION 1	
GROUP	RATING
A	1
B	1
C	1
D	2
E	2
F	2
G	2
H	2

SESSION 2	
GROUP	RATING
A	2
B	2
C	2
E	2
F	1
G	2
H	2

SESSION 3	
GROUP	RATING
A	2
B	2
C	2
D	3
E	3
F	1
G	1
H	2

4. **OBJECTIVE:** Under this heading evaluation (assessment) results and observations are recorded, as well as patient's progress in therapy. (Please note that Patient Interview is not reported under the heading Objective).

a) **Count:** The following table outlines the number of correct assessments (as determined by the model report) that each group reported. If a group failed to perform a necessary assessment, however they included this in their plan than it has been recorded in the table. (REP = REPORTED, IP = IN PLAN, MISS = MISSING).

SESS1	A	B	C	D	E	F	G	H	TOTAL
NEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
REP	4.5/45	04/40	4.5/45	06/60	4.5/45	3.5/35	3.5/35	05/50	35.5/44
IP	000/00	00/00	000/00	00/00	000/00	000/00	000/00	00/00	0000/00
MIS	5.5/55	06/60	5.5/55	04/40	5.5/55	6.5/65	6.5/65	05/50	44.5/56
TOT	10 100	10 100	10 100	10 100	10 100	10 100	10 100	10 100	80 100

SESS2	A	B	C	E	F	G	H	TOTAL
NEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
REP	08/62	8.5/65	07/54	8.5/65	05/38	5.5/42	08/62	50.5/55
IP	00/00	000/00	00/00	000/00	00/00	000/00	00/00	0000/00
MIS	05/38	4.5/35	06/46	4.5/35	08/62	7.5/58	05/38	40.5/45
TOT	13 100	13 100	13 100	13 100	13 100	13 100	13 100	91.0 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
NEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
REP	11/100	10/91	11/100	10.5/95	6.5/59	09/82	8.5/77	10/91	76.5/87
IP	00/000	00/00	00/000	000/00	00/00	00/00	00/00	00/00	0000/00
MIS	00/000	01/09	00/000	0.5/05	4.5/41	02/18	2.5/23	01/09	11.5/13
TOT	11/100	11 100	11/100	11 100	11 100	11 100	11 100	11 100	88 100

b) **MISSING:** Among those necessary assessments missing, a group may have: 1) failed to perform it (NP); 2) performed it but failed to report it (NR); or 3) reported it under the wrong heading (WH).

SESSION 1	GROUP								
MISS	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	1.5/27	2/33	2.5/45	01/25	0.5/09	1.5/23	0.5/08	00/000	9.5/21
WH	000/00	0/00	000/00	00/00	000/00	000/00	000/00	00/000	00/00
NP	4.0/73	4/67	3.0/55	03/75	5.0/91	5.0/77	6.0/92	05/100	35/79
TOT	5.5 100	6 100	5.5 100	04 100	5.5 100	6.5 100	6.5 100	05 100	44.5 100

SESSION 2								GROUP
MISS	A	B	C	E	F	G	H	TOTAL
# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	01/20	1.5/33	02/33	1.5/33	04/50	0.5/07	04/80	14.5/36
WH	00/00	000/00	00/00	000/00	00/00	00/000	00/00	0000/00
NP	04/80	3.0/67	04/67	3.0/67	04/50	7.0/93	01/20	26.0/64
TOT	05 100	4.5/100	06 100	4.5 100	08 100	7.5 100	05 100	40.5 100

SESSION 3								GROUP	
MISS	A	B	C	D	E	F	G	H	TOTAL
# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	00/00	00/000	00/00	.5/100	0.5/11	01/50	1.5/60	00/000	3.5/30
WH	00/00	00/000	00/00	00/000	000/00	00/00	000/00	00/000	00/00
NP	00/00	01/100	00/00	00/000	4.0/89	01/50	1.0/40	01/100	8.0/70
TOT	00 00	01 100	00 00	.5 100	4.5 100	02 100	2.5 100	01 100	11.5/100

c) DESCRIPTION: Table 4c outlines those missing assessments performed by a particular group, but either not reported or reported under the wrong heading. In addition if an assessment was reported under the wrong heading, then the heading under which it was reported is provided.

ASSESSMENT	SESSION 1		
	NOT REPORTED	PERFORMED WRONG HEADING	NOT PERFORMED
ROM	C, D, E, F		B, H
MS	A, B, C		D, E, F, G, H
Coord/Balance	B		A, C, D, G, H
Mobility	A, B, C, F, G		
Endurance			A, B, C, E, F, G, H
Transfers	D, F		B
Bedroom			A, C, E, F, G
Bathing	A, B, C, D		G
Dressing			E, F
Grooming			A, B, D, E, F, G, H

ASSESSMENT	SESSION 2		
	NOT REPORTED	PERFORMED WRONG HEADING	NOT PERFORMED
ROM	B, C, E, F, H		
MS	E, F, H		A, C, G
Coord/Balance			A, B, C, E, F, G, H
Sensation	B, C, F		E
Hand Function	A, B, E, F		
Endurance	H		A, B, C, E, G
Communication	A, G, H		F
Kitchen	C, H		
Bedroom	C		A, B, F, G
Bathing	F		G
Eating	D, H		
Dressing	D, H		G
Grooming	H		C, F, G

ASSESSMENT	PERFORMED		
	NOT REPORTED	WRONG HEADING	NOT PERFORMED
Coord/Balance	(D)		B, E, F, G, H
Hand Function			E
Endurance	G		E
Communication			E
Sensation	(E)		
Eating	(F)		
Dressing	(G)		

\* N.B. all letters circled indicate that the group failed to record part not all. of the necessary assessment. Thus half a mark was given.

d) UNNECESSARY: Table 4d outlines the number of unnecessary assessments performed and how many were reported or not. It is better not to report those assessments which are unnecessary. (REP = REPORTED, NREP = NOT REPORTED).

SESS1	A		B		C		D		E		F		G		H		TOTAL	
UNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
REP	01	100	01	100	00	00	01	100	01	100	01	100	01	100	01	100	07	100
NREP	00	000	00	000	00	000	00	000	00	000	00	000	00	000	00	000	00	000
TOT	01	100	01	100	00	00	01	100	01	100	01	100	01	100	01	100	07	100

SESS2	A		B		C		E		F		G		H		TOTAL	
UNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
REP	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
NREP	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00
TOT	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00	00

SESS3	A		B		C		D		E		F		G		H		TOTAL	
UNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
REP	03	75	03	100	02	67	03	100	01	100	02	100	01	100	01	100	16	89
NREP	01	25	00	000	01	33	00	000	00	000	00	000	00	000	00	000	02	11
TOT	04	100	03	100	03	100	03	100	01	100	02	100	01	100	01	100	18	100

e) Observations of others: Included under the heading of Objective is important observations noted by others. Table 4e outlines the number of times each group included or failed to include important information. (N.B. some of these observations may be reported under other acceptable headings, they are dealt with under this heading for scoring purposes.)

SESS1	A		B		C		D		E		F		G		H		TOTAL	
INFO	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CORR	00	000	00	000	00	000	00	000	00	000	00	000	01	20	00	000	01	03
MISS	05	100	05	100	05	100	05	100	05	100	05	100	04	80	05	100	39	98
TOT	05	100	05	100	05	100	05	100	05	100	05	100	05	100	05	100	40	100

SESS2	A		B		C		E		F		G		H		TOTAL	
INFO	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CORR	00	000	00	000	00	000	00	000	00	000	00	000	00	000	00	000
MISS	04	100	04	100	04	100	04	100	04	100	04	100	04	100	28	100
TOT	04	100	04	100	04	100	04	100	04	100	04	100	04	100	28	100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	01/20	03/60	04/80	04/80	02/40	02/40	02/40	01/20	19/48
MISS	04/80	02/40	01/20	01/20	03/60	03/60	03/60	04/80	21/53
TOT	05 100	05 100	05 100	05 100	05 100	05 100	05 100	05 100	40 101

f) Reason: There are three reasons why information could have been missing under this category: 1) the group had collected the information but failed to report it, 2) the group reported the information under the wrong heading (a heading other than Objective eg. Plan, Case history, etc.), or 3) the group never obtained the information. Table 4f outlines which missing information was collected but not reported (NR), reported under the wrong heading (WH), or never collected (NO).

SESS1	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	01/20	03/60	00/000	00/000	00/000	00/000	00/000	00/00	04/10
WH	00/00	00/00	00/000	00/000	00/000	00/000	00/000	01/20	01/03
NO	04/80	02/40	05/100	05/100	05/100	05/100	04/100	04/80	34/87
TOT	05 100	05 100	05 100	05 100	05 100	05 100	04 100	05 100	39 100

SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	02/50	01/25	00/000	01/25	01/25	02/50	00/000	07/25
WH	00/00	00/00	00/000	01/25	00/00	00/00	00/000	01/04
NO	02/50	03/75	04/100	02/50	03/75	02/50	04/100	20/71
TOT	04 100	04 100	04 100	04 100	04 100	04 100	04 100	28 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
NR	04/100	02/100	01/100	01/100	03/100	03/100	02/67	04/100	20/95
WH	00/000	00/000	00/000	00/000	00/000	00/000	00/00	00/000	00/00
NO	00/000	00/000	00/000	00/000	00/000	00/000	01/33	00/000	01/05
TOT	04 100	02 100	01 100	01 100	03 100	03 100	03 100	04 100	21 100

g) Missing: The chart below outlines which information was missing, who missed it, whether or not it was obtained, and if obtained whether or not it was reported.

SESSION 1 INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
remaining in bed	B		A,C,D,E,F,G,H
dependant on nurse	B		A,C,D,E,F,G,H
not appear disabled	B		A,C,D,E,F,G,H
husband will help	A		B,C,D,E,F,G,H
homemaker provided		H-ASS.	A,B,C,D,E,F

SESSION 2 INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
Loss of appetite lost 15 pounds			A,B,C,E,F,G,H
entitled to services	A,B,E,G		A,B,C,E,F,G,H
husb not understand	A,F,G	E-SH	C,F,H B,C,H

SESSION 3 INFORMATION	NOT REPORTED	OBTAINED WRONG HEADING	NOT OBTAINED
Pt doing little	A,B,C,D,E,F,H		G
Wife concerned ab pt	A,B,F,G,H		
Wife can't cope	A,E,H		
children acting out	A,E,F,G,H		

h) Unnecessary/Misplaced: Table 4h outlines the number of times a group included unnecessary information under Objective which was either irrelevant (or inappropriate to include in the OT report) or misplaced (that is this information should have been reported under another heading and not under the heading Objective).

SESS1	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	01/14	00/00	00/00	00/00	01/33	00/00	00/00	00/00	02/18
MISPL	06/86	00/00	00/00	01/100	02/67	00/00	00/00	00/00	09/82
TOT	07 100	00 00	00 00	01 100	03 100	00 00	00 00	00 00	11 100

SESS2	A	B	C	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/00	00/00	00/00	00/00	03/60	00/00	03/25
MISPL	00/00	06/100	00/00	00/00	00/00	02/40	01/100	09/75
TOT	00 00	06 100	00 00	00 00	00 00	05 100	01 100	12 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
UNNEC	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
IRREL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/00
MISPL	04/100	00/00	00/00	00/00	02/100	02/100	00/00	00/00	08/100
TOT	04 100	00 00	00 00	00 00	02 100	02 100	00 00	00 00	08 100

\*N.B. some information is neutral, that is it is acceptable to incorporate this information into the report even though it was not reported in the model report. Therefore the group is not penalized.

i) Score: This section marked Objective has been given a score of 20 points as players must report the assessments performed and any important observations which will have a bearing on treating the patient. Although players must choose which assessments are necessary, it is very simple to report those assessments; since all the group has to do is to copy the results of each assessment. Some discrimination and decision is required in deciding which observations to report. The score for this section is calculated as follows:

- 1) For each correct assessment reported or planned the group gets one point See section 4a.
- 2) For each reported assessment which is unnecessary or misplaced 1 point is subtracted from the score. See section 4d.
- 3) For each correct observation (not assessment) reported the group





SESS3	A		B		C		D		E		F		G		H		TOTAL	
INFO	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CORR	00	00	01	50	1.5	75	01	50	00	000	1.5	75	01	50	0.5	25	6.5	41
MISS	02	100	01	50	0.5	25	01	50	02	100	0.5	25	01	50	1.5	75	9.5	59
TOT	02	100	02	100	02	100	02	100	02	100	02	100	02	100	02	100	16	100

b) Insight: Each occupational therapist has his/her own style of writing and may stress certain factors more than others. This is particularly true for the section marked Analysis. Thus many different variations of this section are acceptable. Groups may have had important insights into the patient which have not been reported in the model report. THESE INSIGHTS HAVE THE POTENTIAL TO CHANGE THE MODEL REPORT. Therefore the table below provides a count of the number of excellent points a group may have put forward which were not included in the model report.

SESS1	A		B		C		D		E		F		G		H		TOTAL	
IN	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
	00	000	00	000	00	000	00	000	00	000	00	000	00	000	00	000	00	000

SESS2	A		B		C		E		F		G		H		TOTAL	
IN	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
	00	000	01	100	01	100	01	100	00	000	00	000	01	100	04	100

SESS3	A		B		C		D		E		F		G		H		TOTAL	
IN	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
	00	000	01	100	00	000	00	000	00	000	00	000	00	000	00	000	01	100

c) Unnecessary/Misplaced: Table 5c outlines the number of times a group included unnecessary information which was either irrelevant/unclear/incorrect or reported under the wrong heading (i.e. should have been reported under a heading other than Analysis).

SESS1	A		B		C		D		E		F		G		H		TOTAL	
UNNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
IRREL	00	000	00	000	00	00	00	00	00	00	01	20	03	60	00	000	04	24
MISPL	03	100	02	100	00	00	00	00	00	00	04	80	02	40	02	100	13	76
TOTAL	03	100	02	100	00	00	00	00	00	00	05	100	05	100	02	100	17	100

SESS2	A		B		C		E		F		G		H		TOTAL	
UNNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
IRREL	00	000	00	00	00	000	00	000	01	100	00	000	00	00	01	09
MISPL	05	100	00	00	01	100	02	100	00	000	02	100	00	00	10	91
TOTAL	05	100	00	00	01	100	02	100	01	100	02	100	00	00	11	100

SESS3	A		B		C		D		E		F		G		H		TOTAL	
UNNEC	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
IRREL	01	50	00	00	00	00	00	00	00	00	00	00	00	00	00	00	01	13
MISPL	01	50	00	00	00	00	03	100	03	100	00	00	00	00	00	00	07	88
TOTAL	02	100	00	00	00	00	03	100	03	100	00	00	00	00	00	00	08	101

d) Score: This section titled Analysis has been given a score of 10 points, since the group must analyze the information obtained and



SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	5.5/37	04/27	4.5/30	04/27	03/20	05/33	04/27	30/29
MISS	9.5/63	11/73	10.5/70	11/73	12/80	10/67	11/73	75/71
TOT	15 100	15 100	15 100	15 100	15 100	15 100	15 100	105 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	5.5/37	7.5/50	08/53	06/40	7.5/50	07/47	08/53	06/40	55.5/46
MISS	9.5/63	7.5/50	07/47	09/60	7.5/50	08/53	07/53	09/60	64.5/54
TOT	15 100	15 100	15 100	15 100	15 100	15 100	15 100	15 100	120 100

b) Additional Goals: Since the "model" report is only a model; there are many other goals which may be appropriate. The table below provides a count of the number of excellent (creative) goals a group may have put forward which were not included in the model report. THESE GOALS HAVE THE POTENTIAL TO CHANGE THE MODEL REPORT.

SESSION 1	GROUP								TOTAL
ADD'L	A	B	C	D	E	F	G	H	
	00	00	00	00	00	00	00	00	00

SESSION 2	GROUP								TOTAL
ADD'L	A	B	C	E	F	G	H		
	00	00	00	01	00	00	00	01	

SESSION 3	GROUP								TOTAL
ADD'L	A	B	C	D	E	F	G	H	
	01	01	00	01	02	03	01	01	10

c) Inappropriate: Table 6c outlines the number of times a group included goals which were inappropriate (unclear), dangerous, or misplaced information (reported under the wrong heading of PLAN).

SESS1	A	B	C	D	E	F	G	H	TOTAL
GOALS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
INAPP	00/00	00/000	00/00	00/00	00/00	00/00	00/00	00/00	00/000
DANGR	00/00	01/100	00/00	00/00	00/00	00/00	00/00	00/00	01/100
MISPL	00/00	00/000	00/00	00/00	00/00	00/00	00/00	00/00	00/000
TOTAL	00 00	01 100	00 00	00 00	00 00	00 00	00 00	00 00	01 100

SESS2	A	B	C	E	F	G	H	TOTAL
GOALS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
INAPP	00/00	00/000	00/00	00/00	01/50	01/100	02/50	04/50
DANGR	00/00	01/100	00/00	00/00	01/50	00/000	02/50	04/50
MISPL	00/00	00/000	00/00	00/00	00/00	00/000	00/00	00/000
TOTAL	00 00	01 100	00 00	00 00	02 100	01 100	04 100	08 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
GOALS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
INAPP	01/100	00/00	00/00	00/00	00/00	00/00	00/00	01/100	02/100
DANGR	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/000	00/000
MISPL	00/00	00/00	00/00	00/00	00/00	00/00	00/00	00/000	00/000
TOTAL	01 100	00 00	00 00	00 00	00 00	00 00	00 00	01 100	02 100

d) Score: This section titled Plan has been given a score of 30 points, since the group must analyze the information obtained and develop an OT treatment plan outlining the goals of treatment. The score for this section is calculated as follows:

- 1) For each necessary treatment goal put forward the group gets one point. See section 6a.
- 2) For each additional goal put forward the group is given one point. These are counted as bonus points. See section 6b.
- 3) For each goal which is inappropriate, dangerous, or misplaced information 1 point is subtracted from the score. See section 6c.

SESSION 1			SESSION 2			SESSION 3		
GROUP	SCORE		GROUP	SCORE		GROUP	SCORE	
	INITIAL ( /10)	FINAL ( /30)		INITIAL ( /15)	FINAL ( /30)		INITIAL ( /15)	FINAL ( /30)
A	2.0	6	A	5.5	11	A	05.5	11
B	0.0	0	B	3.0	06	B	08.5	17
C	2.0	6	C	4.5	09	C	08	16
D	0.5	2	E	5.0	10	D	07	14
E	2.0	6	F	1.0	02	E	09.5	19
F	3.5	11	G	4.0	08	F	10	20
G	2.0	6	H	0.0	00	G	09	18
H	3.5	11				H	06	12

e) Presentation/Clarity: A rating scheme has been devised to assess the clarity and method of presentation of the information for each section of the report. Rating:

- 0 = Poor. Difficult to understand, method of presentation poor.  
 1 = Fair. Both clarity and method of presentation require improvement.  
 2 = Good. Either method of presentation or clarity could be improved.  
 3 = Excellent. Well written, and concise. No improvement required.

Table 6e outlines the rating each group received for this section.

SESSION 1		SESSION 2		SESSION 3	
GROUP	RATING	GROUP	RATING	GROUP	RATING
A	1	A	2	A	1
B	1	B	2	B	2
C	1	C	2	C	2
D	0	E	2	D	2
E	2	F	2	E	2
F	2	G	2	F	2
G	1	H	2	G	2
H	2			H	2

#### OVERALL SCORE

An overall score has been computed for each group for their report. The following marking scheme has been devised for the OT report.

90-100%	EXCELLENT
80-89%	VERY GOOD
70-79%	SATISFACTORY
60-69%	FAIR
0-59%	UNSATISFACTORY

The table below outlines the final score each group achieved. The score is calculated by adding up the scores each group obtained for each

section. The final score is calculated out of 85.

<u>SESSION 1</u>			
GROUP	FINAL SCORE		RANK
	( /85)	PERCENTAGE	
A	14	16%	UNSATISFACTORY
B	09	11%	UNSATISFACTORY
C	26	31%	UNSATISFACTORY
D	11	13%	UNSATISFACTORY
E	16	19%	UNSATISFACTORY
F	22	26%	UNSATISFACTORY
G	20	24%	UNSATISFACTORY
H	32	38%	UNSATISFACTORY

<u>SESSION 2</u>			
GROUP	FINAL SCORE		RANK
	( /85)	PERCENTAGE	
A	34	40%	UNSATISFACTORY
B	32	38%	UNSATISFACTORY
C	33	39%	UNSATISFACTORY
E	38	45%	UNSATISFACTORY
F	15	18%	UNSATISFACTORY
G	25	29%	UNSATISFACTORY
H	26	31%	UNSATISFACTORY

<u>SESSION 3</u>			
GROUP	FINAL SCORE		RANK
	( /85)	PERCENTAGE	
A	36	42	UNSATISFACTORY
B	57	67	FAIR
C	63	74	SATISFACTORY
D	44	52	UNSATISFACTORY
E	47	55	UNSATISFACTORY
F	49	58	UNSATISFACTORY
G	56	66	FAIR
H	47	55	UNSATISFACTORY

Appendix I  
Raw Data for Information Sheets

OT U3

## RESULTS OF INFORMATION SHEETS

GROUP COMPOSITION:	SESSION 1	SESSION 2	SESSION 3
	A = 1,2,3	A = 4,7	A = 3,5,6,9
	B = 7,8,9	B = 2,5,9	B = 2,4,8
	C = 4,5,6.	C = 3,6,8	

1. **REASON:** Players were expected to record their reason (rationale) behind each move executed in the game.

a) **Count:** Table 1a outlines the number of times each group either recorded (PRES) or failed to record (ABS) their reason for a move.

	GROUP							
	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
PRES	17	100	17	100	10	100	44	100
ABS	00	000	00	000	00	000	00	000
TOT	17	100	17	100	10	100	44	100

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
PRES	20	100	28	100	24	100	72	100
ABS	00	000	00	000	00	000	00	000
TOT	20	100	28	100	24	100	72	100

	A		B		TOTAL	
	#	%	#	%	#	%
PRES	17	100	17	100	34	100
ABS	00	000	00	000	00	000
TOT	17	100	17	100	34	100

b) **Type:** Table 1b outlines how many different types of reasons were put forward by each group.

Rating: 0 = unsound, ridiculous reason, missing.

1 = somewhat appropriate, requires clarification.

2 = good, rational reason.

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	00	00	01	06	00	00	01	02
1	11	65	09	53	02	20	22	50
2	06	35	07	41	08	80	21	48
	17	100	17	100	10	100	44	100

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	01	05	02	07	01	04	04	06
1	06	30	11	39	19	79	36	50
2	13	65	15	54	04	17	32	44
	20	100	28	100	24	100	72	100

	A		B		TOTAL	
	#	%	#	%	#	%
0	03	18	00	00	03	09
1	09	53	05	29	14	41
2	05	29	12	71	17	50
	17	100	17	100	34	100

2. **DISAGREEMENTS:** Each player was responsible for his own move.

However, other players could disagree and were expected to record their disagreement.

a) **Count:** Table 2a outlines the number of disagreements recorded (PRES) or not (ABS) by each group.



SESS 1	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
PRES	02	12	00	00	02	20	04	09
ABS	15	88	17	100	08	80	40	91
	17	100	17	100	10	100	44	100

SESS 2	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
PRES	00	000	02	07	06	25	08	11
ABS	20	100	26	93	18	75	64	89
	20	100	28	100	24	100	72	100

SESS 3	A		B		TOTAL	
	#	%	#	%	#	%
PRES	05	29	01	06	06	18
ABS	12	71	16	94	28	82
	17	100	17	100	34	100

b) Type: Table 2b outlines how many different types of disagreements were put forward by each group.

Rating: 0 = inappropriate, or unclear.

1 = suggestion appropriate; however, original move appropriate.

2 = appropriate, original move inappropriate.

SESS 1	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	02	100	00	00	00	00	02	50
1	00	00	00	00	02	100	02	50
2	00	00	00	00	00	00	00	00
	02	100	00	00	02	100	04	100

SESS 2	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	00	00	01	50	01	17	02	25
1	00	00	00	50	01	17	01	13
2	00	00	01	50	04	67	05	63
	00	00	02	100	06	101	08	101

SESS 3	A		B		TOTAL	
	#	%	#	%	#	%
0	01	20	01	100	02	33
1	01	20	00	000	01	17
2	03	60	00	000	03	50
	05	100	01	100	06	100

c) Description: Table 2c provides a more detailed description of the disagreements. Included in the description is the identity of the subject(s) who disagreed; whether or not it was possible to pursue the disagreement (in certain cases an alternative suggestion was put forward); if the disagreement was followed-up (where applicable); the identity of the subject who followed it up; and when it was followed up.

SESSION 1			FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	*WHEN	WHO
A	0	2	No	-	-	-
A	0	2	No	-	-	-
C	1	?(5,6)	Yes	Yes	*steps 2,4	6,5
C	1	4	No	-	-	-

\* refers to the number of steps after the disagreement was lodged that it was followed up.

SESSION 2			FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	WHEN	WHO
B	0	2,5	NO			
B	2	?2,9	NO			
C	2	?3,6	YES	YES	step 1	6,4
C	0	?6,8	YES	YES	steps 1,2	8,6

C	1	73,8	YES	*NO		
				*YES	step 5	8
C	2	76,8	YES	*NO		
				*YES	step 2	6
C	2	73,6	YES	*YES	step 3	8
				*YES	step 2	3
C	2	76,8	YES	*YES	step 4	6
				*YES	step 2	6
				*YES	step 3	3

\*More than one suggestion made.

SESSION 3			*FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	*WHEN	WHO
A	2	73,5,9	YES	YES	1st step	3
A	0	75,6,9	NO			
A	2	73,6,9	YES	YES	1st step	6
A	1	73,5,9	YES	YES	1st step	3
A	2	75,6,9	NO			
B	2	4	NO			

3. **INFORMATION:** Refers to the information collected (from the PIB) during the game as a result of the actions of the players. Players were expected to record the information obtained.

a) **Count:** Table 3a outlines the number of times each group recorded (COMP) or failed (INCOM) to record all the information presented to them during a particular move.

SESS 1	A	B	C	TOTAL
INFO	# %	# %	# %	# %
COMP	16 94	11 65	09 90	36 82
INCOM	01 06	06 35	01 10	08 18
	17 100	17 100	10 100	44 100

SESS 2	A	B	C	TOTAL
INFO	# %	# %	# %	# %
COMP	14 70	23 82	23 96	60 83
INCOM	06 30	05 18	01 04	12 17
	20 100	28 100	24 100	72 100

SESS 3	A	B	TOTAL
INFO	# %	# %	# %
COMP	17 100	13 76	30 88
INCOM	00 000	04 24	04 12
	17 100	17 100	34 100

4. **MOVES:** Moves via action cards which each group carried out, during the play of the game.

a) **Count:** Table 4a outlines the number of different moves/actions each group carried out. In the case of "Telephone Calls" only those calls which were successful (that is, resulted in access to information) have been included in this table.

SESSION 1	A	B	C
NUMBER OF:	A	B	C
ASSESSMENTS	8	4	4
CONSULTATIONS	5	8	4
TELEPHONE	4	5	2
TAXI	0	0	0
TOTAL MOVES	17	17	10

SESSION 2	A	B	C
# OF:	A	B	C
ASSES	07	12	17
CONS	09	11	06
PHONE	03	04	01
TAXI	01	01	00
TOTAL	20	28	24

SESSION 3	A	B
# OF:	A	B
ASSES	05	04
CONS	08	09
PHONE	04	04
TAXI	00	00
TOTAL	17	17

5. RELEVANT INFORMATION: Basically there are two types of information available in this game. Information obtained from others via use of "consultation, telephone, and taxi" action cards; and information obtained from OT via assessments. For these cases the minimum number of moves necessary to gather all relevant information is:

SESSION 1		SESSION 2		SESSION 3	
NECESSARY INFORMATION	MOVES	NECESSARY INFORMATION	MOVES	NECESSARY INFORMATION	MOVES
LOCATIONS	13	LOCATIONS	09	LOCATIONS	08
ASSESSMENTS	12	ASSESSMENTS	14	ASSESSMENTS	06
TOTAL	25	TOTAL	23	TOTAL	14

6. LOCATIONS:

a) Count: Number of necessary locations containing vital information which groups visited or missed.

SESS 1	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	06	46	09	69	06	46	21	54
MISS	07	54	04	31	07	54	18	46
	13	100	13	100	13	100	39	100

SESS 2	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	08	89	07	78	06	67	21	78
MISS	01	11	02	22	03	33	06	22
	09	100	09	100	09	100	27	100

SESS 3	A		B		TOTAL	
	#	%	#	%	#	%
CORR	07	88	06	75	13	81
MISS	01	13	02	25	03	19
	08	101	08	100	16	100

b) Location: Table 6b provides a breakdown of the information.

SESSION 1				SESSION 2				SESSION 3		
RELEVANT	A	B	C	RELEVANT	A	B	C	RELEVANT	A	B
2c	-	-	-	7cp	-	-	-	8cp	x	x
5 or 7c	-	x	x	12pc	x	x	x	12pc	-	x
8c	-	x	x	19pc	x	x	x	26 or 35pc	x	-
12p	x	-	x	24pc	x	x	x	29pc	x	-
22 or 23c	-	-	x	30c	x	x	x	30c	x	x
24c or p	-	x	x	31c	x	-	-	32c	x	x
28c or p	-	-	-	32c	x	x	x	33c	x	x
30c	x	x	-	33c	x	x	-	38p	x	x
32c	x	x	x	38p	x	x	x	TOTAL	7	6
34c or p	x	x	-	TOTAL	8	7	6			
37p or c	x	x	-							
38p	x	x	-							
39p or c	-	x	-							
13	6	9	6							

c) Type: Table 6c outlines how many different types of moves (to gather information from others) were carried out by each group.

Rating: 0 = unnecessary, no reason to visit/phone this place.

1 = appropriate, however not a necessary move.

2 = necessary move.

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	00	00	00	00	00	00	00	00
1	03	33	04	31	00	00	07	25
2	06	67	09	69	06	100	21	75
	09	100	13	100	06	100	28	100

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
0	01	07	02	12	00	00	03	08
1	04	31	07	44	01	14	12	33
2	08	62	07	44	06	86	21	58
	13	100	16	100	07	100	36	99

	A		B		TOTAL	
	#	%	#	%	#	%
0	01	08	00	00	01	04
1	04	33	07	54	11	44
2	07	58	06	46	13	52
	12	100	13	100	25	100

7. ASSESSMENTS: Number of correct and missing assessments as determined by model report.

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	08	67	04	33	04	33	16	44
MISS	04	33	08	67	08	67	20	56
	12	100	12	100	12	100	36	100

	A		B		C		TOTAL	
	#	%	#	%	#	%	#	%
CORR	06	43	12	86	13	93	31	74
MISS	08	57	02	14	01	07	11	26
	14	100	14	100	14	100	42	100

	A		B		TOTAL	
	#	%	#	%	#	%
CORR	04	67	04	67	08	67
MISS	02	33	02	83	04	33
	06	100	06	100	12	100

b) Relevant: Table 7b provides a breakdown of the relevant (necessary) assessments which should have been conducted for this case history. Included in the table is a description of which assessments the groups conducted or failed to conduct.

SESS 1	A	B	C
RELEVANT			
ROM	x	-	-
M. S.	x	-	-
COORD/BALANCE	-	x	-
SENSATION	x	x	x
HAND FUNCTION	x	x	-
ENDURANCE	-	-	-
COMMUNICATION	-	-	-
BATHROOM	-	-	-
EATING	x	-	-
DRESSING	x	-	x
GROOMING	x	-	x
INTERVIEW	x	x	x
	8	4	4

SESS 2	A	B	C
RELEVANT			
COORD/BALANCE	x	x	x
SENSATION	-	x	x
PERCEPTION	-	x	x
MOBILITY	x	-	x
HAND FUNCTION	-	x	x
ENDURANCE	-	x	-
COGNITION	-	x	x
COMMUNICATION	-	x	x
TRANSFERS	x	x	x
KITCHEN	-	x	x
BEDROOM	-	-	x
BATHROOM	x	x	x
DRESSING	x	x	x
Pt INTERVIEW	x	x	x

SESSION 3	A	B
RELEVANT		
ROM	x	x
MUSCLE TONE	x	x
SENSATION	x	x
COGNITION	-	-
COMMUNICATION	-	x
Pt INTERVIEW	x	-
	4	4

- 06 12 13

c) Unnecessary: Number of unnecessary and necessary assessments.

conducted as determined by model report.

SESSION 1		A		B		C		TOTAL	
ASSESSMENTS	#	%	#	%	#	%	#	%	
UNNECESSARY	00	00	00	00	00	00	00	00	
NECESSARY	08	100	04	100	04	100	16	100	
	08	100	04	100	04	100	16	100	

SESSION 2		A		B		C		TOTAL	
ASSESSMENTS	#	%	#	%	#	%	#	%	
UNNECESSARY	00	00	00	000	02	12	02	06	
*UNNECESSARY	01	14	00	000	02	12	03	08	
NECESSARY	06	86	12	100	13	76	31	87	
	07	100	12	100	17	100	36	100	

Please note for this particular case 3 assessments were deemed unnecessary because they had been conducted by the Physiotherapist. The results of these assessments were available to the the players if they went to the PT.

SESSION 3		A		B		TOTAL	
ASSESSMENTS	#	%	#	%	#	%	
UNNECESSARY	01	20	00	000	01	10	
NECESSARY	04	80	04	100	08	90	
	05	100	04	100	09	100	

8. INFORMATION FOLLOW UP: Often information obtained from the referral, and various locations and assessments provided hints as to the whereabouts of potentially valuable information concerning the case history. The following tables outline which moves (carried out by a group) provided hints, the "contents" of the hint, whether or not the a hint was followed up, and when it was followed up.

SESSION 1 GROUP A:

Reference	Hints	Follow up	When
01) 14c	Pt Medical Chart	yes	1st step
02) 32c	Work	*no	
03) " "	PT	no	
04) " "	Physiatrist	**no	
05) " "	Social Work	yes	6th step
06) 30c	Home	•yes	15th step
07) " "	Hand Function	••yes	18th step
08) 19a	Work	*no	
09) " "	Hand Function	••yes	17th step
10) " "	Sensation	yes	5th step
11) 12p	Home	•yes	10th step
12) " "	Work	*no	
13) 29p	Nursing Station	yes	1st step
14) " "	Resident	no	
15) 34c	ADL A	yes	1,2,3 step
16) 4c	Physiatrist	**no	

\* Hint given more than once, yet not followed up.

• Hint given more than once and followed up.

N.B. For the category "When". The steps are counted after the hint was received.

## SESSION 1 GROUP B:

	<u>Reference</u>	<u>Hints</u>	<u>Follow up</u>	<u>When</u>
01)	14c	PT Medical Chart	yes	1st step
02)	32c	Work	yes	10th step
03)	" "	PT	yes	3rd step
04)	" "	Physiatrist	x[attempted]	steps 13, 14,15,16 17th step
05)	" "	Social Work	yes	8th step
06)	30c	Home	yes	8th step
07)	" "	Hand Function	yes	4th step
08)	7c	Endurance	no	
09)	" "	Muscle Strength	no	
10)	34c	ADL A	no	
11)	19a	Work	yes	3rd step
12)	12c	Social Work p	no	
13)	8p	Psychologist	yes	1st step
14)	" "	Physiatrist c	yes	2nd step
15)	8c	P+O	no	

x three different people.

## SESSION 1 GROUP C:

	<u>Reference</u>	<u>Hints</u>	<u>Follow up</u>	<u>When</u>
01)	19a	Work	*no	
02)	" "	Hand Function	no	
03)	" "	Sensation	yes	2nd step
04)	32c	Work	*no	
05)	" "	PT	yes	2nd step
06)	" "	Physiatrist	yes	1st step
07)	" "	Social Work	x[attempted]	steps 3,4 5th step
08)	8c	P+O	no	
09)	7c	Endurance	no	
10)	" "	Muscle Strength	no	
11)	12p	Home	no	
12)	" "	Work	*no	

\* Hint given more than once, yet not followed up.

° Hint given more than once and followed up.

x 2 different people.

## SESSION 2 GROUP A:

	<u>Reference</u>	<u>Description</u>	<u>Follow up</u>	<u>When</u>
01)	Referral	neurology	yes	2nd step
02)	32c	med rec	no	
03)	" "	endurance	no	
04)	" "	muscle strength	yes	13th step
05)	" "	PT	*no	
06)	" "	psychologist	yes	16th step
07)	" "	social work	yes	15th step
08)	19c	mobility	yes	9th step
09)	" "	ADL A	yes	steps 5,6 7
10)	29c	Pt Lounge	yes	1st step
11)	" "	Ward meeting	yes	2nd step

12)	33c	dressing	yes	1st step
13)	" "	bathing	yes	2nd step
14)	" "	transfers	yes	3rd step
15)	" "	mobility	yes	4th step
16)	" "	psychologist	*yes	11th step
17)	" "	home	x[attempted]	1st step
			yes	2nd step
18)	4c	PT	*no	

\* Hint given more than once, yet not followed up.

\* Hint given more than once and followed up.

x same person both times.

#### SESSION 2 GROUP B:

	Reference	Description	Follow up	When
01)	Referral	neurology	yes	4th step
02)	32c	med rec	yes	1st step
03)	" "	endurance	yes	27th step
04)	" "	muscle strength	no	
05)	" "	PT	*no	
06)	" "	psychologist	yes	5th step
07)	" "	social work	yes	6th step
08)	19c	mobility	*no	
09)	" "	ADL A	yes	steps 6,7 8,21
10)	12c	home	*yes	12th step
11)	4c	PT	*no	
12)	33c	dressing	yes	3rd step
13)	" "	bathing	yes	2nd step
14)	" "	transfers	yes	1st step
15)	" "	mobility	*no	
16)	" "	home	*yes	9th step

\* Hint given more than once, yet not followed up.

\* Hint given more than once and followed up.

#### SESSION 2 GROUP C:

	Reference	Description	Follow up	When
01)	Referral	neurology	yes	24th step
02)	32c	med rec	no	
03)	" "	endurance	no	
04)	" "	muscle strength	yes	7th step
05)	" "	PT	no	
06)	" "	psychologist	yes	2nd step
07)	" "	social work	yes	3rd step
08)	12c	home	yes	1st step

#### SESSION 3 GROUP A:

	Reference	Description	Follow up	When
01)	Referral	Physiatrist	yes	1st step
02)	8c	ward meeting	yes	1st step
03)	30c	home	yes	14th step
04)	19a	communication	*no	
05)	29p	communication	*no	

\* Hint given more than once, yet not followed up.

SESSION 3 GROUP B:

	<u>Reference</u>	<u>Description</u>	<u>Follow up</u>	<u>When</u>
01)	Referral	physiatrist	yes	10th step
02)	30c	home	yes	9th step
03)	34c	staff lounge	yes	1st step
04)	6p	staff Doctor	no	

8b) Count: Recording of the number of different hints which each group unearthed during the play of the game, as well as an account of whether or not these hints were successfully followed-up (acted upon).

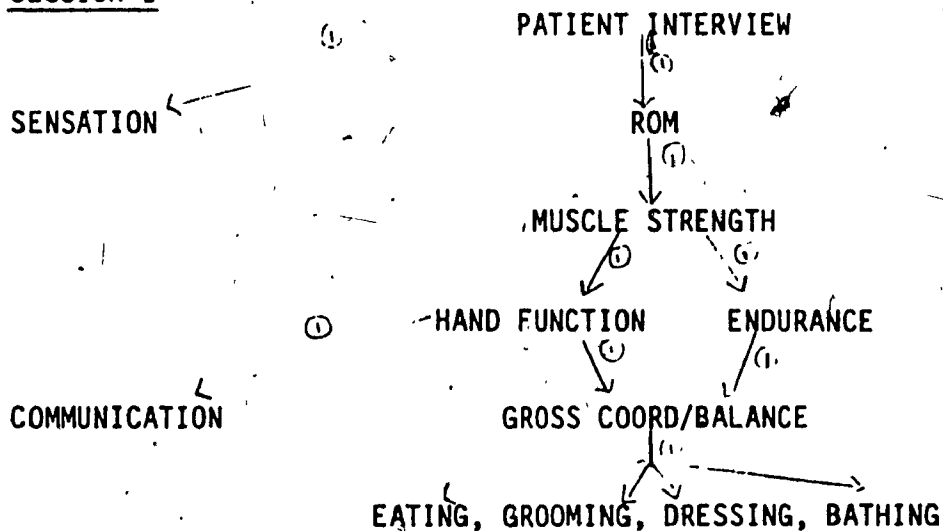
<u>SESS 1</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>TOTAL</u>	
	#	%	#	%	#	%	#	%
YES	07	64	09	64	04	40	20	57
NO	04	36	05	36	06	60	15	43
<u>TOTAL</u>	<u>11</u>	<u>100</u>	<u>14</u>	<u>100</u>	<u>10</u>	<u>100</u>	<u>35</u>	<u>100</u>

<u>SESS 2</u>	<u>A</u>		<u>B</u>		<u>C</u>		<u>TOTAL</u>	
	#	%	#	%	#	%	#	%
YES	13	81	10	77	05	63	28	74
NO	03	19	03	23	03	38	09	26
<u>TOTAL</u>	<u>16</u>	<u>100</u>	<u>13</u>	<u>100</u>	<u>08</u>	<u>101</u>	<u>37</u>	<u>100</u>

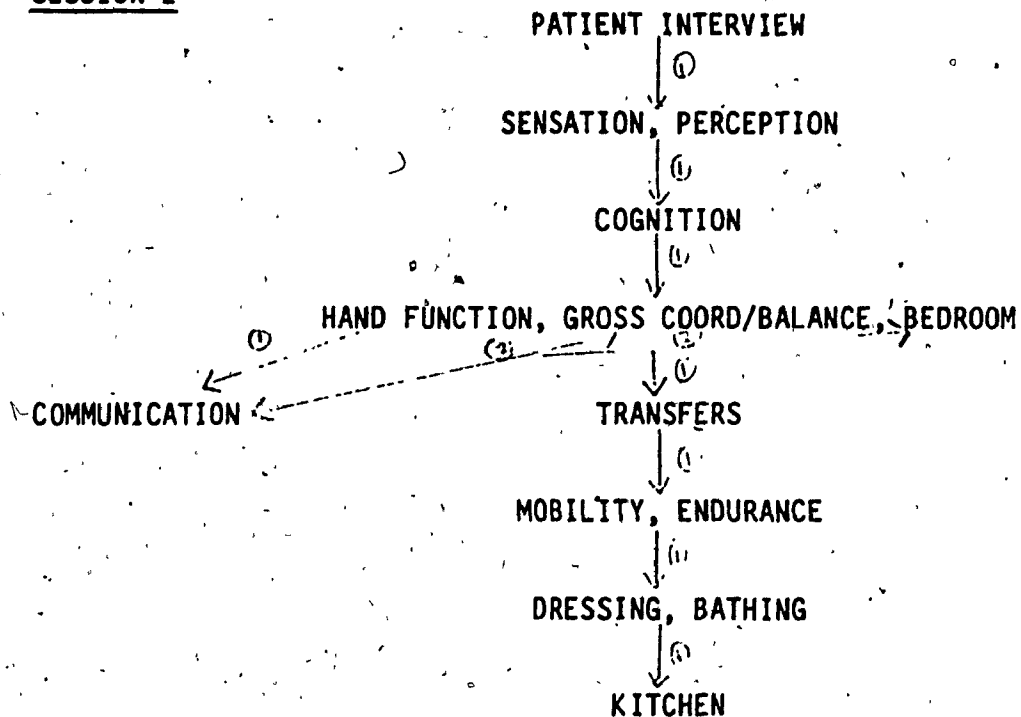
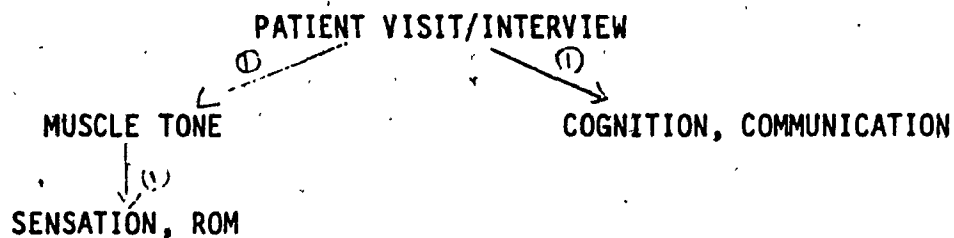
<u>SESS 3</u>	<u>A</u>		<u>B</u>		<u>TOTAL</u>	
	#	%	#	%	#	%
YES	03	75	03	75	06	75
NO	01	25	01	25	02	25
<u>TOTAL</u>	<u>04</u>	<u>100</u>	<u>04</u>	<u>100</u>	<u>08</u>	<u>100</u>

9. ORDER OF MOVES:

a) Ideal order of assessments: The chart below outlines the "ideal" order in which the necessary assessments should have been performed.

SESSION 1



SESSION 2SESSION 3

There are two types of relationships between assessments: serial and parallel. In a serial relationship the second assessment must be preceded by the first. In a parallel relationship the order of the assessments is not a consideration. In the above chart category one represents serial relationships between assessments, and category two represents parallel relationships.

b) Actual Order: Outlined below is the actual order in which each group performed the necessary (relevant) assessments.

SESSION 1GROUP A

PATIENT INTERVIEW  
 SENSATION  
 EATING  
 DRESSING  
 GROOMING  
 HAND FUNCTION  
 ROM  
 MUSCLE STRENGTH

GROUP B

SENSATION  
 HAND FUNCTION  
 PATIENT INTERVIEW  
 COOR/BALANCE

GROUP C

PATIENT INTERVIEW  
 SENSATION  
 DRESSING  
 GROOMING

SESSION 2GROUP A

DRESSING  
 BATHING  
 TRANSFERS  
 MOBILITY  
 Pt INTERVIEW  
 COOR/BALANCE

GROUP B

TRANSFERS  
 BATHING  
 DRESSING  
 COOR/BALANCE  
 Pt INTERVIEW  
 PERCEPTION  
 COMMUNICATION  
 COGNITION  
 SENSATION  
 HAND FUNCTION  
 KITCHEN  
 ENDURANCE

GROUP C

Pt INTERVIEW  
 TRANSFERS  
 MOBILITY  
 BATHING  
 GROSS COOR/BAL  
 DRESSING  
 HAND FUNCTION  
 SENSATION  
 BEDROOM  
 PERCEPTION  
 KITCHEN  
 COGNITION

SESSION 3GROUP A

ROM  
 Pt INTERVIEW  
 SENSATION  
 MUSCLE TONE

GROUP B

ROM  
 MUSCLE TONE  
 SENSATION  
 COMMUNICATION

In order to assess the performance of each group a scoring scheme has been devised which compares the order that the group performed their assessments to that of the ideal order. Therefore for each assessment which indicates:

Category 1: 2 points are added to the group's score.

Not Category 1: 2 points are subtracted from the group's score.

Category 2: 1 point is added to the group's score.

Table 9b outlines the scores for each group. Each group started with a score of zero. Maximum possible score for Session 1 is 109.

SESSION 1

	A	B	C
SCORE	+3	+2	+9
%	03%	02%	08%

Maximum possible score for Session 2 is 168.

SESSION 2

	A	B	C
SCORE	-19	+07	+16
%	00%	04%	10%

Maximum possible score for Session 3 is 22.

SESSION 3

	A	B
SCORE	-01	+04
%	00%	18%

c) Ideal order of Moves: Below is a chart of the ideal order of "information" moves. Relationships between moves are either serial or parallel.

SESSION 1

MEDICAL CHARTS    PATIENT ROOM    PATIENT INTERVIEW

PHYSIATRIST    HEAD NURSE    PT    REHAB-MEETING    SOCIAL WORK    PLASTIC    X-RAY

RESIDENT    NURSES    HOME    P+O    PSYCHOLOGY

WORK

SESSION 2

MEDICAL CHARTS    PATIENT ROOM    PATIENT INTERVIEW    NEURO

HEAD NURSE/NURSING    PT    PSYCHOLOGY    SOCIAL WORK

WARD CONFERENCE    Pt LOUNGE

PHONE

SESSION 3

MEDICAL CHARTS    PATIENT ROOM    PATIENT INTERVIEW    PHYSIATRIST

HEAD NURSE    Pt HOME    WARD CONFERENCE

MED INTERN/STAFF DR.    SOCIAL WORK

d) Actual Order: The charts below outline the actual order of the relevant "information" moves each group carried out.

SESSION 1GROUP A

cPt MED CHART  
cPt ROOM  
aPt INTERVIEW  
pP+O  
pSOCIAL WORK  
pHEAD NURSE  
cNURSING STATION  
pHOME

GROUP B

cPt MED CHART  
cPt ROOM  
cPt DESK  
cNURSING STATION  
aPt INTERVIEW  
cSOCIAL WORK  
pHOME  
pWORK  
pP+O  
pPHYSIATRIST  
pPSYCHOLOGIST

GROUP C

aPt INTERVIEW  
cPLASTICS  
cPt MED CHART  
cPHYSIATRIST  
cPt DESK  
pPSYCHOLOGIST

SESSION 2GROUP A

cMED CHART  
cNEURO  
cPt ROOM  
cHEAD NURSE  
cPt LOUNGE  
cWARD MEETING  
aPt INTERVIEW  
pSOCIAL WORK  
pPSYCHOLOGIST  
pHOME

GROUP B

cMED CHART  
pNEURO  
pPSYCHOLOGY  
cSOCIAL WORK  
cPt ROOM  
cWARD CONFERENCE  
aPt INTERVIEW  
pHOME  
cNURSE

GROUP C

cMED CHART  
cPt ROOM  
cPSYCHOLOGY  
cSOCIAL WORK  
pHOME  
aPt INTERVIEW  
cNEURO

SESSION 3GROUP A

cPHYSIATRIST  
cWARD CONFERENCE  
cMED CHART  
cPt ROOM  
aPt INTERVIEW  
pHEAD NURSE  
pSTAFF Dr  
pHOME

GROUP B

cMED CHART  
cPt ROOM  
cWARD CONFERENCE  
cPHYSIATRIST  
pHOME  
pSOCIAL WORK

Table 9d outlines the scores for each group. The same scoring scheme as outlined in section 9b was used.

Max Score = 206.

SESS 1

	A	B	C
SCORE	+41	+31	+31
%	20%	15%	15%

Max Score = 96.

SESS 2

	A	B	C
SCORE	+52	+35	+11
%	54%	36%	11%

Max Score = 62.

SESS 3

	A	B
SCORE	+31	+22
%	50%	35%

OT U2 RESULTS OF OCCUPATIONAL THERAPY INFORMATION SHEETS  
 GROUP COMPOSITION:

SESSION 1	SESSION 2	SESSION 3
A = 32,23,28	A = 18,32,24	A = 32,17,38
B = 24,17,36,19	B = 13,22,25,10	B = 10,30,19
C = 22,18,38	C = 17,35,23	C = 25,33,23
D = 10,26,11	E = 33,37,20	D = 28,24,22
E = 13,35,31	F = 38,28,36	E = 16,15,26
F = 37,30,16	G = 31,11,30	F = 36,20,31
G = 25,20,12	H = 29,12,19	G = 18,11,29
H = 15,33,29	N.B. no group D	H = 37,12,13

1. REASON: Players were expected to record their reason (rationale) behind each move executed in the game.

a) Count: Table 1a outlines the number of times each group either recorded or failed to record their reason for a move.

SESS1	GROUP								TOTAL
	A	B	C	D	E	F	G	H	
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	14/100	19/100	12/100	12/92	11/100	17/100	12/100	14/100	111/99
NO	00/000	00/000	00/000	01/08	00/000	00/000	00/000	00/000	001/01
TOT	14 100	19 100	12 100	13 100	11 100	17 100	12 100	14 100	112 100

SESS2	GROUP							TOTAL
	A	B	C	E	F	G	H	
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	19/100	22/96	18/100	22/100	19/95	16/100	22/100	138/99
NO	00/000	01/04	00/000	00/000	01/05	00/000	00/000	002/01
TOT	19 100	23 100	18 100	22 100	20 100	16 100	22 100	140 100

SESS3	GROUP								TOTAL
	A	B	C	D	E	F	G	H	
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	21/78	29/100	31/100	30/100	26/96	24/100	22/100	24/86	207/95
NO	06/22	00/000	00/000	00/000	01/04	00/000	00/000	04/14	11/05
TOT	27 100	29 100	31 100	30 100	27 100	24 100	22 100	28 100	218/100

b) Type: Table 1b outlines how many different types of reasons were put forward by each group.

Rating: 0 = unsound, ridiculous reason, missing.

1 = somewhat appropriate, requires clarification.

2 = good, rational reason.

SESS1	GROUP								TOTAL
	A	B	C	D	E	F	G	H	
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	00/00	05/26	00/00	02/15	03/27	04/24	02/17	01/07	17/15
1	09/64	10/53	09/75	09/69	05/45	10/59	07/58	07/50	66/59
2	05/36	04/21	03/25	02/15	03/27	03/18	03/25	06/43	29/26
	14 100	19 100	12 100	13 99	11 99	17 101	12 100	14 100	112/100

SESS2	GROUP							TOTAL
	A	B	C	E	F	G	H	
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	01/05	03/13	02/11	01/05	05/25	00/00	03/14	15/11
1	12/63	18/78	14/78	11/50	12/60	11/69	17/77	95/68
2	06/32	02/09	02/11	10/45	03/15	05/31	02/09	30/21
	19 100	23 100	18 100	22 100	20 100	16 100	22 100	140 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	07/26	02/07	05/16	04/13	04/15	01/04	01/05	08/29	32/15
1	14/52	18/62	16/52	20/67	09/33	15/63	13/59	13/46	118/54
2	06/22	09/31	10/32	06/20	14/52	08/33	08/36	07/25	68/31
TOT	27 100	29 100	31 100	30 100	27 100	24 100	22 100	28 100	218 100

2. DISAGREEMENTS: Each player was responsible for his own move. However, other players could disagree and were expected to record their disagreement.

a) Count: Table 2a outlines the number of disagreements recorded by each group.

SESS1	A	B	C	D	E	F	G	H	TOTAL
DIS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	04/29	05/26	00/00	01/08	02/18	01/06	01/08	00/00	14/13
NO	10/71	14/74	12/100	12/92	09/82	16/94	11/92	14/100	97/87
TOT	14 100	19 100	12 100	13 100	11 100	17 100	12 100	14 100	111 100

SESS2	A	B	C	E	F	G	H	TOTAL
DIS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	04/21	01/04	02/11	00/000	03/15	03/19	00/000	13/09
NO	15/79	22/96	16/89	22/100	17/85	13/81	22/100	127/91
TOT	19 100	23 100	18 100	22 100	20 100	16 100	22 100	140 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
DIS	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	01/04	00/000	00/000	02/07	00/000	02/08	01/05	00/00	06/03
NO	26/96	29/100	31/100	28/93	27/100	22/92	21/95	28/100	212/97
TOT	27 100	29 100	31 100	30 100	27 100	24 100	22 100	28 100	218 100

b) Type: Table 2b outlines how many different types of disagreements were put forward by each group.

Rating: 0 = inappropriate, or unclear.

1 = suggestion appropriate; however, original move appropriate.

2 = appropriate, original move inappropriate.

SESS1	A	B	C	D	E	F	G	H	TOTAL
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	00/00	02/40	00/00	00/000	00/000	00/000	00/000	00/00	02/20
1	04/80	02/40	00/00	00/000	00/000	01/100	00/000	00/00	07/40
2	01/20	01/20	00/00	01/100	02/100	00/000	01/100	00/00	06/40
TOT	05 100	05 100	00 00	01 100	02 100	01 100	01 100	00 00	15 100

SESS2	A	B	C	E	F	G	H	TOTAL
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	01/25	01/100	00/00	00/00	00/00	00/000	00/00	02/15
1	02/50	00/000	01/50	00/00	02/67	03/100	00/00	08/62
2	01/25	00/000	01/50	00/00	01/33	00/000	00/00	03/23
TOT	04 100	01 100	02/100	00 00	03 100	03 100	00 00	13 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
TYPE	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
0	1 / 100	00/00	00/00	00/000	00/00	01/50	00/000	00/00	02/33
1	0 / 000	00/00	00/00	02/100	00/00	01/50	01/100	00/00	04/67
2	0 / 000	00/00	00/00	00/000	00/00	00/00	00/000	00/00	00/00
TOT	1	100 00 00	00/00	02 100	00 00	02 100	01 100	00 00	06 100

c) Description: Table 2c provides a more detailed description of the disagreements. Included in the description is the identity of the subject(s) who disagreed; whether or not it was possible to pursue the disagreement (in certain cases a specific alternative suggestion was put forward); if the disagreement was followed-up (where applicable); the identity of the subject who followed it up; and when it was followed up.

SESSION 1			FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	*WHEN	WHO
A	1	23	NO			
A	1	28	YES	NO		
A	2	32	YES	YES	*STEP 2	32
A	1	23	YES	YES	STEP 1	32
A	1	23,28	YES	YES	STEP 1	23
B	2	717,36,19	YES	YES	STEP 1	36
B	1	17	YES	YES	STEP 1	17
B	1	24	YES	NO		
B	0	36	YES	YES	STEP 1	36
B	0	14,17	NO			
D	2	26	NO			
E	2	713,31	YES	NO		
E	2	713,31	YES	YES	STEP 2	13
F	1	16	YES	YES	STEP 1	16
G	2	20,25	YES	YES	STEP 1	25

\* refers to the number of steps after the disagreement was lodged that it was followed up.

SESSION 2			FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	WHEN	WHO
A	0	32	YES	YES	1st step	32
A	2	32,18	YES	YES	1st step	18
A	1	24	YES	YES	1st step	24
A	1	18	NO			
B	0	22	NO			
C	2	35	YES	YES	2nd step	35
C	1	23	NO			
F	1	36,38	YES	YES	1st step	36
F	1	28	YES	YES	1st step	28
F	2	36,38	NO			
G	1	730,31	YES	YES	1st step	30
G	1	31	YES	NO		
G	1	31	YES	YES	1st step	31

SESSION 3			FOLLOW-UP			
GROUP	TYPE	WHO	POSSIBLE	FOLLOWED UP	WHEN	WHO
A	0	32	No	-	-	-
D	1	22	Yes	Yes	*step 1	22

D	1	28,24	Yes	Yes	step 1	24
F	0	36	No	-	-	-
F	1	31,36	Yes	Yes	step 1	31
G	1	11	Yes	Yes	step 1	29

3. INFORMATION: Refers to the information collected (from the PIB), during the game as a result of the actions of the players. Players were expected to record the information obtained.

a) Count: Table 3a outlines the number of times each group recorded or failed to record all the information presented to them during a particular move.

SESS1	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
COMP	11/79	12/63	06/50	12/92	05/45	16/94	11/92	12/86	85/76
NOT	03/21	07/37	06/50	01/08	06/55	01/06	01/08	02/14	27/24
TOT	14 100	19 100	12 100	13 100	11 100	17 100	12 100	14 100	112 100

SESS2	A	B	C	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
COMP	14/74	18/78	10/56	19/86	14/70	16/100	15/68	106/76
NOT	05/26	05/22	08/44	03/14	06/30	00/000	07/32	34/24
TOTAL	19 100	23 100	18 100	22 100	20 100	16 100	22 100	140 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
INFO	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
COMP	24/89	27/93	26/84	28/93	27/100	20/83	18/82	24/86	194/89
NOT	03/11	02/07	05/16	02/07	00/000	04/17	04/18	04/14	24/11
TOT	27 100	29 100	31 100	30 100	27/100	24 100	22 100	28 100	218 100

4. MOVES: Moves via action cards which each group carried out, during the play of the game.

a) Count: Table 4a outlines the number of different moves (Assessment, Consultation, Telephone, and Taxi) each group carried out. In the case of "Telephone Calls" only those calls which were successful (that is, resulted in access to information) have been included in this table.

SESSION 1	GROUP								SESSION 2								
	# OF	A	B	C	D	E	F	G		H	# OF	A	B	C	E	F	G
ASS	08	08	08	09	07	06	06	07	ASS	10	11	10	11	10	07	13	
CONS	03	09	03	03	03	07	05	05	CONS	06	09	04	09	05	08	07	
PHONE	03	02	00	00	00	02	00	01	PHONE	03	02	04	02	04	01	00	
TAXI	00	00	01	01	01	01	01	01	TAXI	00	01	00	00	01	00	02	
TOTAL	14	19	12	13	11	16	12	14	TOTAL	19	23	18	22	20	16	22	

SESSION 3	# OF	A	B	C	D	E	F	G	H
ASS	16	14	15	15	09	13	12	12	
CONS	08	11	09	08	13	07	07	11	
PHONE	03	03	07	07	04	04	02	05	
TAXI	00	01	00	00	01	00	01	00	
TOTAL	27	29	31	30	27	24	22	28	

5. RELEVANT INFORMATION: Basically there are two types of information



available in this game. Information obtained from others via use of "consultation, telephone, and taxi" action cards; and information obtained from OT via assessments. For this case history the minimum number of moves necessary to gather all relevant information is:

SESSION 1		SESSION 2		SESSION 3	
NECESSARY	MOVES	NECESSARY	MOVES	NECESSARY	MOVES
LOCATIONS	09	LOCATIONS	09	LOCATIONS	13
ASSESSMENTS	11	ASSESSMENTS	14	ASSESSMENTS	12
TOTAL	20	TOTAL	23	TOTAL	25

#### 6. LOCATIONS:

a) Count: Number of necessary locations containing vital information which groups visited or missed.

SESS1	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	03/33	03/33	02/22	01/11	01/11	03/33	03/33	04/44	20/28
MISS	06/67	06/67	07/78	08/89	08/89	06/67	06/67	05/56	52/72
TOT	09 100	09 100	09 100	09 100	09 100	09 100	09 100	09 100	72 100

SESS2	A	B	C	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	06/67	05/56	03/33	06/67	04/44	06/67	02/22	32/51
MISS	03/33	04/44	06/67	03/33	05/55	03/33	07/78	31/49
TOT	09 100	09 100	09 100	09 100	09 100	09 100	09 100	63 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
CORR	08/62	11/85	11/85	09/69	12/92	09/69	05/38	11/85	76/73
MISS	05/38	02/15	02/15	04/31	01/08	04/31	08/62	02/15	28/27
TOT	13 100	13 100	13 100	13 100	13 100	13 100	13 100	13 100	104 100

b) Location: Table 6b provides an outline of the different groups success or failure in locating the different pieces of relevant information.

SESSION1									SESSION 2							
RELEVANT	A	B	C	D	E	F	G	H	RELEVANT	A	B	C	E	F	G	H
5c	-	-	-	-	-	x	-	-	12pc	x	x	x	x	x	x	-
12pc	x	-	x	-	-	-	x	x	13pc	-	-	-	-	-	-	-
18pc	-	x	-	x	-	x	-	x	17c	x	x	x	x	x	x	x
27pc or 40pc	-	-	-	-	-	-	x	x	23c	-	-	-	x	-	x	-
29pc	-	-	-	-	-	-	-	-	27c	x	x	-	x	-	x	-
30c	-	-	-	-	-	-	-	-	30c	-	-	-	-	-	-	-
32c	x	x	x	-	x	x	x	x	32c	x	x	x	x	x	x	x
33c	-	x	-	-	-	-	-	-	38p	x	-	-	-	x	x	-
38p	x	-	-	-	-	-	-	-	39pc	x	x	-	x	-	-	-
TOTAL	3	3	2	1	1	3	3	4	TOTAL	6	5	3	6	4	6	2

"c" = consultation; "p" = telephone.



SESS2	A		B		C		E		F		G		H		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CORR	10	71	11	79	10	71	11	79	10	71	07	50	13	93	72	73
MISS	04	29	03	21	04	29	03	21	04	29	07	50	01	07	26	27
TOT	14	100	14	100	14	100	14	100	14	100	14	100	14	100	98	100

SESS3	A		B		C		D		E		F		G		H		TOTAL	
	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%	#	%
CORR	12	100	11	92	12	100	12	100	08	67	11	92	11	92	11	92	88	92
MISS	00	000	01	08	00	000	00	000	04	33	01	08	01	08	01	08	08	08
TOT	12	100	12	100	12	100	12	100	12	100	12	100	12	100	12	100	96	100

b) Relevant: Table 7b provides a breakdown of the relevant (necessary) assessments which should have been conducted for this case history. Included in the table is a description of which assessments the groups conducted or failed to conduct.

SESSION 1	RELEVANT							
	A	B	C	D	E	F	G	H
ROM	x	-	x	x	x	x	x	-
M. S.	x	x	x	-	-	-	-	-
COORD/BALANCE	-	x	-	-	x	x	-	-
MOBILITY	x	x	x	x	x	x	x	x
ENDURANCE	-	-	-	x	-	-	-	-
TRANSFERS	x	-	x	x	x	x	x	x
BEDROOM	-	x	-	x	-	-	-	x
BATHROOM	x	x	x	x	x	x	-	x
DRESSING	x	x	x	x	-	-	x	x
GROOMING	-	-	x	-	-	-	-	-
INTERVIEW	x	x	x	x	x	x	x	x
	7	7	8	8	6	6	5	6

SESSION 2	RELEVANT							
	A	B	C	E	F	G	H	
ROM	x	x	x	x	x	x	x	x
M. S.	-	x	-	x	x	-	-	x
COORD/BALANCE	-	-	-	-	-	-	-	-
SENSATION	x	x	x	-	x	x	x	x
HAND FUNCTION	x	x	x	x	x	x	x	x
ENDURANCE	-	-	-	-	x	-	-	x
COMMUNICATION	x	x	x	x	-	-	-	x
KITCHEN	x	x	x	x	x	x	x	x
BEDROOM	-	-	x	x	-	-	-	x
BATHROOM	x	x	x	x	x	-	-	x
EATING	x	x	x	x	x	x	x	x
DRESSING	x	x	x	x	x	-	-	x
GROOMING	x	x	-	x	-	-	-	x
INTERVIEW	x	x	x	x	x	x	x	x
	10	11	10	11	10	07	13	

SESSION 3	RELEVANT							
	A	B	C	D	E	F	G	H
ROM	x	x	x	x	x	x	x	x
M. S.	x	x	x	x	x	x	x	x
COORD/BALANCE	x	-	x	x	-	-	-	-
SENSATION	x	x	x	x	x	x	x	x
HAND FUNCTION	x	x	x	x	-	x	x	x
ENDURANCE	x	x	x	x	-	x	x	x
COMMUNICATION	x	x	x	x	-	x	x	x
BATHROOM	x	x	x	x	x	x	x	x
EATING	x	x	x	x	x	x	x	x
DRESSING	x	x	x	x	x	x	x	x
GROOMING	x	x	x	x	x	x	x	x
INTERVIEW	x	x	x	x	x	x	x	x
	12	11	12	12	8	11	11	11

c) Unnecessary: Number of unnecessary and necessary assessments conducted as determined by model report.

SESS1	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
UN	01/13	01/13	00/000	01/11	01/14	01/17	01/14	01/14	07/12
NEC	07/87	07/87	08/100	08/89	06/86	05/83	05/86	06/86	52/88
TOT	08 100	08 100	08 100	09 100	07 100	06 100	06 100	07 100	59 100

SESS2	A	B	C	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
UN	00/000	00/000	00/000	00/000	00/000	00/000	00/000	00/000
NEC	10/100	11/100	10/100	11/100	10/100	07/100	13/100	72/100
TOT	10 100	11 100	10 100	11 100	10 100	07 100	13 100	72 100

SESS3	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
UN	04/25	03/21	03/20	03/20	01/11	02/15	01/08	01/08	18/17
NEC	12/75	11/79	12/80	12/80	08/89	11/85	11/92	11/92	88/83
TOT	16 100	14 100	15 100	15 100	09 100	13 100	12 100	12 100	106 100

8. INFORMATION FOLLOW UP: Often information obtained from the referral, and various locations and assessments provided hints and/or suggestions as to whereabouts of potentially valuable information concerning the case history. The following tables outline which moves (carried out by a group) provided hints, the "contents" of the hint, whether or not the a hint/suggestion was followed up, and when it was followed up.

SESSION 1 GROUP A:

Reference	Hint	Follow up	When
01) Referral	Ortho	No	
02) " " "	ADL	Yes	steps 12 13
03) 14c	Med Chart	Yes	1st step
04) 32c	PT	No	
05) " "	Social Work	*Yes	6th step
06) 6p	Social Work	*Yes	2nd step
07) 12p	Comm Liason Nurse	No	

N.B. For the category "When". The steps are counted after the hint was received. (Please note this includes unsuccessful steps in counting.)

\* Hint given more than once, and followed up.

SESSION 1 GROUP B:

Reference	Hint	Follow up	When
01) Referral	Ortho	Yes	2nd step
02) " " "	ADL	*Yes	steps 15, 16
03) 32c	PT	[attempted]	4th step
04) " "	Social Work	No	
05) 3c	Ward Conf	*Yes	4th step
06) 34p	Ward Conf	*Yes	1st step
07) 33c	ADL	*Yes	steps 6,7 11

\* Hint given more than once and followed up.

## SESSION 1 GROUP C:

Reference	Hint	Follow up	When
01) Referral	Ortho	No	
02) " " "	ADL	Yes	steps 9, 10,12, 1st step
03) 14c	Med Chart	Yes	
04) 32c	PT	No	
05) " "	Social Work	Yes	1st step
06) 12c	Comm Liason Nurse	No	
07) 38c	Home p	No	

## SESSION 1 GROUP: D

Reference	Hint	Follow up	When
01) Referral	Ortho	Yes	2nd step
02) " " "	ADL	Yes	steps 9, 12
03) 4c	Ortho	Yes	1st step
04) 38c	Home p	No	

\* Hint given twice and followed up.

## SESSION 1 GROUP E:

Reference	Hint	Follow up	When
01) Referral	Ortho	*No	
02) " " "	ADL	Yes	step 9
03) 32c	PT	No	
04) " "	Social Work	No	
05) 4c	Ortho	*No	
06) 38c	Home p	[attempted] No	1st step

\* Hint given twice and never followed up.

## SESSION 1 GROUP F:

Reference	Hint	Follow up	When
01) Referral	Ortho	Yes	2nd step
02) " " "	ADL	Yes	step 13
03) 14c	Med Chart	Yes	1st step
04) 32c	PT	Yes	12th step
05) " "	Social Work	No	
06) 3c	Ward Conf	No	
07) 38c	Home p	No	

## SESSION 1 GROUP G:

Reference	Hint	Follow up	When
01) Referral	Ortho	No	
02) " " "	ADL	Yes	step 6
03) 32c	PT	No	
04) " "	Social Work	Yes	7th step
05) 38c	Home p	No	
06) 12c	Comm Liason Nurse	Yes	2nd step

## SESSION 1 GROUP H:

Reference	Hint	Follow up	When
01) Referral	Ortho	Yes	9th step
02) " " "	ADL	Yes	steps 1,3

03) 14c	Med Chart	Yes	1st step
04) 32c	PT	No	
05) " "	Social Work	Yes	3rd step
06) 4c	Ortho	Yes	1st step
07) 12p	Comm Liason Nurse	Yes	3rd step
08) 38c	Home p	No	

\*Hint given more than once and followed up.

#### SESSION 2 GROUP A:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	4th step
02) " " "	Work	x[attempted]	20th step
		Yes	21st step
03) 32c	XRay	No	
04) 19a	Work	[attempted]	17th step
		Yes	18th step
05) 33c	Rheum	Yes	1st step
06) 12c	Work	[attempted]	14th step
		Yes	15th step
07) " "	Comm Liason Nurse	Yes	4th step

\*Hint given more than once, and followed up.

x attempted by two different people.

#### SESSION 2 GROUP B:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	20th step
02) " " "	Work	Yes	22st step
03) 32c	XRay	No	
04) 33c	Rheum	Yes	18th step
05) 12p	Work	Yes	18th step
06) " "	Comm Liason Nurse	Yes	2nd step
07) 19a	Work	Yes	17th step
08) 7c	ROM	Yes	6th step
09) 12c	Work	Yes	4th step
10) 34c	Pt Lounge	No	

\*Hint given more than once and followed up.

#### SESSION 2 GROUP C:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	14th step
02) " " "	Work	*No	
03) 32c	XRay	Yes	16th step
04) 19a	Work	*No	
05) 33c	Rheum	Yes	2nd step
06) 12c	Work	*No	
07) " "	Comm Liason Nurse	Yes	3rd step
08) 27p	Comm Liason Nurse c	No	
09) XRay	XRay c	No	
10) 34c	Pt Lounge	No	

\*Hint Given more than once and never followed up.

\*Hint given more than once and followed up.

## SESSION 2 GROUP E:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	2nd step
02) " " "	Work	*Yes	19th step
03) 32c	XRay	Yes	21st step
04) 19a	Work	*Yes	17th step
05) 12c	Work	*Yes	16th step
06) " "	Comm Liason Nurse	Yes	1st step
07) 34c	Pt Lounge	Yes	3rd step

\* Hint given more than once and followed up.

## SESSION 2 GROUP F:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	2nd step
02) " " "	Work	*No	
03) 32c	XRay	No	
04) 19a	Work	*No	
05) 12c	Work	*No	
06) " "	Comm Liason Nurse	x[attempted]	steps 1,2
		Yes	3rd step
07) 12p	Comm Liason Nurse c	No	

\* Hint given more than once and never followed up.

x attempted by two different people.

## SESSION 2 GROUP G:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	4th step
02) " " "	Work	*No	
03) 32c	XRay	Yes	2nd step
04) 19a	Work	*No	
05) 12c	Work	*No	
06) " "	Comm Liason Nurse	Yes	1st step
07) 7c	ROM	Yes	4th step
08) 34c	Pt Lounge	Yes	1st step

\*Hint given more than once and never followed up.

## SESSION 2 GROUP H:

Reference	Description	Follow up	When
01) Referral	Rheum	Yes	4th step
02) " " "	Work	*Yes	14th step
03) 32c	XRay	No	
04) 19a	Work	*Yes	11th step
05) 3c	MS	Yes	10th step
06) 34c	Pt Lounge	No	

\*Hint given more than once and followed up.

## SESSION 3 GROUP A:

Reference	Description	Follow up	When
01) 32c	Work	*no	
02) " "	PT	no	
03) " "	Physiatrist	yes	1st step
04) " "	Social Work	yes	2nd step
05) 8c	P+0	yes	8th step
06) 12c	Social Work p	yes	5th step

07) 6c	Rehab Conf Room	yes	2nd step
08) 19a	Work	*no	
09) " "	Hand Function	yes	17th step
10) " "	Sensation	yes	10th step
11) 2c	Psychology	yes	1st step
12) " "	Endurance	yes	19th step
13) 12p	Home	yes	3rd step

\* Hint given more than once, yet not followed up.

#### SESSION 3 GROUP B:

Reference	Description	Follow up	When
01) 32c	Work	yes	18th step
02) " "	PT	yes	1st step
03) " "	Physiatrist	yes	3rd step
04) " "	Social Work	yes	2nd step
05) 7c	Endurance	yes	22nd step
06) " "	Musc Strength	yes	23rd step
07) 12c	Social Work p	x[attempted]	steps 5,6
		yes	7th step
08) 8c	P+O	yes	14th step
09) 19a	Work	yes	14th step
10) " "	Hand Function	yes	7th step
11) " "	Sensation	yes	1st step
12) 12p	Home	yes	10th step
13) " "	Work	yes	8th step
14) 34c	ADL A	yes	12th step
15) 2c	Psychology	yes	1st step

x two different people.

\* hint given more than once and followed up.

#### SESSION 3 GROUP C:

Reference	Description	Follow up	When
01) 32c	Work	yes	27th step
02) " "	PT	yes	steps 8,9
03) " "	Physiatrist	yes	3rd step
04) " "	Social work	yes	1st step
05) 12c	Social Work p	yes	3rd step
06) 8c	P+O	yes	2nd step
07) 12p	Home	yes	2nd step
08) " "	Work	yes	23rd step
09) 34p	ADL A	yes	steps 8,9
			11,12.
10) 7c	Endurance	yes	4th step
11) " "	Musc Strength	yes	5th step
12) 19a	Work	yes	17th step
13) " "	Hand Function	yes	12th step
14) " "	Sensation	yes	1st step

\* Hint given more than once and followed up.

#### SESSION 3 GROUP D

Reference	Description	Follow up	When
01) 19a	Work	Yes	9th step
02) " "	Hand Function	Yes	26th step
03) " "	Sensation	Yes	19th step



04) 32c	Work	•Yes	6th step
05) " "	PT	Yes	13th step
06) " "	Physiatrist	Yes	2nd step
07) " "	Social Work	Yes	1st step
08) 12c	Social Work p	No	
09) 8c	P+0	x[attempted]	13th step
		Yes	15th step
10) 22p	P+S' c	Yes	4th step
11) 34c	ADL A	Yes	steps 8,9 10,11
12) 5c	Endurance	Yes	12th step
13) " "	Muscle Strength	Yes	16th step
14) 29p	Resident Dr.	No	

\* Hint given more than once and followed up.  
x 2 different people.

### SESSION 3 GROUP E:

Reference	Description	Follow up	When
01) 19a	Work	•Yes	16th step
02) " "	Hand Function	*No	
03) " "	Sensation	Yes	1st step
04) 32c	Work	•Yes	14th step
05) " "	PT	Yes	3rd step
06) " "	Physiatrist	Yes	5th step
07) " "	Social Work	Yes	4th step
08) 18p	P+S	Yes	1st step
09) 7c	Endurance	*No	
10) " "	Musc Strength	Yes	5th step
11) 12c	Social Work p	•Yes	18th step
12) 8c	P+0	Yes	5th step
13) 34c	ADL A	Yes	steps 3, 12,13,14
14) 5c	Endurance	*No	
15) 1c	Social Work p	•Yes	1st step
16) 2c	Psychology	Yes	1st step
17) " "	Endurance	*No	
18) 30c	Hand Function	*No	

\* Hint given more than once, yet not followed up.

• Hint given more than once and followed up.

### SESSION 3 GROUP F:

Reference	Description	Follow up	When
01) 19a	Work	•Yes	24th step
02) " "	Hand Function	Yes	17th step
03) " "	Sensation	Yes	10th step
04) 32c	Work	•Yes	23rd step
05) " "	PT	Yes	1st step
06) " "	Physiatrist	Yes	2nd step
07) " "	Social Work	Yes	3rd step
08) 7c	Endurance	Yes	16th step
09) " "	Musc. Strength	Yes	17th
step			
10) 8c	P+0	Yes	23rd step
11) 12c	Social Work p	Yes	4th step

12) 34c	ADL A	Yes	steps 6,7 8,14
13) 12p	Home	Yes	1st step
14) " "	Work	Yes	15th step

Hint given more than once and followed up.

#### SESSION 3 GROUP G:

Reference-	Description	Follow up	When
01) 32c	Work	*No	
02) " "	PT	Yes	5th step
03) " "	Physiatrist	Yes	1st step
04) " "	Social Work	Yes	2nd step
05) 8c	P+0	Yes	5th step
06) 12c	Social Work p	Yes	1st step
07) 12p	Home	Yes	19th step
08) " "	Work	*No	
09) 7c	Endurance	Yes	15th step
10) " "	Muscle strength	Yes	9th step
11) 19a	Work	*No	
12) " "	Sensation	Yes	3rd step

\* Hint given more than once yet not followed up.

#### SESSION 3 GROUP H:

Reference	Description	Follow up	When
01) 4c	Physiatrist	Yes	3rd step
02) 32c	Work	Yes	18th step
03) " "	PT	Yes	4th step
04) " "	Physiatrist	Yes	1st step
05) " "	Social Work	Yes	2nd step
06) 8c	P+0	Yes	7th step
07) 12c	Social Work p	Yes	7th step
08) 7c	Endurance	Yes	11th step
09) " "	Muscle Strength	Yes	10th step
10) 3c	Home	Yes	14th step
11) 1c	Social Work p	Yes	2nd step
12) 12p	Home	Yes	11th step
13) " "	Work	Yes	9th step
14) 19a	Work	Yes	8th step
15) " "	Hand Function	Yes	1st step
16) " "	Sensation	Yes	2nd step

Hint given more than once and followed up.

d) Count: Recording of the number of different hints which each group unearthed during the play of the game, as well as an account of whether or not these hints were successfully followed-up (acted upon).

SESS1	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	03/50	03/60	03/43	02/67	01/20	04/57	03/50	05/71	24/52
NO	03/50	02/40	04/57	01/33	04/80	03/43	03/50	02/29	22/48
TOT	06 100	05 100	07 100	03 100	05 100	07 100	06 100	07 100	46 100

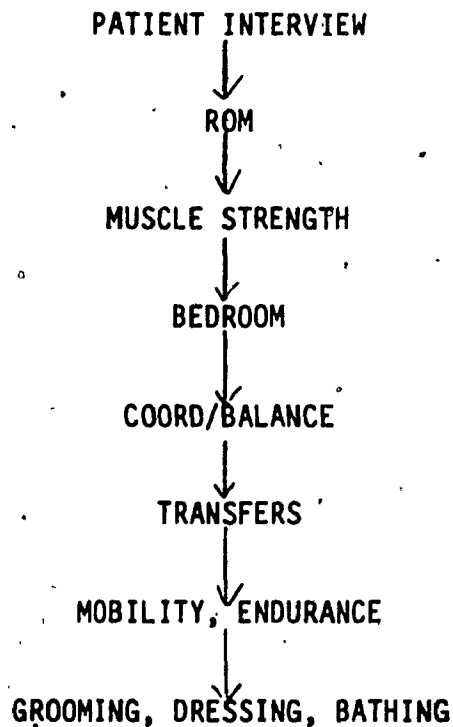
SESS2	A	B	C	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	03/75	04/67	04/50	05/100	02/40	05/83	03/60	26/67
NO	01/25	02/33	04/50	00/000	03/60	01/17	02/40	13/33
TOT	04 100	06 100	08 100	05 100	05 100	06 100	05 100	39 100

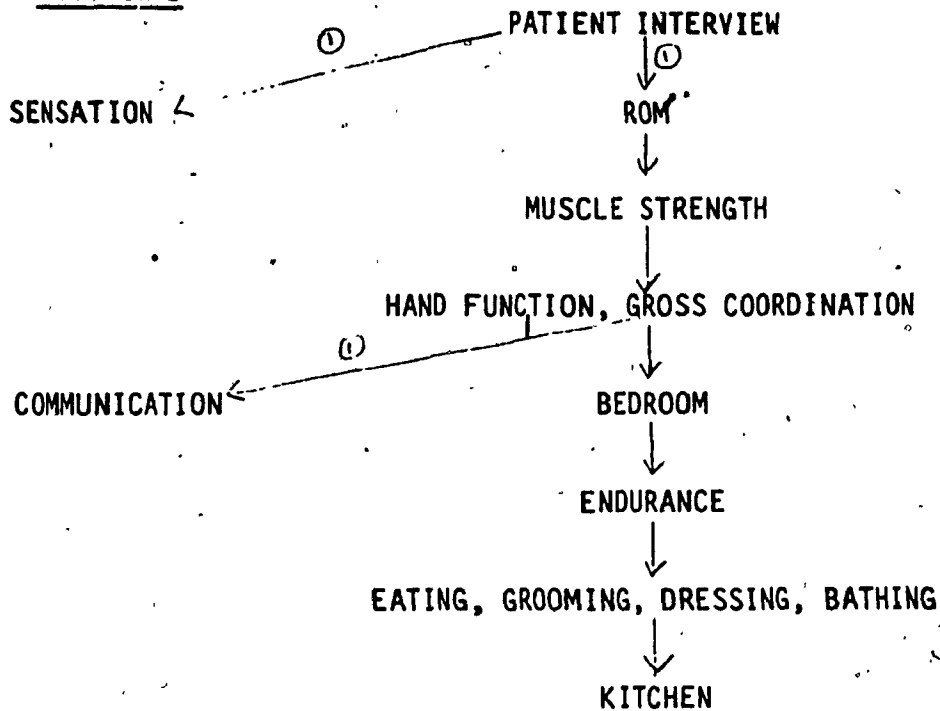
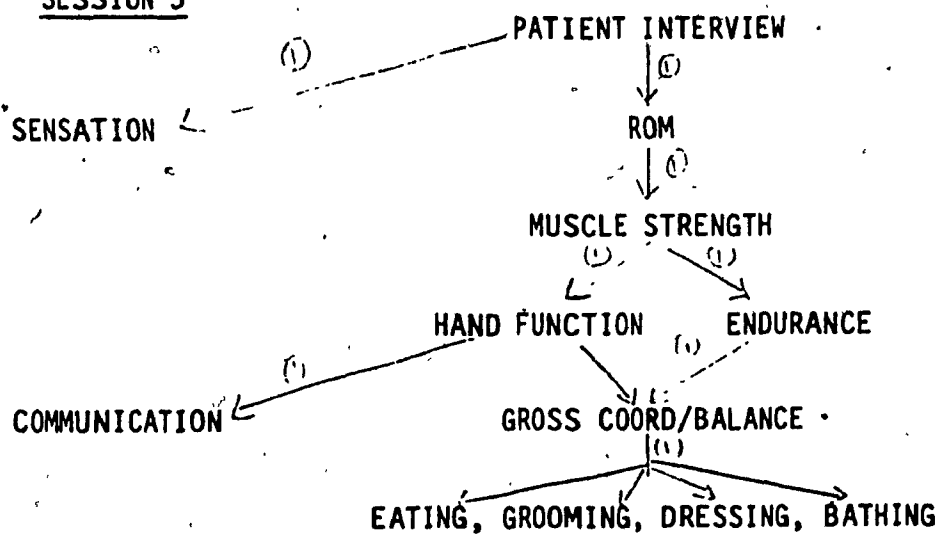
SESS3	A	B	C	D	E	F	G	H	TOTAL
	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %	# / %
YES	10/83	13/100	12/100	11/85	11/85	13/100	09/90	11/100	90/93
NO	02/17	00/000	00/000	02/15	02/15	00/000	01/10	00/000	07/07
TOT	12 100	13 100	12 100	13 100	13 100	13/100	10/100	11 100	97 100

### 9. ORDER OF MOVES:

a) Ideal order of assessments: The chart below outlines the "ideal" order in which the necessary assessments should have been performed.

#### SESSION 1



SESSION 2SESSION 3

There are two types of relationships between assessments: serial and parallel. In a serial relationship the second assessment must be preceded by the first. In a parallel relationship the order of the assessments is not a consideration. In the above chart category one represents serial relationships between assessments, and category two represents parallel relationships.

b) Actual Order: Outlined below is the actual order in which each group performed the necessary (relevant) assessments.

SESSION 1

<u>GROUP A</u>	<u>GROUP B</u>	<u>GROUP C</u>	<u>GROUP D</u>
PT INTERVIEW	MS	PT INTERVIEW	ROM
MOBILITY	MOBILITY	ROM	MOBILITY
ROM	DRESSING	MS	INTERVIEW
MS	BATHING	MOBILITY	TRANSFERS
TRANSFERS	PT INTERVIEW	TRANSFERS	ENDURANCE
BATHING	COORD	DRESSING	BATHING
DRESSING	BEDROOM	HYGIENE	DRESSING
		GROOMING	BEDROOM

<u>GROUP E</u>	<u>GROUP F</u>	<u>GROUP G</u>	<u>GROUP H</u>
PT INTERVIEW	MOBILITY	PT INTERVIEW	DRESSING
ROM	ROM	MOBILITY	MOBILITY
MOBILITY	COORD	TRANSFERS	BATHING
COORD	TRANSFERS	DRESSING	TRANSFERS
BATHING	BATHING	ROM	INTERVIEW
TRANSFERS			BEDROOM

SESSION 2

<u>GROUP A</u>	<u>GROUP B</u>	<u>GROUP C</u>
PE INTERVIEW	PE INTERVIEW	PE INTERVIEW
HAND FUNCTION	HAND FUNCTION TEST	SENSATION
ROM	SENSATION	HAND FUNCTION
COMMUNICATION	BATHING	EATING
KITCHEN	MS	ROM
DRESSING	COMMUNICATION	COMMUNICATION
GROOMING	ROM	KITCHEN
SENSATION	KITCHEN	BATHING
BATHING	DRESSING	DRESSING
EATING	EATING	BEDROOM
	GROOMING	

SESSION 2

<u>GROUP E</u>	<u>GROUP F</u>	<u>GROUP G</u>	<u>GROUP H</u>
PE INTERVIEW	PE INTERVIEW	PE INTERVIEW	HAND FUNC
HAND FUNCTION	HAND FUNCTION	HAND FUNCTION TEST	INTERVIEW
ROM	ROM	ROM	KITCHEN
COMMUNICATION	SENSATION	KITCHEN	ROM
KITCHEN	ENDURANCE	SENSATION	DRESSING
DRESSING	MS	EATING	GROOMING
GROOMING	KITCHEN	COMMUNICATION	EATING
BATHING	DRESSING		MS
EATING	BATHING		SENSATION
BEDROOM	EATING		ENDURANCE
MS			BATHING
			COMMUNIC
			BEDROOM

SESSION 3

GROUP A	GROUP B	GROUP C	GROUP D
PT INTERVIEW	PT INTERVIEW	PT INTERVIEW	INTERVIEW
SENSATION	SENSATION	SENSATION	SENSATION
ROM	HAND FUNCTION	ROM	COMMUNIC
MUSC STRENGTH	COMMUNICATION	ENDURANCE	DRESSING
COMMUNICATION	DRESSING	MUSC STRENGTH	GROOMING
EATING	EATING	EATING	EATING
DRESSING	GROOMING	BATHING	BATHING
GROOMING	ROM	COMMUNICATION	ENDURANCE
HAND FUNCTION	ENDURANCE	GROOMING	HAND FUNC
BATHING	MUSC STRENGTH	DRESSING	ROM
COORDINATION	BATHING	COORDINATION	STRENGTH
ENDURANCE		HAND FUNCTION	COORDINAT

SESSION 3

GROUP E	GROUP F	GROUP G	GROUP H
PT INTERVIEW	PT INTERVIEW	HAND FUNCTION	INTERVIEW
SENSATION	ROM	PT INTERVIEW	HAND FUNC
ROM	SENSATION	COMMUNICATION	SENSATION
MUSC STRENGTH	EATING	SENSATION	ROM
EATING	DRESSING	ROM	STRENGTH
GROOMING	BATHING	MUSC STRENGTH	ENDURANCE
DRESSING	COMMUNICATION	EATING	COMMUNIC
BATHING	HAND FUNCTION	BATHING	BATHING
	ENDURANCE	DRESSING	EATING
	MUSC STRENGTH	GROOMING	DRESSING
	GROOMING	ENDURANCE	GROOMING

In order to assess the performance of each group a scoring scheme has been devised which compares the order that the group performed their assessments to that of the ideal order. Therefore for each assessment which indicates:

Category 1: 2 points are added to the group's score.

Not Category 1: 2 points are subtracted from the group's score.

Category 2: 1 point added to the group's score.

Table 9b outlines the scores for each group. Each group started with a score of zero. Maximum possible score is 106.

SESSION 1

	GROUP							
	A	B	C	D	E	F	G	H
SCORE	29	-3	49	22	18	8	4	19
%	27%	0%	46%	21%	17%	08%	04%	18%

SESSION 2

Maximum possible score is 156.

	A	B	C	E	F	G	H
SCORE	51	54	42	26	55	27	44
%	33%	35%	27%	17%	35%	17%	28%

Maximum score possible is 109.

SESSION 3

	A	B	C	D	E	F	G	H
SCORE	57	33	65	1	44	37	53	81
%	52%	30%	60%	01%	41%	34%	49%	74%

c) Ideal order of Moves: Below is a chart of the ideal order of "information" moves. Relationships between moves are either serial or parallel.

SESSION 1

MEDICAL CHARTS      PATIENT ROOM      PATIENT INTERVIEW      ORTHO

-HEAD NURSE      cPT      WARD CONF      SOCIAL WORK

pHOME      COMM LIASON NURSE/HOME CARE

SESSION 2

MEDICAL CHARTS      PATIENT ROOM      PATIENT INTERVIEW      cRHEUM

cXRAY

SOCIAL WORK      DIETARY

cCOMM LIASON NURSE, pPt HOME, Pt WORK

SESSION 3

MEDICAL CHARTS      PATIENT ROOM      PATIENT INTERVIEW

cPHYSIATRIST      HEAD NURSE      cPT      REHAB-MEETING      pSOCIAL W      cP+S/cX-RAY

RESIDENT      NURSES      pHOME      P+O      PSYCHOLOGY

WORK

d) Actual Order: The chart below outlines the actual order of the relevant information moves each group carried out.

<u>SESSION 1</u>			
<u>GROUP A</u>	<u>GROUP B</u>	<u>GROUP C</u>	<u>GROUP D</u>
cMED CHART	cORTHO	cMED CHART	cORTHO
aPt INTERVIEW	cMED CHART	cSOCIAL WORK	INTERVIEW
pSOCIAL WORK	cWARD CONF	aPt INTERVIEW	
pHOME	aPt INTERVIEW		
<u>GROUP E</u>	<u>GROUP F</u>	<u>GROUP G</u>	<u>GROUP H</u>
aPt INTERVIEW	cORTHO	cMED CHART	INTERVIEW
cMED CHART	cMED CHART	aPt INTERVIEW	MED CHART
	cPT GYM	cSOCIAL WORK	cORTHO
		cLIASON NURSE	pSOCIAL
			cLIASON

SESSION 2

<u>GROUP A</u>	<u>GROUP B</u>	<u>GROUP C</u>
cMED CHART	cMED CHART	cMED CHART
aPt INTERVIEW	pSOCIAL WORK	aPt INTERVIEW
cRHEUM	aPt INTERVIEW	cSOCIAL WORK
cSOCIAL WORK	cCOMM LIASON NURSE	cRHEUM
cCOMM LIASON NURSE	pWORK	
pHOME		
pWORK		

SESSION 2

<u>GROUP E</u>	<u>GROUP F</u>	<u>GROUP G</u>	<u>GROUP H</u>
cMED CHART	cMED CHART	cMED CHART	MED CHART
cRHEUM	cRHEUM	aPt INTERVIEW	INTERVIEW
aPt INTERVIEW	cSOCIAL WORK	cXRAY	cRHEUM
cSOCIAL WORK	pHOME	cRHEUM	
cCOMM LIASON NURSE		cSOCIAL WORK	
pWORK		cCOMM LIASON NURSE	
cXRAY		pHOME	

SESSION 3

<u>GROUP A</u>	<u>GROUP B</u>	<u>GROUP C</u>	<u>GROUP D</u>
cMED CHART	cMED CHART	cMED CHART	INTERVIEW
cPHYSIATRIST	cPT DESK	cPHYSIATRIST	MED CHART
aPt INTERVIEW	cPHYSIATRIST	pSOCIAL WORK	cPHYSIAT
cREHAB CONF	aPt INTERVIEW	pp+0	pHOME
cPSYCHOLOGY	cPLASTICS	pHOME	pWORK
pSOCIAL WORK	pSOCIAL WORK	pNURSES	cPSYCHOL
pp+0	cNURSES	cPT GYM	cP+S
pHOME	pp+0	aPt INTERVIEW	cNURSES
cNURSES	pWORK	cPSYCHOLOGY	cPT GYM
	pHOME	cPT ROOM	pp+0
	cREHAB CONF	cRESIDENT	pHEAD NUR
	cPSYCHOLOGY	pWORK	
		pHEAD NURSE	



SESSION 3

<u>GROUP E</u>	<u>GROUP F</u>	<u>GROUP G</u>	<u>GROUP H</u>
aPT INTERVIEW	aPT INTERVIEW	cMED CHART	CP+S
cMED CHART	cMED CHART	cPHYSIATRIST	MED CHART
CP+S	CPT DESK	pSOCIAL WORK	cPHYSIAT
CPT DESK	cPHYSIATRIST	CPT DESK	CPT DESK
cPHYSIATRIST	cSOCIAL WORK	PP+O	cPSYCHOL
cNURSES	cNURSES	aPt INTERVIEW	PP+O
PP+O	pSOCIAL WORK	THOME	pSOCIAL
PHOME	PHOME		INTERVIEW
PWORK	CPSYCHOLOGY		PWORK
PSOCIAL WORK	pWORK		PHOME
CREHAB CONF	PP+O		CNURSES
CPSYCHOLOGY			
cROOM			

Table 9d outlines the scores for each group. The same scoring scheme as outlined in section 9b was used. Maximum possible score for Session 1 is 77.

SESSION 1

	<u>GROUP</u>							
	A	B	C	D	E	F	G	H
SCORE	11	05	01	01	01	05	11	17
%	14%	06%	01%	01%	01%	06%	14%	22%

SESSION 2

Maximum possible score for Session 2 is 80.

	A	B	C	E	F	G	H
SCORE	36	14	05	26	11	34	3
%	45%	18%	06%	33%	14%	43%	04%

SESSION 3

Maximum possible score for Session 3 is 206.

	A	B	C	D	E	F	G	H
SCORE	54	83	49	37	61	72	21	67
%	26%	40%	24%	18%	30%	35%	10%	33%

Appendix J

Raw Data for Group Dynamics Questionnaires

**QUESTIONNAIRE:** The questionnaire was administered at the end of each gaming session. The purpose of this questionnaire was to obtain information concerning the dynamics of each group, as well as each subject's reaction to the particular case history used.

1. **SEMANTIC DIFFERENTIAL:** This section used semantic differential questions to gain information concerning each subject's opinion of his group, the group's performance, as well as his role in the group.

Questions 1 through 8 are listed below along with how each answer was scored.

A. Your view of your group.

1.	superior	_____	_____	_____	_____	_____	_____	_____	_____	inferior
		1	2	3	4	5	6	7		
2.	good	_____	_____	_____	_____	_____	_____	_____	_____	bad
		1	2	3	4	5	6	7		
3.	successful	_____	_____	_____	_____	_____	_____	_____	_____	unsuccessful
		1	2	3	4	5	6	7		
4.	lazy	_____	_____	_____	_____	_____	_____	_____	_____	hard working
		7	6	5	4	3	2	1		
5.	cooperative	_____	_____	_____	_____	_____	_____	_____	_____	uncooperative
		1	2	3	4	5	6	7		
6.	*clumsy	_____	_____	_____	_____	_____	_____	_____	_____	skillful
		7	6	5	4	3	2	1		
7.	cautious	_____	_____	_____	_____	_____	_____	_____	_____	impulsive**
		1	2	3	4	5	6	7		
8.	serious	_____	_____	_____	_____	_____	_____	_____	_____	silly
		1	2	3	4	5	6	7		

\*changed from bungling.

\*\*changed from rash.

Table 1a: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated. Please note that the identity of each subject is anonymous; thus the designation A-a refers to what group and what position a subject held in a group. Therefore in a subsequent gaming session A-a refers to a completely different subject.

**SESSION 1:**

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	4	3	3	3	4	3	3	3	3.3
- b	1	1	2	1	1	1	2	1	1.3
- c	4	3	3	1	1	1	1	1	1.9
- ave	3	2.3	2.7	1.7	2.0	1.7	2.0	1.7	2.2
B - a	4	3	4	2	2	3	4	2	3.0
- b	1	1	3	2	1	1	1	1	1.4
- c	3	3	2	2	1	2	2	1	2.0
- d	4	2	2	2	1	3	1	2	2.1
- ave	3.0	2.3	2.8	2.0	1.3	2.3	2.0	1.5	2.1

C - a	4	3	3	2	1	3	2	2	2.5
- b	3	3	3	2	1	2	3	2	2.1
- c	4	4	3	2	2	3	3	2	2.9
- ave	3.7	3.3	3.0	2.0	1.3	2.7	2.7	2.0	2.5
D - a	4	2	3	2	1	2	3	1	2.3
- b	2	1	3	1	1	2	2	1	1.6
- c	3	4	4	6	2	3	2	2	3.3
- ave	3.0	2.3	3.3	3.0	1.3	2.3	2.3	1.3	2.4
E - a	3	1	2	2	2	2	2	4	2.3
- b	3	3	3	2	1	3	5	4	3.0
- c	4	2	2	2	7	2	6	6	3.9
- ave	3.3	2.0	2.3	2.0	3.3	2.3	4.3	4.7	3.1
F - a	4	1	1	1	1	2	2	1	1.6
- b	3	2	3	2	1	2	3	2	2.6
- c	3	2	2	2	2	2	2	2	2.1
- ave	3.3	1.7	2.0	1.7	1.3	2.0	2.3	1.7	2.1
G - a	3	3	3	1	1	2	1	2	2.0
- b	4	3	3	3	2	3	3	2	2.9
- c	3	2	3	-	2	2	**3,4	2	2.5
- ave	3.3	2.7	3.0	*2.0	1.7	2.3	2.5	2.0	2.5
H - a	4	3	2	1	1	2	2	1	2.0
- b	4	3	3	2	1	4	5	3	3.1
- c	4	4	2	1	1	1	1	1	1.9
- ave	4.0	3.3	2.3	1.3	1.0	2.3	2.7	1.7	2.3
MEAN	3.3	2.5	2.7	2.0	1.6	2.2	2.6	2.0	2.4
SD	0.9	1.0	0.7	1.0	1.3	0.8	1.3	1.2	

\* average based on two scores.

\*\* averaged 3 and 4, score taken as 3.5.

### SESSION 2:

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	4	2	2	3	1	3	2	1	2.3
- b	3	2	2	2	6	2	5	3	3.1
- c	2	2	2	2	3	2	2	2	2.1
- ave	3.0	2.0	2.0	2.3	3.3	2.3	3.0	2.0	2.5
B - a	2	2	2	3	1	2	2	3	2.1
- b	2	1	4	1	1	2	4	2	2.1
- c	2	1	2	1	1	1	4	2	1.8
- d	2	1	2	1	1	2	2	3	1.8
- ave	2.0	1.3	2.5	1.5	1.0	1.8	3.0	2.5	2.0
C - a	3	3	3	2	2	3	3	2	2.6
- b	4	1	3	1	1	2	3	2	2.1
- c	3	3	2	1	7	1	1	1	2.4
- ave	3.3	2.3	2.7	1.3	3.3	2.0	2.3	1.7	2.4
E - a	3	3	2	2	1	3	4	3	2.6
- b	3	2	2	2	1	3	2	2	2.1
- c	2	1	2	1	1	1	1	1	1.3
- ave	2.7	2.0	2.0	1.7	1.0	2.3	2.3	2.0	2.0
F - a	3	3	3	2	1	2	3	1	2.3
- b	3	4	3	3	2	2	4	4	3.1
- c	2	1	2	2	2	2	3	1	1.9
- ave	2.7	2.7	2.7	2.3	1.7	2.0	3.3	2.0	2.4

G - a	3	2	2	2	1	2	5	3	2.5
- b	3	3	2	2	2	2	2	3	2.4
- c	3	3	3	2	2	3	3	3	2.8
- ave	3.0	2.7	2.3	2.0	1.7	2.3	3.3	3.0	2.6
H - a	2	2	2	2	2	2	2	2	2.0
- b	2	2	3	4	1	1	4	1	2.3
- c	4	5	5	3	3	2	2	2	3.3
- ave	2.7	3.0	3.3	3.0	2.0	1.7	2.7	1.7	2.5
MEAN	2.7	2.2	2.5	2.0	2.0	2.0	2.9	2.1	2.3
SD	0.7	1.1	0.8	0.8	1.6	0.7	1.2	0.9	

## SESSION 3:

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	3	3	2	3	2	3	5	4	3.1
- b	2	2	2	3	2	3	6	4	3.0
- c	3	2	2	3	3	5	3	3	3.0
- ave	2.7	2.3	2.0	3.0	2.3	3.7	4.7	3.7	3.0
B - a	2	2	2	4	2	4	4	1	2.6
- b	2	2	2	2	2	2	2	3	2.1
- c	2	2	2	1	1	2	2	1	1.6
- ave	2.0	2.0	2.0	2.3	1.7	2.7	2.7	1.7	2.1
C - a	2	2	1	1	2	1	2	2	1.6
- b	2	1	1	1	1	2	4	2	1.8
- c	2	2	2	1	1	1	2	2	1.6
- ave	2.0	1.7	1.3	1.0	1.3	1.3	2.7	2.0	1.7
D - a	2	2	1	1	1	1	2	1	1.4
- b	4	2	1	2	1	1	4	2	2.1
- c	2	2	2	2	1	2	2	2	1.9
- ave	2.7	2.0	1.3	1.7	1.0	1.3	2.7	1.7	1.8
E - a	2	1	1	1	1	1	1	1	1.1
- b	2	1	1	1	1	1	1	1	1.1
- c	3	2	2	2	2	2	1	1	1.9
- ave	2.3	1.3	1.3	1.3	1.3	1.3	1.0	1.0	1.4
F - a	3	2	2	2	2	2	2	2	2.1
- b	2	1	2	1	6	1	2	2	2.1
- c	1	1	1	1	1	1	4	2	1.5
- ave	2.0	1.3	1.7	1.3	3.0	1.3	2.7	2.0	1.9
G - a	3	2	1	1	1	2	2	1	1.6
- b	3	1	2	2	1	2	2	3	2.0
- c	2	2	2	2	2	3	2	1	2.0
- ave	2.7	1.7	1.7	1.7	1.3	2.3	2.0	1.7	1.9
H - a	2	2	2	2	1	2	2	1	1.8
- b	1	1	1	2	1	2	2	2	1.5
- c	3	2	2	2	2	3	2	1	2.1
- ave	2.0	1.7	1.7	2.0	1.3	2.3	2.0	1.3	1.8
MEAN	2.3	1.8	1.6	1.8	1.7	2.0	2.5	1.9	1.9
SD	0.7	0.5	0.5	0.8	1.1	1.0	1.3	0.9	

Below are questions 9 through 11 and how they were scored.

B. Your view of your group's report.

9.           poor       :       :       :       :       :       :       :       good  
               7       6       5       4       3       2       1

10. successful 1 : 2 : 3 : 4 : 5 : 6 : 7 : unsuccessful  
 11. complete 1 : 2 : 3 : 4 : 5 : 6 : 7 : incomplete

Table 1b: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated.

SESSION 1:

GROUP	QUESTIONS			AVE
	9	10	11	
A - a	3	3	3	3.0
- b	2	2	3	2.3
- c	3	3	3	3.0
- ave	2.7	2.7	3.0	2.7
B - a	3	4	5	4.0
- b	1	1	3	1.7
- c	2	2	2	2.0
- d	4	4	4	4.0
- ave	2.5	2.8	3.5	2.9
C - a	3	3	4	3.3
- b	4	4	5	4.3
- c	5	4	5	4.7
- ave	4.0	3.7	4.7	4.1
D - a	2	2	6	3.3
- b	4	4	4	4.0
- c	5	4	6	5.0
- ave	3.7	3.3	5.3	4.1
E - a	3	2	3	2.7
- b	3	2	3	2.7
- c	4	4	4	4.0
- ave	3.3	2.7	3.3	3.1
F - a	1	1	2	1.3
- b	3	3	3	3.0
- c	2	2	2	2.0
- ave	2.0	2.0	2.3	2.1
G - a	3	3	5	3.7
- b	3	4	6	4.3
- c	3	3	4	3.3
- ave	3.0	3.3	5.0	3.8
H - a	3	3	3	3.0
- b	4	4	5	4.3
- c	4	4	4	4.0
- ave	3.7	3.7	4.0	3.8
MEAN	3.1	3.0	3.9	3.3
SD	1.0	1.0	1.2	

GROUP	9	10	11	AVE
- b	3	3	3	3.0
- c	4	3	6	4.3
- ave	3.7	3.3	4.7	3.9
B - a	2	3	4	3.0
- b	4	3	4	3.7
- c	2	2	3	2.3
- d	3	3	4	3.3
- ave	2.8	2.8	3.8	3.1
C - a	3	3	5	3.7
- b	3	3	3	3.0
- c	1	2	2	1.7
- ave	2.3	2.7	3.3	2.8
D - a	3	2	3	2.7
- b	2	5	5	4.0
- c	2	2	2	2.0
- ave	2.3	3.0	3.3	2.9
E - a	2	2	3	2.3
- b	3	4	5	4.0
- c	2	2	3	2.3
- ave	2.3	2.7	3.7	2.9
G - a	2	2	5	3.0
- b	2	2	3	2.3
- c	3	3	3	3.0
- ave	2.3	2.3	3.7	2.8
H - a	5	3	3	3.7
- b	2	2	3	2.3
- c	5	4	5	4.7
- ave	4.0	3.0	3.7	3.6
MEAN	2.8	2.8	3.7	3.1
SD	1.1	0.9	1.1	

## SESSION 3:

GROUP	QUESTIONS			AVE
	9	10	11	
A - a	2	2	1	1.7
- b	3	4	4	3.7
- c	2	2	2	2.0
- ave	2.3	2.7	2.3	2.5
B - a	1	1	2	1.3
- b	2	3	3	2.7
- c	2	2	2	2.0
- ave	1.7	2.0	2.3	2.0
C - a	2	6	2	3.3
- b	2	2	2	2.0
- c	1	1	2	1.3
- ave	1.7	3.0	2.0	2.2
D - a	1	1	2	1.3
- b	1	1	-1	1.0
- c	1	1	1	1.0
- ave	1.0	1.0	1.3	1.1
E - a	1	1	2	1.3
- b	1	1	1	1.0
- c	2	2	2	2.0
- ave	1.3	1.3	1.7	1.4
F - a	2	2	2	2.0
- b	2	1	2	1.7
- c	1	1	1	1.0
- ave	1.7	1.3	1.7	1.6
G - a	2	1	2	1.7
- b	2	2	2	2.0
- c	2	2	2	2.0
- ave	2.0	1.7	2.0	1.9
H - a	2	2	2	2.0
- b	1	1	2	1.3
- c	2	2	2	2.0
- ave	1.7	1.7	2.0	1.8
MEAN	1.7	1.8	1.9	1.8
SD	0.6	1.2	0.7	

Below are questions 12 through 21 and how they were scored.

C. Your participation in your group's decision making.

12. active \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : passive
13. unwilling \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : willing
14. influential \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : noninfluential
15. successful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : unsuccessful
16. meaningful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : meaningless
17. dominant \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : lax

18. sufficient 1 : 2 : 3 : 4 : 5 : 6 : 7 : insufficient
19. leading 1 : 2 : 3 : 4 : 5 : 6 : 7 : following
20. critical 1 : 2 : 3 : 4 : 5 : 6 : 7 : indiscriminate
21. useful 1 : 2 : 3 : 4 : 5 : 6 : 7 : useless

Table 1c: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated.

SESSION 1:

GROUP	QUESTIONS.										AVE
	12	13	14	15	16	17	18	19	20	21	
A - a	3	2	3	3	3	3	1	2	4	3	2.7
- b	1	1	1	1	1	4	1	2	3	2	1.7
- c	2	2	4	4	2	4	2	4	4	2	3.0
- ave	2.0	1.7	2.7	2.7	2.0	3.7	1.3	2.7	3.7	2.3	2.5
B - a	3	2	3	2	3	4	3	4	4	3	3.1
- b	2	1	2	2	1	2	1	2	3	1	1.7
- c	3	2	2	1	2	2	2	2	2	2	2.0
- d	3	1	5	4	4	6	4	6	4	3	4.0
- ave	2.8	1.5	3.0	2.3	3.3	3.5	2.5	3.5	3.3	2.3	2.7
C - a	2	2	2	3	3	4	2	3	4	3	2.8
- b	2	1	2	2	2	2	2	2	3	2	2.0
- c	2	2	3	4	3	4	3	4	4	3	3.2
- ave	2.0	1.7	2.3	3.0	2.7	3.3	2.3	3.0	3.7	2.7	2.7
D - a	1	2	3	2	2	4	1	4	2	1	2.2
- b	1	1	2	2	2	4	2	4	4	1	2.3
- c	1	1	2	3	3	4	2	2	3	2	2.3
- ave	1.0	1.3	2.3	2.3	2.3	4.0	1.7	3.3	3.0	1.3	2.3
E - a	3	2	2	2	2	3	1	4	2	2	2.3
- b	2	2	2	2	2	2	2	2	3	3	2.2
- c	2	2	2	2	2	3	3	3	3	3	2.5
- ave	2.3	2.0	2.0	2.0	2.0	2.7	2.0	3.0	2.7	2.7	2.3
F - a	1	1	3	1	1	3	2	4	4	2	2.2
- b	2	2	3	3	2	4	2	4	4	3	2.9
- c	2	2	2	2	2	3	2	3	4	3	2.5
- ave	1.7	1.7	2.7	2.0	1.7	3.3	2.0	3.7	4.0	2.7	2.5
G - a	1	1	2	2	2	2	1	2	4	2	1.9
- b	2	2	3	3	2	4	3	3	4	2	2.8
- c	3	2	6	4	3	4	2	4	3	3	3.4
- ave	2.0	1.7	3.7	3.0	2.3	3.3	2.0	3.0	3.7	2.3	2.7
H - a	1	1	1	2	2	4	1	2	3	2	1.9
- b	2	2	4	2	2	4	2	4	4	3	2.9
- c	1	1	5	2	2	4	2	4	4	2	2.7
- ave	1.3	1.3	3.3	2.0	2.0	4.0	1.7	3.3	3.7	2.3	2.5
MEAS	1.9	1.6	2.8	2.4	2.2	3.5	2.0	3.2	3.4	2.3	2.5
SD	0.8	0.5	1.2	0.9	0.7	1.0	0.8	1.1	0.7	0.7	



## SESSION 2:

GROUP	QUESTIONS										
	12	13	14	15	16	17	18	19	20	21	AVE
A - a	2	2	2	3	1	4	3	4	3	2	2.6
- b	2	2	2	2	3	3	2	2	5	3	2.6
- c	2	2	3	3	3	4	3	4	3	3	3.0
- ave	2.0	2.0	2.3	2.7	2.3	3.7	2.7	3.3	3.7	2.7	2.7
B - a	1	2	2	2	2	3	2	3	3	2	2.2
- b	2	1	3	3	2	4	1	4	4	2	2.6
- c	2	1	2	2	2	2	1	3	3	2	2.0
- d	2	2	2	2	2	4	1	4	4	3	2.6
- ave	1.8	1.5	2.3	2.3	2.0	3.3	1.3	3.5	3.5	2.3	2.4
C - a	2	2	3	2	2	3	2	4	3	2	2.5
- b	2	1	4	3	2	4	3	4	4	3	3.0
- c	1	1	1	1	2	2	2	2	2	2	1.6
- ave	1.7	1.3	2.7	2.0	2.0	3.0	2.3	3.3	3.0	2.3	2.4
E - a	2	1	2	2	2	4	1	4	4	1	2.3
- b	3	2	3	3	2	4	2	4	3	2	2.8
- c	1	1	2	1	1	3	1	2	2	2	1.6
- ave	2.0	1.3	2.3	2.0	1.7	3.7	1.3	3.3	3.0	1.7	2.2
F - a	2	1	2	2	2	2	2	2	2	2	1.9
- b	2	2	4	3	3	4	3	4	4	3	3.2
- c	1	1	1	2	1	3	1	1	4	2	1.7
- ave	1.7	1.3	2.3	2.3	2.0	3.0	2.0	2.3	3.3	2.3	2.3
G - a	2	2	2	2	1	4	2	5	2	1	2.3
- b	2	2	2	2	2	3	2	3	6	2	2.6
- c	2	2	3	3	3	4	3	4	4	3	3.1
- ave	2.0	2.0	2.3	2.3	2.0	3.7	2.3	4.0	4.0	2.0	2.7
H - a	3	3	3	2	3	3	2	3	3	2	2.7
- b	2	3	3	2	2	2	2	2	5	3	2.6
- c	2	1	1	2	2	1	2	1	3	2	1.7
- ave	2.3	2.3	2.3	2.0	2.3	2.0	2.0	2.0	3.7	2.3	2.3
MEAN	1.9	1.7	2.4	2.2	2.0	3.2	2.0	3.1	3.5	2.2	2.4
SD	0.5	0.6	0.8	0.6	0.7	0.9	0.7	1.1	1.1	0.6	

## SESSION 3:

GROUP	QUESTIONS										
	12	13	14	15	16	17	18	19	20	21	AVE
A - a	2	2	2	2	2	3	3	2	6	2	2.6
- b	2	2	2	3	2	4	2	4	3	2	2.6
- c	3	3	3	3	2	3	2	3	3	2	2.7
- ave	2.3	2.3	2.3	2.7	2.0	3.3	2.3	3.0	4.0	2.0	2.6
B - a	3	2	3	1	1	1	1	3	5	2	2.2
- b	3	2	2	2	2	3	3	3	4	2	2.6
- c	3	3	2	2	2	4	3	4	3	1	2.7
- ave	3.0	2.3	2.3	1.7	1.7	2.7	2.3	3.3	4.0	1.7	2.5
C - a	3	3	3	3	3	4	3	4	4	3	3.3
- b	1	2	2	1	1	4	1	4	3	1	2.0
- c	2	1	3	3	2	4	2	4	5	2	2.8
- ave	2.0	2.0	2.7	2.3	2.0	4.0	2.0	4.0	4.0	2.0	2.7
D - a	1	1	2	2	2	2	2	2	2	2	1.8
- b	1	1	3	3	3	3	2	5	1	2	2.4
- c	1	1	2	2	2	2	2	2	2	2	1.8
- ave	1.0	1.0	2.3	2.3	2.3	2.3	2.0	3.0	1.7	2.0	2.0

E - a	1	1	1	1	1	4	1	4	4	1	1.9
- b	1	1	2	1	1	4	2	3	4	1	2.0
- c	1	1	1	1	1	2	1	1	2	1	1.2
- ave	1.0	1.0	1.3	1.0	1.0	3.3	1.3	2.7	3.3	1.0	1.7
F - a	2	2	2	2	2	4	2	4	4	2	2.6
- b	2	1	2	1	1	3	2	3	3	1	1.9
- c	1	1	1	1	1	4	1	1	1	1	1.3
- ave	1.7	1.3	1.7	1.3	1.3	3.7	1.7	2.7	2.7	1.3	1.9
G - a	1	1	1	2	2	3	1	2	5	1	1.9
- b	2	2	2	2	1	4	2	3	2	1	2.1
- c	2	2	3	2	2	3	2	3	4	2	2.5
- ave	1.7	1.7	2.0	2.0	1.7	3.3	1.7	2.7	3.7	1.3	2.2
H - a	3	2	2	2	2	3	3	3	3	3	2.6
- b	1	1	1	2	1	3	1	3	3	1	1.7
- c	1	2	2	3	2	3	1	3	3	2	2.2
- ave	1.7	1.7	1.7	2.3	1.7	3.0	1.7	3.0	3.0	2.0	2.2
MEAN	1.8	1.7	2.0	2.0	1.7	3.2	1.9	3.0	3.3	1.7	2.2
SD	0.8	0.7	0.7	0.8	0.6	0.8	0.7	1.0	1.3	0.6	

Table 1d: Frequency of scores for questions 1-21.

Q	S	1 f/%	2 f/%	3 f/%	Q	S	1 f/%	2 f/%	3 f/%	
1	1	02/08	00/00	02/08	7	1	05/19	02/09	03/13	
	2	01/04	09/41	14/58		2	09/35	08/36	14/58	
	3	09/36	10/45	07/29		3	** (07/27)	05/23	01/04	
	4	13/52	03/14	01/04		4	** (02/08)	05/23	04/17	
2	1	05/20	06/27	07/29	8	5	02/08	02/09	01/04	
	2	06/24	08/36	16/67		6	01/04	00/00	01/04	
	3	11/44	06/27	01/04		9	1	02/08	01/05	09/38
	4	03/12	01/05	00/00			2	04/16	09/41	14/58
3	1	01/04	00/00	09/38	3		11/44	07/32	01/04	
	2	08/32	14/54	15/63	4		06/24	03/14	00/00	
	3	14/56	06/27	00/00	5	02/08	02/09	00/00		
	4	02/08	01/05	00/00	10	1	02/08	00/00	11/46	
	5	00/00	01/05	00/00		2	06/24	09/41	10/42	
4	1	*07/29	06/27	10/42		3	07/28	09/41	01/04	
	2	14/58	11/50	10/42		4	10/40	03/14	01/04	
	3	02/08	04/18	03/13		5	00/00	01/05	00/00	
	4	00/00	01/05	01/05		6	00/00	00/00	01/04	
	6	01/04	00/00	00/00	11	1	00/00	00/00	05/21	
	5	1	16/64	12/55		13/54	2	03/12	02/09	17/71
2		07/28	06/27	09/38		3	08/32	10/45	01/04	
3		00/00	02/09	01/04		4	06/24	03/14	01/04	
4		01/04	00/00	00/00		5	05/20	06/27	00/00	
6		00/00	01/05	01/04		6	03/12	01/05	00/00	
6	7	01/04	01/05	00/00						
	1	04/16	04/18	08/33						
	2	12/48	13/59	10/42						
	3	08/32	05/23	04/17						
	4	01/04	00/00	01/04						
5	00/00	00/00	01/04							

\* One subject failed to respond.

\*\* One subject gave two different responses to the same question.

Q	S	Session			Q	S	Session		
		1 f/%	2 f/%	3 f/%			1 f/%	2 f/%	3 f/%
12	1	08/32	04/18	11/46	18	1	07/28	06/27	08/33
	2	11/44	16/73	07/29		2	13/52	11/50	11/46
	3	06/24	02/09	06/25		3	04/16	05/23	05/21
13	1	10/40	09/41	11/46	19	4	01/04	00/00	00/00
	2	15/60	11/50	10/42		1	00/00	02/09	02/08
	3	00/00	02/09	03/13		2	09/36	05/23	04/17
14	1	02/08	03/14	05/21	3	04/16	04/18	10/42	
	2	11/44	10/45	13/54	4	11/44	10/45	07/29	
	3	07/28	07/32	06/25	5	00/00	01/05	01/04	
	4	02/08	02/09	00/00	6	01/04	00/00	00/00	
	5	02/08	00/00	00/00	20	1	00/00	00/00	02/08
	6	01/04	00/00	00/00		2	03/12	04/18	04/17
15	1	03/12	02/09	07/29	3	08/32	08/36	08/33	
	2	13/52	13/59	11/46	4	14/56	07/32	06/25	
	3	05/20	07/32	06/25	5	00/00	02/09	03/13	
	4	04/16	00/00	00/00	6	00/00	01/05	01/04	
16	1	03/12	04/18	09/38	21	1	03/12	02/09	10/42
	2	15/60	13/59	13/54		2	11/44	13/59	12/50
	3	06/24	05/23	02/08		3	11/44	07/32	02/08
	4	01/04	00/00	00/00					
17	1	00/00	01/05	01/04					
	2	05/20	04/18	03/13					
	3	05/20	07/32	10/42					
	4	14/56	10/45	10/42					
	6	01/04	00/00	00/00					

2. CLOSED FORM/SCALED ITEMS: Questions 23, 24, and 25 are of the closed form type in which the choice of answers are discrete. Questions 22 and 26 are scaled items in which subjects check the place on the scale that best reflect their opinions about the statement. Below are the questions asked and how they were scored.

22. Was there conflict within your group?

$\frac{1}{\text{a lot}}$ 
 $\frac{2}{\text{some}}$ 
 $\frac{3}{\text{not much}}$ 
 $\frac{4}{\text{none}}$

23. Who made the majority of decisions in the group?

$\frac{1}{\text{one person}}$ 
 $\frac{2}{\text{two people}}$ 
 $\frac{3}{\text{each person took a turn}}$ 
 $\frac{4}{\text{the group as a whole}}$

24. Would you have performed better without the group?

$\frac{1}{\text{yes}}$ 
 $\frac{2}{\text{no}}$ 
 $\frac{3}{\text{the same}}$

25. Would you have preferred to play the game

$\frac{1}{\text{alone?}}$ 
 $\frac{2}{\text{with a different same group?}}$ 
 $\frac{3}{\text{with the group?}}$ 
 $\frac{4}{\text{in any}}$

\*\* New category added for Session 3, U3.

26. The case history was

1  
too easy

2  
fairly  
easy

3  
not very  
easy

4  
very  
difficult

**Table 2a:** outlines what each subject reported for each question. A group average as well as a total average has been calculated for questions 22 and 26 in which the responses are on a scale.

**SESSION 1:**

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	3	3	2	4	2
- b	3	4	2	3	2
- c	4	4	3	4	3
- ave	3.3	NA	NA	NA	2.3
B - a	2	4	2	4	3
- b	4	4	2	3	2
- c	4	3+4	3	4	3
- d	3	2	2	4	3
- ave	3.3	NA	NA	NA	2.8
C - a	3	4	2	4	2
- b	4	4	2	4	3
- c	3	4	2	4	2
- ave	3.3	NA	NA	NA	2.3
D - a	4	4	2	4	2
- b	3	4	2	3	2
- c	3	4	2	4	2
- ave	3.3	NA	NA	NA	2.0
E - a	3	4	2	4	2
- b	3	4	2	4	3
- c	4	4	2	4	3
- ave	3.3	NA	NA	NA	2.7
F - a	4	4	2	4	3
- b	3	4	2	4	2
- c	3	4	2	4	2
- ave	3.3	NA	NA	NA	2.3
G - a	3	2	3	4	2
- b	3	2	2	3	2
- c	3	4	3	4	3
- ave	3.0	NA	NA	NA	2.3
H - a	4	2	2	4	2
- b	3	3	2	4	3
- c	3	4	2	4	3
- ave	3.3	NA	NA	NA	2.7
MEAN	3.3				2.4
SD	0.5				0.5

## SESSION 2:

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	3	3	2	3	3
- b	3	4	2	4	2
- c	3	3	2	3	2
- ave	3.0	NA	NA	NA	2.3
B - a	4	4	3	3	2
- b	3	4	2	4	2
- c	3	4	2	4	3
- d	4	4	2	3	3
- ave	3.5	NA	NA	NA	2.5
C - a	3	4	2	4	3
- b	4	4	3	4	2
- c	4	4	2	3	2
- ave	3.7	NA	NA	NA	2.3
E - a	4	4	2	4	2
- b	4	4	2	4	3
- c	4	4	3	3	*2,3
- ave	4.0	NA	NA	NA	2.5
F - a	4	4	2	4	2
- b	3	4	2	4	2
- c	3	4	3	4	3
- ave	3.3	NA	NA	NA	2.3
G - a	4	4	2	4	2
- b	3	3	3	4	3
- c	3	3	2	4	3
- ave	3.3	NA	NA	NA	2.7
H - a	3	4	3	4	2
- b	4	4	2	4	3
- c	2	4	3	4	3
- ave	3.0	NA	NA	NA	2.7
MEAN	3.4	NA	NA	NA	2.5
SD	0.6				0.5

\* stated doesn't matter

## SESSION 3:

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	4	4	2	4	2
- b	4	3	3	4	2
- c	3	3	3	4	3
- ave	3.7	NA	NA	NA	2.3
B - a	4	4	3	4	3
- b	3	4	2,3	4	2
- c	3	4	2	4	2
- ave	3.3	NA	NA	NA	2.3
C - a	4	4	3	4	2
- b	3	4	2	4	2
- c	4	3	2	4	2
- ave	3.7	NA	NA	NA	2.0
D - a	4	4	3	4	2
- b	3	4	2	4	3
- c	3	4	2	4	2
- ave	3.3	NA	NA	NA	2.3

E - a	4	4	3	4	3
- b	4	4	2	4	2
- c	3	4	3	4	3
- ave	<u>3.7</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>2.7</u>
F - a	3	2	2	4	2
- b	4	4	3	4	3
- c	4	4	2	4	2
- ave	<u>3.7</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>2.3</u>
G - a	2	4	2	4	2
- b	4	3	2	4	2
- c	3	3	2	3	2
- ave	<u>3.0</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>2.0</u>
H - a	4	4	2	4	2
- b	4	3	2	4	2
- c	2	2	2	4	3
- ave	<u>3.3</u>	<u>NA</u>	<u>NA</u>	<u>NA</u>	<u>2.3</u>
MEAN	3.5	NA	NA	NA	2.3
SD	0.7				0.5

3. OPEN ENDED: Questions 27 and 28 are open ended questions. In addition subjects have been invited to record any additional comments. Below are the questions asked.

27. Do you feel you had the necessary knowledge and skills to play this game? If not what knowledge or skills were lacking?

28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

Table 3a: outlines the number of subjects that responded yes or no to question 27.

SESSION 1:

GROUP	YES	NO
A - a	-	-
- b	x	-
- c	-	-
total	1	0
B - a	-	-
- b	x	-
- c	x	-
- d	x	-
total	3	0
C - a	-	x
- b	-	-
- c	x	-
total	1	1
D - a	x	-
- b	-	-
- c	-	-
total	1	0
E - a	-	x
- b	x	-
- c	x	-
total	2	0
F - a	x	-
- b	-	-
- c	x	-
total	2	0
G - a	-	-
- b	-	-
- c	-	-
total	0	0
H - a	-	-
- b	-	-
- c	x	-
total	1	0
TOTAL	11	1
%	44%	4%

SESSION 2:

GROUP	YES	NO
A - a	x	-
- b	-	-
- c	-	x
total	1	1
B - a	x	-
- b	-	-
- c	x	-
- d	-	-
total	2	0
C - a	-	x
- b	-	-
- c	x	-
total	1	1
E - a	-	-
- b	-	-
- c	x	-
total	1	0
F - a	-	-
- b	-	-
- c	x	-
total	1	0
G - a	x	-
- b	x	-
- c	-	-
total	2	0
H - a	x	-
- b	x	-
- c	-	-
total	2	0
TOTAL	10	2
%	45%	9%

SESSION 3:

GROUP	YES	NO
A - a	x	-
- b	x	-
- c	x	-
total	3	0
B - a	x	-
- b	x	-
- c	x	-
total	3	0
C - a	x	-
- b	-	-
- c	x	-
total	2	0
D - a	x	-
- b	x	-
- c	x	-
total	3	0
E - a	-	-
- b	x	-
- c	-	x
total	1	1
F - a	x	-
- b	x	-
- c	x	-
total	3	0
G - a	x	-
- b	x	-
- c	-	-
total	2	0
H - a	x	-
- b	x	-
- c	x	-
total	3	0
TOTAL	20	1
	83%	4%

N.B. In certain cases the subject did not clearly indicate whether or not they had the necessary knowledge and skills. The impression was that they had some but not all. Where there was no clear indication of a yes/no answer then a dashed line (-) was used.

TABLE 3b: outlines the different categories of comments and their content for question 27.

CATEGORY	CONTENT
1	require more knowledge of the role/function of a profession(s).
2	require more skills concerning hospital procedures.
3	require more kl/skill of the necessary information needed.
4	require more kl of where to obtain necessary information.
5	too much time spent on consultations.
6	not enough time spent on performing OT assessments.

- 7 require more knowledge of OT treatment of the particular case.  
 8 require more knowledge concerning the pathology/prognosis of the particular case history.  
 9 require more knowledge of the OT assessments which should be performed concerning the particular case history.  
 10 require organizational skills for prioritizing and gathering information.  
 11 skills in acquiring information improving but still need work.  
 12 require more knowledge of the different types of information available from specific sources.  
 13 failed to study the various possibilities (locations, assessments) available for obtaining information.  
 14 lack experience in applying theory.  
 15 require a better understanding of the SOAP method of report writing.  
 16 difficulty writing/understanding Assessment in SOAP.  
 17 difficulty visualizing case history (need pictures of deformity).

TABLE 3c: outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	0	00	0	00	1	04
2	1	04	0	00	0	00
3	0	00	0	00	0	00
4	3	12	1	05	0	00
5	0	00	0	00	0	00
6	0	00	0	00	0	00
7	0	00	8	36	2	08
8	0	00	7	32	2	08
9	2	08	1	05	0	00
10	5	20	0	00	0	00
11	0	00	2	09	0	00
12	2	08	0	00	0	00
13	2	08	0	00	0	00
14	3	12	2	09	0	00
15	3	12	0	00	1	04
16	0	00	2	09	0	00
17	0	00	1	05	0	00

Table 3d: provides a report of all the comments made for question 27 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments did not answer the question so although they are reported here they are coded under additional comments. These comments are in square brackets [ ].

27. Do you feel you had the necessary knowledge and skills to play this



game? If not what knowledge or skills were lacking?

SESSION 1:

SUB COMMENT

- A,a We weren't sure exactly where to start or where to go to get info in the hospital setting. (4) Knowledge of medical conditions and assessments was sufficient but the knowledge of "plan of attack" to problem was lacking. (10)
- A,c We have enough knowledge but experience and organization are lacking. (14,10)
- B,a I had the necessary knowledge but I just need more organization to gather the information. (10)
- C,a I felt I lack the knowledge of the way an hospital work and what is available for information for OT. (2,12)
- C,b It wasn't skills that were lacking just lack of experience. (14)
- D,b Yes we had the necessary knowledge but we needed more of an understanding of the order of the procedure involved to gather info for treatment planning. (10)
- D,c I think we could have had more knowledge about ways of assessing pt. (9)
- E,b I feel we had a good amount of knowledge. One problem was that we didn't take time to make ourselves aware of what was available to us. (13)
- F,a Yes. I just have to check out the SOAP method. (15)
- F,b Yes for most part. I probably lack the knowledge of knowing where to go to exactly before assessing a patient. (4)
- F,c Yes but there was a bit of confusion about the SOAP method. (15)
- G,a We did not take time to look at all the consultations possible. Thus did not know all our opportunities. (13) We had the necessary knowledge of which assessments to do and the importance of the medical chart and patient interview.
- G,b I think the knowledge was there but the experience of applying was lacking. (14)
- G,c The more difficult to find is where we must find the info; we weren't sure to go to this place or not. (4)
- H,a I feel I had the necessary skills to assess but not necessarily when it came to why we were actually assessing and what that would accomplish. (9)
- H,b I wasn't sure of exactly what type of information was available from the specific sources. (12) I was also unsure of exactly what

information took priority. (10)

H,c Yes, but the SOAP method was introduced to us a year ago and was very theoretical. We had the knowledge but did not know how to use it. (15)

SESSION 2:

SUB COMMENT

A,a Yes but it's hard sometimes to figure out abstractly the picture of the hand, deformities, strength, edema without seeing it would be great to have pictures. (17)

A,b Yes, I feel I had enough knowledge in RA as a disease, skills in acquiring info improved from last week but still need work. (11)

A,c I felt I didn't know a lot on that subject to plan a treatment. (7)

B,a Yes, except difficulty with assessment and plan (determining short and long term goals). (16,7)

B,b I feel I have learned the necessary skills but that as they were learned last year I have forgotten a lot about rheumatic diseases and their treatment. (8,7)

B,d May lack some knowledge about how to treat a person with RA. (7)

C,a I still have problems with "assessment" and "plan" parts. (16,7)  
Having reviewed RA would have helped!! (8)

C,b Again knowledge was appropriate even if sometimes we had to refresh our long term memory but experience is lacking. (14)

E,a Basic knowledge was there - but some forgetfulness eg) sensation - carpal tunnel syndrome. (8)

E,b Lack knowledge that loss of sensation might indicate carpal tunnel syndrome. (8)

F,a We didn't think about communication assessment because I viewed it as talking not necessarily writing. (9) And the splint I did not know exactly the degree you should splint. (7)

F,b I thought I had the necessary knowledge until I read the model report. It was very much more detailed than we expected. (7,8)

F,c Yes, better than last time although we lack the experience and awareness to pick up on things like carpal tunnel syndrome. (14,8)

G,b Yes, except I didn't feel I had the skill to accurately and correctly diagnose the patient as having carpal tunnel syndrome. (8)

- G,c Much more than last time, more aware of what pathways to take in order to find out the most amount of info. (11)
- H,b Yes. I know a bit about the subject but I didn't know where gets my info (specific). (4) [I would have liked to know about something specific but no response to my question.]
- H,c I feel I lacked the knowledge regarding splinting and positioning of the hand. (7)

SESSION 3:  
SUB COMMENT

- A,a Yes I had the necessary skills to play this case history.
- A,c We had enough to play this game about amputations since we had a good background on it.
- B,a Yes, I would have liked some info about the prosthesis for the plan - pre prosthesis, post prosthesis. \*\*
- C,a Today's subject was fairly easy for me because I had get info about amputees for a paper.
- C,b Some knowledge on OT and amputees was lacking, but otherwise skills were there. (7,8)
- C,c Yes and no, because we are supposed to know a lot about amputees but to remember everything it is another question. (8)
- E,b Yes, we had the necessary knowledge however I had some little memory blank about the bandage to put to the stump. (7)
- E,c I didn't know who were responsible for patient's operation (orthopaedic or plastics and surgery). (1) I was still mixed with OBJECTIVE in SOAP. (15)
- F,a Yes, we more more successful than last time.
- F,c [For the first time I felt like I had the skills to play the game. It went faster.]
- G,c I felt I knew more than in the previous case history.
- H,a I didn't have much difficulty as in the first time. Our report was fairly good.
- H,c Yes we had, we saw amputations extensively last semester.

\*\*Statement unclear, unable to code.

TABLE 3e; outlines the different categories of comments and their content for question 28.

CATEGORY	CONTENT
1	importance of finding out information from professionals the patient has been referred to.

- 2 that information gathering is a step by step process.
- 3 importance of communication to obtain information.
- 4 why certain information should have been gathered.
- 5 where to obtain necessary information.
- 6 how to obtain necessary i.e. to go to the appropriate person/place to look for specific information.
- 7 why certain OT assessments should have been carried out for this case.
- 8 learned more about OT treatment of a particular condition.
- 9 that some of the moves suggested during game play which were overridden, were appropriate (debriefing),
- 10 how to make mistakes.
- 11 that everyday automatic processes are a lot more complicated when dissected.
- 12 should assess more thoroughly.
- 13 require further practice in report writing.
- 14 learned more about the pathology/prognosis/complications/etc.. of a particular medical condition.
- 15 to place more emphasis on assessments and patient interviews rather than consultations.
- 16 how to plan, prioritize steps for gathering information (efficiency)
- 17 how to organize information gathered to write a report.
- 18 SOAP method of report writing.
- 19 what the A in SOAP means, how to write it.
- 20 limitation of hospital field.
- 21 how to handle a case study in a hospital environment (referral to plan).
- 22 how to work in a group/ team approach.
- 23 to be specific when planning treatment goals.
- 24 to focus on case history rather than the hospital setting (board)
- 25 how to problem solve/make decisions.
- 26 go to patient's room.
- 27 to record any assessments which were planned but not carried out because of lack of time.
- 28 role/function of one or more professionals/departments.
- 29 many ways to gather information.
- 30 a lot of information, regarding the patient, is required in order to plan a good treatment program.
- 31 OT's can help diagnose/be the first to recognize a medical problem.
- 32 importance of psychological adjustment to a handicap.
- 33 importance of family education.

**TABLE 3f:** outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	0	00	0	00	0	00
2	0	00	0	00	0	00
3	0	00	0	00	0	00

4	1	04	0	00	0	00
5	6	24	2	09	2	08
6	2	08	2	09	3	13
7	1	04	3	14	1	04
8	2	08	6	27	6	25
9	0	00	0	00	0	00
10	0	00	0	00	0	00
11	0	00	0	00	0	00
12	0	00	1	05	0	00
13	2	08	0	00	0	00
14	1	04	2	09	0	00
15	0	00	0	00	0	00
16	11	44	2	09	4	16
17	1	04	0	00	2	08
18	4	16	1	05	6	25
19	2	08	3	14	2	08
20	1	04	0	00	0	00
21	2	08	1	05	0	00
22	2	08	0	00	0	00
23	0	00	4	18	1	04
24	0	00	1	05	0	00
25	0	00	0	00	1	04
26	0	00	0	00	1	04
27	0	00	1	05	0	00
28	2	08	2	09	1	04
29	1	04	0	00	0	00
30	1	04	0	00	0	00
31	0	00	1	05	0	00
32	0	00	0	00	1	04
33	0	00	0	00	1	04

TABLE 3g: provides a report of all the comments made for question 28 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments did not answer the question so although they are reported here they are coded under additional comments.

These comments are in square brackets []. Also some comments made in additional comments answer question 28 and thus have been included here.

28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

SESSION 1:

SUB COMMENT

A,a Learnt that I have a lot to learn in report writing (13) and gaining info. (6) It was a learning experience as to how to initially go about attaining info.

A,b I learned I should be structured to decide who I should go see first to gather information from the patient. (16) I learned also about in the SOAP (18), how to write exactly in the ASSESSMENT.

(19)

- A,c How to get start in assessment procedures. \*\* Limitation of a hospital field. (20) How to gather info. (6)
- B,a Learn what information to get first and how to choose the most important and appropriate information. (16)
- B,b The stages of treatment. (8) We have seen the problem, the things forgot, at the beginning of the game. After the game we can see the error. We have to change the procedure for the next game eg. interview of the patient at the beginning not at the end. (16)
- B,c Better organizing skills. (16) Most of the groups had similar problems. Where the best places are to start to get information. (5)
- B,d [Surprised by the realism of the simulation.] Learned organization of the collection of data to write a report. (17)
- C,a I learned what info could be given by a social worker and who to go to see at first. (28,16)
- C,b I learned a bit more on how to handle a case study in a hospital situation. (21)
- C,c How to discuss suggestions amongst my fellow OTs. (22)
- D,a Team approach, different opinions. (22) How to sequence in gathering info. (16)
- D,b The importance of going to different departments to gather info (5), and exposure to report writing. (18)
- D,c Where you could get information. (5) Usually way of recovery of a pt with a hip replacement (3-4 mo). (14) How to plan treatment and how to do assessment. (8,19)
- E,a That info can be gained by using other strategies. You should consider what is available to you to make the better decision. (16) Learn how to prepare a report. (18)
- E,b Lots! There are so many ways to go about getting information about patient (29), and you realize that there's so much info needed in order to make a proper treatment plan. (30) You may think you have enough, and it would probably make for an OK treatment plan, but it could be so much better.
- E,c I learnt (reminded myself of) the format I should go through when I see a patient eg. 1st - medical chart, 2nd interview patient, etc. (16)
- F,a How to sequence myself as an OT to gather info about the patient (which is appropriate or not). (16)

- F,b I learned what I wrote in question 27 (I probably lack the knowledge of knowing where to go to exactly before assessing a patient). (5) I learn to organize how to go about an assess. (16)
- F,c [It was a very useful and beneficial game. It helps to make you aware of how much assessing and evaluating must take place re: a pt. It's challenging and it helps you to think about all the possibilities available in treating a patient and to consider what's the most important areas to focus on.]
- G,a That it takes time to report! (13) [We did not have time to think about the treatment plan. We were also confused about what the A in SOAP meant.]
- G,b I learned that it is much more complicated then I thought when it comes to making decisions and judgement calls concerning the steps to follow (i.e. assessments required and setting priorities). (16)
- G,c We learn about where find information and what info must be more important to obtain, which assessment, etc. (5,4,7)
- H,a I learned the sequential steps involved in receiving a referred patient (21) and who to consult upon questioning. (5)
- H,b I learned something about from whom and where to find important pt. information eg) social worker; nurses; team meetings. (5,28)
- H,c How to make a report. (18) How to be efficient in our assessment.\*\*

---

\*\*Statement unclear, not coded.

## SESSION 2:

SUB	COMMENT
-----	---------

- |     |   |
|-----|---|
| A,a | I learned about the role of community liaison nurse (28) and the probability of carpal tunnel syndrome in RA. (14)  |
| A,b | To think of other diagnoses from the results of my OT assessments i.e. carpal tunnel from tingling and numbness. (14)   |
| A,c | Again the assessment part of SOAP where I never know what to write I realized what was the meaning. (19) Management of RA and where to get information for that condition. (8,5)                                      |
| B,a | Learn a pattern or way of going about collecting information on the patient in an efficient and proper way. (16) Learn the value of other possible consultants. (28)  |
| B,b | I learned about the type of splinting used in RA. (8) I learned a little more about how you write the assessment part of SOAP. (19) I learned or gained experience in report writing (which should be specific). (18) |
| B,c | More about assessing and treating RA. (7,8)   |

- B,d That it is important to be specific when planning treatment. (23)  
How to make an assessment (in SOAP?). (19)
- C,a I learn how to go about getting info and find that you need to be very specific in goals. (6,23)
- C,b I learn more to deal with the case history itself rather the hospital setting. (24)
- C,c I learnt the process to go through with a patient when a consultation (?referral) is given. (21)
- E,a Be complete in your evaluation! Don't forget to think of things not yet mentioned in referral. (12) OT's can be diagnostic. (31)
- E,c Check for sensation in an RA pt. (7)
- F,a I learned to find information in a fairly organized manner. (16)
- F,b I learnt the most reading the STG and LTG in the model. This was very interesting and complete. (8)
- F,c Learnt to go to reference\*\*, be more specific in our goals (23), about leather cuffs. (8)
- G,a If you don't have time to do all the assessments you want - should put'em in the plan. (27)
- G,b I learned that it is important to be precise in stating a treatment plan but otherwise we included everything else in the report. (23)
- H,a I was more successful in where getting information. (5)
- H,b [A lot of things I learn. It's fun because there is a lot of subject.]
- H,c More info on treating RA. (8)

\*\*\*\*\*

FROM ADDITIONAL COMMENTS

- B,a I learn a lot related to collecting info and the importance of choosing or doing the proper assessments. (6,7)

\*\*Statement unclear, not coded.

SESSION 3:

SUB COMMENT

- A,b Became better acquainted with writing short and long term goals. (18)
- A,c [About the same as others - same procedures to get info - very frustrating sometimes.]
- B,a I understand more about the assessment and plan. (19,8) Because I had some difficulties to find elements for assessment. [But I see



an improvement for the report at each time.]

- B,b Learned how to write a proper report and how to be concise and include B,b the necessary information. (18)
- B,c I learned the importance of psychological adjustment with a handicap and that despite a person's intelligence and education they can be unrealistic about such an injury and the consequences. (32)
- C,a I learned to be more problem solving and decision making because of the experience of the game. (25)
- C,b I again learned more about acquiring information (6) - also what to include in a report and how info should be organized. (17) Goals are now much clearer (though not perfect), as is Assessment (in SOAP). (18,19)
- D,a Now I am more organized to find information. (16) Our assessments and goals were pretty good.
- D,c How to get info on patients. (6)
- E,a How to use the SOAP method effectively. (18)
- E,b [I think it increased my self esteem as an OT. The goals that I had stated matched pretty closely to the answer sheet.]
- E,c Where to go for info about pt. (5) The primary goals (long term and short term) for amputees etc.. (8)
- F,a Learn to use consultations first (16), which assessments were needed (7), learning to write a report (very important) (17).  
Learning which facts are more important than others in treatment plan. (8)
- F,b Go to patient's room! (26)
- F,c Be more precise in goals and writing the subjective parts of report. (23,18)
- G,a It's necessary to get info from different resources in different environments. (5)
- G,b The process of gaining info becomes more organized, it takes less time to gather info. (16)
- G,c It made me review treatment goals for amputees. (8)
- H,a Since the three plays, I learn a lot in how organizing and getting information. (6,16)
- H,b Not much since the third game went very well.

\*\*\*\*\*

FROM ADDITIONAL COMMENTS

- B,c Family education's importance was learned. (33) The final game added to my knowledge of report writing. (18)
- C,c Understanding the resources and function of different areas. (28)
- D,b Saw some progress in establishing the goals in treatment plan - more organized. (8,16)
- G,a I did learn how to organize short and learn term goals which I had found quite difficult before the game. (8)

**TABLE 3h:** outlines the different categories and their content for Additional comments.

CATEGORY	CONTENT
1	Fun.
2	very interesting game/challenging/good
3	game well planned.
4	good educational technique.
5	good learning experience.
6	encourages problem solving.
7	forces one to make decisions.
8	opportunity to see/discuss other points of view.
9	opportunity to share kl with others.
10	relevant for OT students, particularly those lacking clinical experience.
*11	game approximates reality.
12	learn how to formulate a treatment plan.
13	game time too long.
14	necessary knowledge and skills needed to play this game not provided in McGill OT program.
15	although disagreements often expressed, seldom if ever recorded due to group pressure. The group disagreement record should be an anonymous record and not exposed to group pressure.
16	Could it be more defined about the psychological, social, and functional aspects of the patient.
17	game easier (familiarization)
18	know how and where to get info more easily with practice (session to session).
19	although little experience/knowledge concerning the condition felt had basic skills to handle/treat such a patient.
20	game enables one to assess whether can handle a patient with a given condition without having much experience/knowledge of the condition.
21	need practice writing OT reports (difficulty writing A and P)
22	not enough time to write the OT report.
23	McGill OT program does not provide enough practice in treatment planning/analysing case histories/writing reports.
24	game should be used to prepare OT students for clinical placements at the end of second year.
25	should allow player to write assessments directly onto report/instead of rewriting them.
26	should include an assessment for relexes-neurological.

- 27 need a larger die.  
 28 need to be made aware of the less frequented areas of the hospital.  
 29 staff room should have a telephone.  
 30 too much time spent playing the game.  
 31 game does not allow one to carry out more than one assessment at a time which is possible in reality.  
 32 Question 26 on progress questionnaire should have the following categories: fairly easy, easy, challenging or takes work thinking or difficult, very difficult or challenging.  
 33 model report provides feedback.  
 34 help prepare for clinical placements/future role.  
 35 teaches one how and where to gather information for treatment planning.  
 36 SOAP review sheet not representative of model reports.  
 37 too much writing required in game.  
 38 teaches one how to approach a case history.  
 39 allows one to apply theoretical knowledge (for the first time)  
 40 confused about what the A in SOAP means.  
 41 plan of model report very detailed.  
 42 not enough time to execute all desired moves.  
 43 debriefing session too long.  
 44 unable to get responses to specific questions.  
 45 opportunity to practise writing reports.  
 46 game should be part of any OT curriculum.  
 47 game should be used at U1 level.  
 48 desire further use/interaction with game.  
 49 amputee case history sexist.  
 50 frustrating at times  
 51 can see improvement in performance (reports)  
 52 increased self esteem as an OT.

Table 3i: outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	4	16	3	14	3	13
2	7	28	0	00	2	08
3	0	00	0	00	0	00
4	3	12	0	00	0	00
5	5	20	1	05	1	04
6	0	00	0	00	0	00
7	0	00	0	00	0	00
8	0	00	0	00	1	04
9	0	00	0	00	0	00
10	1	04	0	00	0	00
11	3	12	0	00	0	00
12	0	00	0	00	0	00
13	1	04	0	00	0	00
14	0	00	0	00	0	00
15	0	00	0	00	0	00

16	0	00	0	00	0	00
17	0	00	5	23	3	13
18	0	00	0	00	0	00
19	0	00	0	00	0	00
20	0	00	0	00	0	00
21	0	00	2	09	0	00
22	2	08	0	00	1	04
23	1	04	0	00	0	00
24	0	00	0	00	0	00
25	0	00	0	00	0	00
26	0	00	0	00	0	00
27	0	00	0	00	0	00
28	0	00	0	00	0	00
29	0	00	0	00	0	00
30	0	00	0	00	0	00
31	0	00	0	00	0	00
32	0	00	0	00	0	00
33	1	04	0	00	0	00
34	4	16	0	00	2	08
35	2	08	0	00	2	08
36	1	04	0	00	0	00
37	1	04	0	00	0	00
38	1	04	0	00	0	00
39	2	08	0	00	0	00
40	1	04	0	00	1	04
41	0	00	2	09	0	00
42	0	00	2	09	0	00
43	0	00	1	05	0	00
44	0	00	1	05	0	00
45	0	00	0	00	1	04
46	0	00	0	00	1	04
47	0	00	0	00	1	04
48	0	00	0	00	1	04
49	0	00	0	00	1	04
50	0	00	0	00	1	04
51	0	00	0	00	1	04
52	0	00	0	00	1	04

TABLE 3j: provides a report of all the additional comments made, included under this category are those comments situated under questions 27 and 28 which did not answer the questions. Each comment has been coded, to provide a count of the different types of comments put forward. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

Additional Comments:

SESSION 1:  
SUB COMMENT

A,b It was a very good game, really interesting (2) and I learned a lot. (5) It looked more like reality (11) and having a solutionaire also help us, give us feedback. (33).

A,c It's a game that every OT student should experience. (10) It

- really gives a view of our future role in an hospital. (34)
- B,a It is a very educational game to learn how and where to get information needed to plan treatment. (4,35) I still need some practice!
- B,c The SOAP sheet to read before coming wasn't representative of the way the solution was written. (36)
- B,d Very interesting and challenging game. (2) I think it's a good way (realistic) to approach case histories. (4)
- C,a The only cons I find there is a lot of writing to do. (37) The game is excellent we learn a lot. (5)
- C,b Very interesting. (2) Long. (13) Could learn a lot from a game like this especially for placements. (34)
- D,a Superb! (2)
- D,b Excellent game, a lot of fun and I will and am learning a lot. (1,5) We just don't get enough experience writing reports and analyzing case histories in the OT program at McGill. (23)
- D,c We ran out of time so we couldn't do the assessment, and treatment planning. (22)
- E,c I find this game is successful in teaching OT students some ways in which to approach a case history. (38)
- F,a I find the game very challenging. It was fun and very interesting. (1,2) It is realistic (11), and it will be very helpful for the future. (34)
- F,b This game is fun and at same time a learning experience. (1,5) Should use it more often.
- G,a See you next time!
- H,a I feel I still have a lot to learn about more specific treatment of the patient. I know the general procedures but it gets more complicated than that as I have just seen. I really enjoyed this game and I feel it may benefit my work in the clinical setting. (1,34)
- H,b The game is the closest thing to a real application of classroom theory (to a clinical situation) that I have experienced so far. (39)
- H,c Very good game and I mean excellent. (2) We can now concretize our knowledge... that is about time. (39)

\*\*\*\*\*

FROM QUESTION 28

- B,d Surprised by the realism of the simulation. (11)
- F,c It was a very useful and beneficial game (4). It helps to make you aware of how much assessing and evaluating must take place re: a pt. (35). It's challenging (2) and it helps you to think about all the possibilities available in treating a patient and to consider what's the most important areas to focus on. (5)
- G,a We did not have time to think about the treatment plan. (22) We were also confused about what the A in SOAP meant. (40)

## SESSION 2:

## SUB COMMENT

- A,a We had discussions on priorities of the assessments which could be done first.\*\*
- A,b I felt this game (2nd time of play) was fun and I was more comfortable with the situation and getting info. (1,17)
- B,a Much easier to play game got use to system and understand the purpose and use of different areas indicated on the board. (17) I think [I learn a lot related to collecting info and the importance of choosing or doing the proper assessments.]\* Although I still have difficulty in writing assessment and goals. (21)
- B,b Last week's game helped me a lot in knowing where to go for consultations so things went a lot smoother this week. (17) I feel I am getting more adept at report writing but that I still need a lot more experience. (21)
- E,c The group was very efficient, we had time to do all the assessments we thought would be useful. (17) FUN! (1)
- F,a I still have trouble writing the assessment (17) and the plan was really specific to what we gave. (41)
- G'b Due to lack of time we would have performed more assessments. (42) The ones we had anticipated to do were included in the sample report.
- G,c Not enough time to do all assessments that we wanted to - didn't write it in treatment plan, but will remember to next time. (42)
- H,a The plan was too much detail, we just mention some principles, but they were not so specific. (41) The debriefing session is too long... (43)

\*\*\*\*\*

## FROM QUESTION 27

- H,b I would have liked to know about something specific but no response to my question. (44)

\*\*\*\*\*

## FROM QUESTION 28

H,b A lot of things I learn. (5) It's fun (1) because there is a lot of subject.

\*\* Statement unclear, unable to code.

\* Answers question 28, therefore coded there.

SESSION 3.

SUB. COMMENT

A,a Still having problems with the Assessment/analysis section of the report. I'm not 100% clear - every case seemed to do it differently. (40)

B,b It was a great experience to play this game since it gave the opportunity to practise writing reports (45) and performing the right assessments and going to the proper departments to find the required info. (35)

B,c [Family education's importance was learned. The final game added to my knowledge of report writing.] It was well worth the time and should be part of any OT curriculum. (46)

C,b This game gets funner and more meaningful with each session! (1)

C,c Pretty easy to collect info and write report, took less time, more effecient. (17) [Understanding the resources and function of different areas.]

D,a I think it is really a fun game (1); I learned a lot from it. (5)

D,b [Saw some progress in establishing the goals in treatment plan - more organized.]

D,c I find this game would be really good for U1 students, especially before they go on their placements. Learning this in U2 is a bit late it should be clear by U1. (47)

E,a Very good game. (2)

E,c I wish we could do this game for other case histories in order to be more skillful. (48)

F,a Great game! (2) This will really help us a lot when we go to the hospital. (34) Thanks!

F,c Working in the different groups was great experience. Learning to work with different people. This group definitely was the best. But I don't know if it was the group itself or the fact that it was our third time playing. (8)

G,a I found this game to be very challenging the first time however after the second one I found it to be repetitive. (17) [I did learn how to organize short and learn term goals which I had found quite difficult before the game.]

G,b I find that it takes so long writing the social, case history,

assessments done in the objective part, so that we don't have enough to write plan. (22)

G,c I liked my experience of playing this game I think it is very educational in setting goals for treatment and becoming aware of assessment information that can be found. (35)

H,a That was a enjoying experience (1) we learn a lot and I think it's a good approach for our future clinical placement. (34)  
Feleccitation!

H,c I found a little sexist that because this patient was a man, no kitchen and bedroom assessment were done on him even though I am sure he had defecits. It is often the first thing we look at in females... (49)

\*\*\*\*\*

FROM QUESTION 27

F,c For the first time I felt like I had the skills to play the game. It went faster. (17)

\*\*\*\*\*

FROM QUESTION 28

A,c About the same as others - same procedures to get info - very frustrating sometimes. (50)

B,a But I see an improvement for the report at each time. (51)

E,b I think it increased my self esteem as an OT. The goals that I had stated matched pretty closely to the answer sheet. (52)

---



1. **SEMANTIC DIFFERENTIAL:** This section used semantic differential questions to gain information concerning each subject's opinion of his group, the group's performance, as well as his role in the group. Questions 1 through 8 are listed below along with how each answer was scored.

## A. Your view of your group.

1.	superior	1	2	3	4	5	6	7	inferior
2.	good	1	2	3	4	5	6	7	bad
3.	successful	1	2	3	4	5	6	7	unsuccessful
4.	lazy	7	6	5	4	3	2	1	hard working
5.	cooperative	1	2	3	4	5	6	7	uncooperative
6.	*clumsy	7	6	5	4	3	2	1	skillful
7.	**cautious	1	2	3	4	5	6	7	**rash
8.	serious	1	2	3	4	5	6	7	silly

\* changed to clumsy when administered to OT U2.

\*\* changed to impulsive when administered to OT U2

Table 1a: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated. Please note that the identity of each subject is anonymous; thus the designation A-a refers to what group and what position a subject held in a group. Therefore in a subsequent gaming session A-a refers to a completely different subject.

SESSION 1:

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	3	3	3	3	2	2	2	3	2.6
- b	2	2	2	2	6	2	3	1	2.5
- c	2	1	2	1	1	2	2	1	1.5
- ave	2.3	2	2.3	2	3	2	2.3	1.7	2.2
B - a	3	3	2	2	1	2	1	1	1.9
- b	4	4	3	2	3	3	4	3	3.3
- c	3	2	3	1	1	3	3	2	2.3
- ave	3.3	3	2.7	1.7	1.7	2.7	2.7	2	2.5
C - a	3	2	2	2	6	2	5	2	3.0
- b	3	2	2	3	2	3	3	3	2.7
- c	-	2	4	2	1	2	3	2	2.3
- ave	3	2	2.7	2.3	3	2.3	3.7	2.3	2.7
MEAN	2.9	2.3	2.6	2.0	2.6	2.3	2.9	2.0	2.5
SD	0.6	0.9	0.7	0.7	2.1	0.5	1.2	0.9	

SESSION 2:

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	2	1	1	2	1	2	2	2	1.6
- b	2	2	2	2	2	2	2	2	2.0
- ave	2	1.5	1.5	2	1.5	2	2	2	1.8
B - a	3	3	3	2	2	3	2	3	2.6
- b	3	3	3	2	6	2	4	2	3.1
- c	4	3	2	3	2	2	3	4	2.9
- ave	3.3	3	2.7	2.3	3.3	2.3	3	3	2.9
C - a	1	1	1	1	1	1	3	1	1.3
- b	1	1	1	1	1	2	1	1	1.1
- c	2	2	2	1	1	2	3	1	1.8
- ave	1.3	1.3	1.3	1	1	1.7	2.3	1	1.4
MEAN	2.3	2.0	1.9	1.8	2.0	2.0	2.5	2.0	2.0
SD	1.0	0.9	0.8	0.7	1.7	0.5	0.9	1.1	

SESSION 3:

GROUP	QUESTIONS								AVE
	1	2	3	4	5	6	7	8	
A - a	2	1	1	1	1	2	4	4	2
- b	3	3	2	3	3	3	3	4	3
- c	2	2	2	2	3	3	3	3	2.5
- d	3	2	2	3	2	2	3	5	2.8
- ave	2.5	2	1.8	2.3	2.3	2.5	3.3	4.0	2.6
B - a	2	2	2	2	2	2	3	2	2.1
- b	2	2	2	1	1	2	2	1	1.6
- c	2	1	1	1	1	1	4	1	1.5
- ave	2	1.7	1.7	1.3	1.3	1.7	3	1.3	1.7
MEAN	2.3	1.9	1.7	1.9	1.9	2.1	3.1	2.9	2.2
SD	0.5	0.7	0.5	0.9	0.9	0.7	0.7	1.6	

Below are questions 9 through 11 and how they were scored.

8. Your view of your group's report.

9. poor \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : good

10. successful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : unsuccessful

11. complete \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : incomplete

Table 1b: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated.

SESSION 1:

GROUP	QUESTIONS			AVE
	9	10	11	
A - a	2	2	2	2.0
- b	2	2	3	2.3
- c	1	1	2	1.3
- ave	1.7	1.7	2.3	1.9
B - a	3	2	1	2.0
- b	4	4	4	4.0
- c	4	4	5	4.3
- ave	3.7	3.3	3.3	3.4
C - a	3	3	3	3.0
- b	3	2	3	2.7
- c	2	3	3	2.7
- ave	2.7	2.7	3	2.8
MEAN	2.7	2.6	2.9	2.7
SD	1.0	1.0	1.2	

SESSION 2:

GROUP	QUESTIONS			AVE
	9	10	11	
A - a	3	2	2	2.3
- b	2	2	2	2.0
- ave	2.5	2	2	2.2
B - a	1	2	2	1.7
- b	3	3	2	2.7
- c	2	2	2	2.0
- ave	2	2.3	2.0	2.1
C - a	2	1	1	1.3
- b	1	1	1	1.0
- c	2	2	2	2.0
- ave	1.7	1.3	1.3	1.4
MEAN	2.0	1.9	1.8	1.9
SD	0.8	0.6	0.5	

SESSION 3:

GROUP	QUESTIONS			AVE
	9	10	11	
A - a	1	1	3	1.7
- b	2	3	3	2.7
- c	2	2	2	2
- d	2	2	3	2.3
- ave	1.8	2	2.8	2.2
B - a	1	1	1	1.0
- b	1	1	2	1.3
- c	2	2	2	2.0
- ave	1.3	1.3	1.7	1.4
MEAN	1.6	1.7	2.3	1.9
SD	0.5	0.8	0.8	

Below are questions 12 through 21 and how they were scored.

C. Your participation in your group's decision making.

12. active \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : passive
13. unwilling \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : willing
14. influential \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : noninfluential
15. successful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : unsuccessful
16. meaningful \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : meaningless
17. dominant \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : lax
18. sufficient \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : insufficient
19. leading \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : following
20. critical \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : \_\_\_\_\_ : indiscriminate

21. useful 1 : 2 : 3 : 4 : 5 : 6 : 7 : useless

Table 1c: outlines what each subject reported for each question. The table includes the average score for each group on a given question as well as the average score of all subjects on a given question. In addition the average score of all questions which a given subject has answered has been calculated.

SESSION 1:

GROUP	QUESTIONS										AVE
	12	13	14	15	16	17	18	19	20	21	
A - a	2	2	3	2	3	4	3	4	4	3	3.0
- b	2	1	2	2	1	3	2	3	3	2	2.1
- c	1	1	1	1	1	3	1	3	1	1	1.4
- ave	1.7	1.3	2.0	1.7	1.7	3.3	2.0	3.3	2.7	2.0	2.2
B - a	1	2	1	1	1	4	1	3	2	2	1.8
- b	5	3	4	4	4	4	5	5	4	4	4.2
- c	2	2	1	3	3	4	3	3	3	3	2.7
- ave	2.7	2.3	2.0	2.7	2.7	4.0	3.0	3.7	3.0	3.0	2.9
C - a	1	1	2	2	2	4	1	4	4	1	2.2
- b	2	2	2	2	2	3	4	3	4	2	2.6
- c	2	1	3	3	2	4	3	4	4	2	2.8
- ave	1.7	1.3	2.3	2.3	2.0	3.7	2.7	3.7	4.0	1.7	2.5
MEAN	2.0	1.7	2.1	2.2	2.1	3.7	2.6	3.6	3.2	2.2	2.5
SD	1.2	0.7	1.0	1.0	1.1	0.5	1.4	0.7	1.1	1.0	

SESSION 2:

GROUP	QUESTIONS										AVE
	12	13	14	15	16	17	18	19	20	21	
A - a	2	2	4	2	2	3	2	4	3	2	2.6
- b	1	1	2	2	2	4	1	4	3	2	2.1
- ave	1.5	1.5	3	2	2	3.5	1.5	4	3	1.5	2.4
B - a	6	2	3	2	3	4	3	4	3	2	3.2
- b	2	2	2	2	2	2	2	2	4	2	2.2
- c	2	2	3	3	3	4	1	4	3	2	2.7
- ave	3.3	2	2.7	2.3	2.7	3.3	2	3.3	3.3	2	2.7
C - a	2	2	2	2	2	3	2	3	3	3	2.4
- b	1	1	1	1	1	3	1	2	1	1	1.3
- c	2	1	3	2	2	4	2	3	4	2	2.5
- ave	1.7	1.3	2	1.7	1.7	3.3	1.7	2.7	2.7	2	2.1
MEAN	2.3	1.6	2.5	2.0	2.1	3.4	1.8	3.3	3.0	1.9	2.4
SD	1.6	0.5	0.9	0.5	0.6	0.7	0.7	0.9	0.9	0.6	

## SESSION 3:

GROUP	QUESTIONS										
	12	13	14	15	16	17	18	19	20	21	AVE
A - a	1	1	1	1	1	4	2	3	2	1	1.7
- b	4	3	3	3	3	4	3	4	4	4	3.1
- c	2	2	3	2	3	4	2	4	3	2	2.7
- d	5	2	3	2	2	4	3	3	5	2	3.1
- ave	3	2	2.5	2	2.3	4	2.5	3.5	3.5	2.3	2.7
B - a	1	1	1	1	1	2	1	2	2	1	1.3
- b	1	1	1	1	1	4	1	4	4	2	2.0
- c	1	1	3	2	2	3	1	3	3	2	2.1
- ave	1	1	1.7	1.3	1.3	3	1	3	3	1.7	1.8
MEAN	2.1	1.6	2.1	1.7	1.9	3.6	1.9	3.3	3.3	2.0	2.3
SD	1.7	0.8	1.1	0.8	0.9	0.8	0.9	0.8	1.1	1.0	

Table 1d: Frequency of scores for questions 1-21. (Q equals question, S equals score)

Q	S	Session			Q	S	Session		
		1 f/%	2 f/%	3 f/%			1 f/%	2 f/%	3 f/%
1	1	*00/00	02/25	00/00	9	1	01/11	02/25	03/43
	2	02/25	03/38	05/71		2	03/33	04/50	04/57
	3	05/63	02/25	02/29		3	03/33	02/25	00/00
	4	01/13	01/13	00/00		4	02/22	00/00	00/00
2	1	01/11	03/38	02/29	10	1	01/11	02/25	03/43
	2	05/56	02/25	04/57		2	04/44	05/63	03/43
	3	02/22	03/38	01/14		3	02/22	01/13	01/14
	4	01/11	00/00	00/00		4	02/22	00/00	00/00
3	1	00/00	03/38	02/29	11	1	01/11	02/25	01/14
	2	05/56	03/38	05/71		2	02/22	06/75	03/43
	3	03/33	02/25	00/00		3	04/44	00/00	03/43
	4	01/11	00/00	00/00		4	01/11	00/00	00/00
4	1	02/22	03/38	03/43	12	1	03/33	02/25	04/57
	2	05/56	04/50	02/29		2	05/56	05/63	01/14
	3	02/22	01/13	02/29		4	00/00	00/00	01/14
	5	01/11	00/00	00/00		5	01/11	00/00	01/14
5	1	04/44	04/50	03/43	13	1	04/44	03/38	04/57
	2	02/22	03/38	02/29		2	04/44	05/63	02/29
	3	01/11	00/00	02/29		3	01/11	00/00	01/14
	6	02/22	01/13	00/00		14	1	03/33	01/13
6	1	00/00	01/13	01/14	2		03/33	03/38	00/00
	2	06/67	06/75	04/57	3		02/22	03/38	04/57
	3	03/33	01/13	02/29	4		01/11	01/13	00/00
	7	1	01/11	01/13	00/00	15	1	02/22	01/13
2		02/22	03/38	01/14	2		04/44	06/75	03/43
3		04/44	03/38	04/57	3		02/22	01/13	01/14
4		01/11	01/13	02/29	4		01/11	00/00	00/00
5		01/11	00/00	00/00	16		1	03/33	01/13
8	1	03/33	03/38	02/29		2	03/33	05/63	02/29
	2	03/33	03/38	01/14		3	02/22	02/25	02/29
	3	03/33	01/13	01/14		4	01/11	00/00	00/00
	4	00/00	01/13	02/29					
5	00/00	00/00	01/14						

\* One subject failed to respond.

Q	S	Session		
		1 f/%	2 f/%	3 f/%
17	2	00/00	01/13	01/14
	3	03/33	03/38	01/14
	4	06/67	04/50	05/71
18	1	03/33	03/38	03/43
	2	01/11	04/50	02/29
	3	03/33	01/13	02/29
	4	01/11	00/00	00/00
	5	01/11	00/00	00/00
19	2	00/00	02/25	01/14
	3	05/56	02/25	03/43
	4	03/33	04/50	03/43
	5	01/11	00/00	00/00

Q	S	Session		
		1 f/%	2 f/%	3 f/%
20	1	01/11	01/13	00/00
	2	01/11	00/00	02/29
	3	02/22	05/63	02/29
	4	05/56	02/25	02/29
	5	00/00	00/00	01/14
21	1	02/22	02/25	02/29
	2	04/44	05/63	04/57
	3	02/22	01/13	00/00
	4	01/11	00/00	01/14

2. CLOSED FORM/SCALED ITEMS: Questions 23, 24, and 25 are of the closed-form type in which the choice of answers are discrete. Questions 22 and 26 are scaled items in which subjects check the place on the scale that best reflect their opinions about the statement. Below are the questions asked and how they were scored.

22. Was there conflict within your group?

$\frac{1}{\text{a lot}}$                        $\frac{2}{\text{some}}$                        $\frac{3}{\text{not much}}$                        $\frac{4}{\text{none}}$

23. Who made the majority of decisions in the group?

$\frac{1}{\text{one person}}$                        $\frac{2}{\text{two people}}$                        $\frac{3}{\text{each person took a turn}}$                        $\frac{4}{\text{the group as a whole}}$

24. Would you have performed better without the group?

$\frac{1}{\text{yes}}$                        $\frac{2}{\text{no}}$                        $\frac{3}{\text{the same}}$

25. Would you have preferred to play the game

$\frac{1}{\text{alone?}}$                        $\frac{2}{\text{with a different group?}}$                        $\frac{3}{\text{with the same group?}}$

26. The case history was

$\frac{1}{\text{too easy}}$                        $\frac{2}{\text{fairly easy}}$                        $\frac{3}{\text{not very easy}}$                        $\frac{4}{\text{very difficult}}$

Table 2a: outlines what each subject reported for each question. A group average as well as a total average has been calculated for questions 22 and 26 in which the responses are on a scale.

SESSION 1:

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	3	4	2	3	3
- b	2	3	2	3	2
- c	2	4	2	3	3
- ave	2.3	NA	NA	NA	2.7
B - a	2	4	2	3	2
- b	1	2	1	2	2
- c	3	4	2	3	2
- ave	2.0	NA	NA	NA	2.0
C - a	3	4	2	3	3
- b	3	4	2	3	3
- c	3	1	2	3	3
- ave	3.0	NA	NA	NA	3.0
MEAN	2.4	NA	NA	NA	2.6
SD	0.7				0.5

SESSION 2:

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	4	2	3	3	2
- b	4	4	3	3	3
- ave	4	NA	NA	NA	2.5
B - a	3	4	2	3	3
- b	3	2	2	3	2
- c	3	4	2	3	2
- ave	3	NA	NA	NA	2.3
C - a	3	4	2	3	3
- b	3	4	2	3	3
- c	4	3	2	*4	3
- ave	3.3	NA	NA	NA	3
MEAN	3.4	NA	NA	NA	2.6
SD	0.5				0.5

AVERAGE \* stated doesn't matter

SESSION 3:

GROUP	QUESTIONS				
	22	23	24	25	26
A - a	3	4	1	3	3
- b	3	4	3	3	3
- c	2	4	2	3	3
- d	3	3	2	*4	3
- ave	2.8	NA	NA	NA	3
B - a	3	3	2	3	3
- b	3	4	2	3	3
- c	2	3	3	*4	2
- ave	2.7	NA	NA	NA	2.7
MEAN	2.7	NA	NA	NA	2.9
SD	0.5				0.4

\* stated doesn't matter.

3. OPEN ENDED: Questions 27 and 28 are open ended questions. In addition subjects have been invited to record any additional comments.

Below are the questions asked.

27. Do you feel you had the necessary knowledge and skills to play this game? If not what knowledge or skills were lacking?

28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

Table 3a: outlines the number of subjects that responded yes or no to question 27.

SESSION 1:			SESSION 2:			SESSION 3:		
GROUP	YES	NO	GROUP	YES	NO	GROUP	YES	NO
A - a	x		A - a	x		A - a	-	-
- b	x		- b	x		- b	-	-
- c	x		total	2	0	- c		x
total	3	0	B - a	-	-	- d	-	-
B - a	x		- b	x		total	0	1
- b	x		- c	x		B - a	-	-
- c	x		total	2	0	- b	x	
total	3	0	C - a	x		- c	x	
C - a	-	-	- b		x	total	2	0
- b	x		- c	-	-	TOTAL	2	1
- c	x		total	1	1	%	29%	14%
total	2	0	TOTAL	5	1			
TOTAL	8	0	%	63%	13%			
%	89%	00%						

TABLE 3b: outlines the different categories of comments and their content for question 27.

CATEGORY	CONTENT
1	require more knowledge of the role/function of a profession(s).
2	require more skills concerning hospital procedures.
3	require more kl/skill of the necessary information needed.
4	require more kl of where to obtain necessary information.
5	too much time spent on consultations.
6	not enough time spent on performing OT assessments.
7	require more knowledge of OT treatment of the particular case.
8	require more knowledge concerning the pathology/prognosis of the particular case history.
9	require more knowledge of the OT assessments which should be performed concerning the particular case history.

TABLE 3c: outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.



CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	2	22	0	00	0	00
2	1	11	0	00	0	00
3	2	22	0	00	0	00
4	1	11	0	00	0	00
5	1	11	0	00	0	00
6	1	11	0	00	0	00
7	1	11	0	00	1	14
8	1	11	0	00	4	57
9	0	00	3	38	4	57

Table 3d: provides a report of all the comments made for question 27 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments did not answer the question so although they are reported here they are coded under additional comments. These comments are in square brackets [ ].

27. Do you feel you had the necessary knowledge and skills to play this game? If not what knowledge or skills were lacking?

SESSION 1:  
SUB COMMENT

- A,a Yes. But more k1 about the purposes of each profession would have been useful. eg. Plastics (1).
- A,b Yes. Need more skills about hospital interactions and procedures (2) as well as about prosthetics. (1)
- B,a Yes. I felt having enough of k1 but it is difficult to think about all the kind of info (3) and where you could get it. (4)
- B,b Yes. I had the necessary skills but I felt too much time was spent on consultations (5) and not enough on OT assessments. (6)
- B,c Yes. I had enough knowledge about the functioning of an hospital setting. I need to review treatment of amputation for goals of treatment. (7)
- C,a I felt I had enough k1 to know what major info I should gather, yet there were some areas (eg. coord/balance) which I did not consider due to lack of experience. (3) Not familiar with amputations. (8)
- C,c Yes, I feel I had sufficient k1 to play this game. [Thanks to my clinical placement. The theory alone in this school would not have given me the necessary k1.]

**SESSION 2:****SUB COMMENT**

- A,b Yes, although I did overlook some areas (eg. percept, hand function and sensory assessments) (9). [I have had no direct experience with MS patients, but I feel capable of dealing with such patients and thus playing the game.]
- B,a [I had not the fullest of all backgrounds on MS OT treatment but managed fairly enough.]
- B,c Yes, [I knew where to go to get the informations much more faster than the first time, I also knew where to go (appropriate).]
- C,a Yes I did have the necessary knowledge and skills. [What would be helpful to us as students is to be made more aware of less frequented areas in the hospital i.e. patient lounge, rehab secretary, and conference room, prosthetics and orthotics (last week's patient).]
- C,b No. Didn't know the hand function assessment MRMT. (9)
- C,c Some skills were lacking in some assessments i.e. the hand evaluation - MRMT TEST - never heard of it! (9) Otherwise yes had necessary knowledge.

**SESSION 3:****SUB COMMENT**

- A,a Cognitive assessments (9), head injury. (8)
- A,b No background or experience in head injuries - so difficult to choose proper assessments and do a complete plan (9,7). [But the process to get information was the same as any other case.]
- A,c No our background about closed head injuries (as a group) was not sufficient to do the best of jobs. (8)
- A,d Lacking in knowledge and experience with brain injury patients. (8)
- B,a We are lacking experience in head injuries and prognosis for treatment. (8) We lack the assessment of cognitive level. (9)
- B,b Yes. [Although we do not have much background in head injuries specifically, we have enough knowledge to determine basic needs of patient, assess, and treatment.]
- B,c Yes, except was unaware that a cognition test could be done at such a basic level. (9)

**TABLE 3e:** outlines the different categories of comments and their content for question 28.

**CATEGORY CONTENT**

- | CATEGORY | CONTENT  |
|----------|--|
| 1        | importance of finding out information from professionals the patient has been referred to. |

- 2 that information gathering is a step by step process.  
 3 importance of communication to obtain information.  
 4 why certain information should have been gathered.  
 5 where to obtain necessary information.  
 6 how to obtain necessary information i.e. to go to the  
 appropriate person/place to look for specific information.  
 7 why certain OT assessments should have been carried out for  
 this case.  
 8 learned more about OT treatment of a particular condition.  
 9 that some of the moves suggested during game play which were  
 overridden, were appropriate (debriefing).  
 10 how to make mistakes.  
 11 that everyday automatic processes are a lot more complicated  
 when dissected.  
 12 should assess more thoroughly.  
 13 require further practice in report writing.  
 14 learned more about the pathology/prognosis of a particular  
 medical condition.  
 15 to place more emphasis on assessments and patient interviews  
 rather than consultations.

TABLE 3f: outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	1	11	0	00	0	00
2	1	11	0	00	0	00
3	1	11	0	00	0	00
4	2	22	0	00	0	00
5	1	11	2	25	0	00
6	2	22	0	00	0	00
7	3	33	2	25	4	57
8	1	11	2	25	3	38
9	1	11	0	00	0	00
10	1	11	0	00	0	00
11	1	11	0	00	0	00
12	0	00	1	13	0	00
13	0	00	1	13	0	00
14	0	00	0	00	2	25
15	0	00	1	13	0	00

TABLE 3g: provides a report of all the comments made for question 28 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments did not answer the question so although they are reported here they are coded under additional comments. These comments are in square brackets [ ].

28. What, if anything, did you learn from the gaming experience (gaming and debriefing)?

## SESSION 1:

SUB COMMENT

- A,a Yes, [fun the group was cooperative and a lot of problem solving was involved in finding more info about the patients] (and how to get that info quickly). (5)
- A,b Why certain assessments were made (7), how (6) and why (4) to certain info is gathered in a hospital.
- A,c Importance of communication assessment (7), following info found in all departments the patient is referred to. (1) Step by step information gathering. (2)
- B,a Communication to get info is important. (3) To look for specific informations to the appropriate person/s, or places. (6)
- B,b That some of the ideas that certain individuals brought up, although overridden by the rest of the group, were appropriate moves in the debriefing session. (9) [I felt that although disagreements were often expressed, they were seldom, if ever recorded due to group pressure. I think the group disagreement record should be an anonymous record and not exposed to group pressure.]
- B,c [Good opportunity to share kl with others and learn new way of working. The board game gives a good picture of the services offered in an hospital].
- C,a How to make mistakes. (10) Process of gathering info: some areas which I did not consider (4) and assessments needed (7). Some aspects of amputation not familiar with (ie decreased coord/balance) (8).
- C,b That every day automatic processes are a lot more complicated when dissected. (11)
- C,c [The game is a good way to think about who and what to assess or consult to gain info about a pt and how to form a Rx plan.]

## SESSION 2:

SUB COMMENT

- A,a [By seeing the patient myself, I won't have to do some assessments because during a physical assessment questions could be asked about family and expectations during rest periods. This game does not allow us to do that.]
- A,b Assess more thoroughly. (12) [(Although I did not feel kitchen/bedroom assessment were necessary at this time-.)]
- B,a I learned more on treatment of Multiple Sclerosis (8) and specially assessment of MS patients. (7)

- B,b Where to go for info. (5) Need practice writing reports more concisely. (13)
- B,c A bit more about assessments done with M.S. (7) Know where to get info. (5)
- C,a To place more emphasis on assessments and patient interviews rather than consultation. (15)
- C,b MS patients require a lot of assessment time. Treatment time must also be long. (8)
- C,c [Good experience in problem solving and program assessment and planning. Do not have enough of this experience (treatment planning) at this school.]

## SESSION 3:

## SUB COMMENT

- A,a Importance of assessing communication and cognition. (7)
- A,b Specific assessments with the patient. (7) Treatment focus on patient and family mainly. Very important because will be long rehab. (8)
- A,c I learned a little more about closed head injuries. (14)
- A,d Learned about what to do with brain injured (comatose) patients. (8)
- B,a How to emphasize communication and cognition in head injuries. The need for intense sensory stimulation. The emphasis on family involvement. (8)
- B,b Important to do cognitive assessment at very low levels (i.e. even with comatose patients) - assess different levels of cognition, even at very basic level. (7)
- B,c Levels of head trauma, application of cognition assessment. Why we'd do a patient interview for a comatose patient. (7,14)

TABLE 3h: outlines the different categories and their content for Additional comments.

CATEGORY	CONTENT
1	Fun.
2	very interesting game.
3	game well planned.
4	good educational technique.
5	good learning experience.
6	encourages problem solving.
7	forces one to make decisions.
8	opportunity to see/discuss other points of view.
9	opportunity to share kl with others.
10	relevant for OT students, particularly those lacking clinical

- experience.
- 11 board game provides a good picture of the various services offered in an hospital.
- 12 learn how to formulate a treatment plan.
- 13 game time too long.
- 14 necessary knowledge and skills needed to play this game not provided in McGill OT program.
- 15 although disagreements often expressed, seldom if ever recorded due to group pressure. The group disagreement record should be an anonymous record and not exposed to group pressure.
- 16 Could it be more defined about the psychological, social, and functional aspects of the patient.
- 17 game easier/less challenging with practice.
- 18 know how and where to get info more easily with practice (session to session).
- 19 although little experience/knowledge concerning the condition felt had basic skills to handle/treat such a patient.
- 20 game enables one to assess whether can handle a patient with a given condition without having much experience/knowledge of the condition.
- 21 need practice writing OT reports.
- 22 not enough time to write the OT report.
- 23 McGill OT program does not provide enough practice in treatment planning.
- 24 game should be used to prepare OT students for clinical placements at the end of second year.
- 25 should allow player to write assessments directly onto report/instead of rewriting them.
- 26 should include an assessment for relexes-neurological.
- 27 need a larger die.
- 28 need to be made aware of the less frequented areas of the hospital.
- 29 staff room should have a telephone.
- 30 too much time spent playing the game.
- 31 game does not allow one to carry out more than one assessment at a time which is possible in reality.
- 32 Question 26 on progress questionnaire should have the following categories: fairly easy, easy, challenging or takes work thinking or difficult, very difficult or challenging.

Table 3i: outlines the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CATEGORY	SESSION 1		SUBJECTS SESSION 2		SESSION 3	
	#	%	#	%	#	%
1	4	44	0	00	0	00
2	2	22	1	13	1	14
3	1	11	0	00	0	00
4	2	22	0	00	2	29
5	1	11	2	25	1	14
6	3	33	1	13	0	00
7	1	11	0	00	0	00

8	1	11	0	00	0	00
9	1	11	0	00	0	00
10	2	22	1	13	0	00
11	1	11	0	00	0	00
12	1	11	1	13	0	00
13	1	11	0	00	0	00
14	1	11	0	00	0	00
15	1	11	0	00	0	00
16	1	11	0	00	0	00
17	0	00	1	13	1	14
18	0	00	1	13	1	14
19	0	00	1	13	0	00
20	0	00	0	00	2	29
21	0	00	1	13	0	00
22	0	00	1	13	0	00
23	0	00	1	13	0	00
24	0	00	0	00	1	14
25	0	00	0	00	1	14
26	0	00	0	00	1	14
27	0	00	0	00	1	14
28	0	00	1	13	0	00
29	0	00	1	13	0	00
30	0	00	1	13	0	00
31	0	00	1	13	0	00
32	0	00	0	00	1	14

TABLE 3j: provides a report of all the additional comments made, included under this category are those comments situated under questions 27 and 28 which did not answer the questions. Each comment has been coded, to provide a count of the different types of comments put forward. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

Additional Comments:

SESSION 1:

SUB COMMENT

- A,a Made me think a lot of how to get the proper info, where to go, and who to see (6). Fun (1)!
- A,b I found it to be a good learning experience (5), where it made us make decisions (7) and to reflect on them through group discussion. Could see other points of view (8).
- A,c Fun (1) and relevant game for OT students (10). Well put together, well planned (3). Very professional.
- B,a Was very interesting (2). Could it be more defined about the psychological, social, functional aspect of the patient? (16)
- B,c Interesting game and debriefing (2), but the game is maybe a bit too long (13).
- C,a Enjoyed playing (1)!

- C,b Good impression of this educational technique (4).
- C,c Good game (4). Especially for students who are lacking in clinical experience (10).

\*\*\*\*\*

FROM QUESTION 27

- C,c Thanks to my clinical placement. The theory alone in this school would not have given me the necessary k1 (14).

\*\*\*\*\*

FROM QUESTION 28

- A,a fun (1) the group was cooperative and a lot of problem solving was involved in finding more info about the patients (6)
- B,b I felt that although disagreements were often expressed, they were seldom, if ever recorded due to group pressure. I think the group disagreement record should be an anonymous record and not exposed to group pressure. (15)
- B,c Good opportunity to share k1 with others and learn new way of working (9). The board game gives a good picture of the services offered in an hospital (11).
- C,c The game is a good way to think about who and what to assess or consult to gain info about a pt (6) and how to form a Rx plan (12).

SESSION 2:

SUB COMMENT

- A,a A staff room should have a phone. (29) We don't have enough time to carry out all the required treatments. \*\*?(unclear, unable to code)
- B,b Need practice writing up the report. (21) Find there is not enough time for report writing (22) and too much time for playing. (30)
- B,c Interesting/easier. (2,17)
- C,b Another valuable learning experience. (5)
- C,c Really good experience-especially for U1 and U2 students. (5,10)

\*\*\*\*\*

FROM QUESTION 27

- A,b I have had no direct experience with MS patients, but I feel capable of dealing with such patients and thus playing the game. (19)
- B,a I had not the fullest of all backgrounds on MS OT treatment but managed fairly enough. (19)
- B,c I knew where to go to get the informations much more faster than the first time, I also knew where to go (appropriate). (18)



C,a What would be helpful to us as students is to be made more aware of less frequented areas in the hospital i.e. patient lounge, rehab secretary, and conference room, prosthetics and orthotics (last week's patient). (28)

\*\*\*\*\*

FROM QUESTION 28

A,a By seeing the patient myself, I won't have to do some assessments because during a physical assessment questions could be asked about family and expectations during rest periods. This game does not allow us to do that. (31)

C,c Good experience in problem solving (6) and program assessment and planning (12). Do not have enough of this experience (treatment planning) at this school. (23)

SESSION 3:

SUB COMMENT

A,b The game was getting easier and less challenging since we got the info quite fast. (17).

A,c The difference between the first time we have played and this one is tremendous; we now know where to go and how to look for information. (18)

A,d Very interesting, good way to learn. (2,4)

B,a This game is excellent! (4) It should be used to prepare students to enter the hospital at the end of second year! (24) I have learned a lot! (5)

B,b Good practice! Enables one to see if could handle such a patient without having much background/skills in this specific area. (20)

B,c Add assessment for Reflexes-Neurological. (26) Larger die. (27) Allow to write assessments right on the report instead of rewriting them. (25) Question 26 (on Progress Questionnaire) place another category - fairly easy, easy, challenging or takes work thinking or difficult, very difficult or challenging. (32)

\*\*\*\*\*

FROM QUESTION 27

B.b Although we do not have much background in head injuries specifically, we have enough knowledge to determine basic needs of patient, assess, and treatment. (20)

Appendix K  
Raw Data for Attitude Questionnaire

**ATTITUDE QUESTIONNAIRE:** The attitude questionnaire was administered at the end of the last gaming session. The purpose of this questionnaire was to obtain information concerning each subject's attitude towards the simulation-game, and the gaming experience.

1. **SCALED ITEMS:** Questions 1 through 4 are scaled items in which subjects check the plate on the scale that best reflects their opinions about the statement. Below are the questions asked and how they were scored.

1) The playing time of the game was

$\frac{1}{\text{Too long}}$                        $\frac{3}{\text{Too short}}$                        $\frac{2}{\text{About right}}$

2) The rules and directions of the game were

$\frac{1}{\text{Very clear}}$                $\frac{2}{\text{Fairly clear}}$                $\frac{3}{\text{Not very clear}}$                $\frac{4}{\text{Very unclear}}$

3) The game play was a valuable learning experience.

$\frac{1}{\text{Strongly Agree}}$                $\frac{2}{\text{Agree}}$                $\frac{3}{\text{Undecided}}$                $\frac{4}{\text{Disagree}}$                $\frac{5}{\text{Strongly Disagree}}$

4) The debriefing was a valuable learning experience.

$\frac{1}{\text{Strongly Agree}}$                $\frac{2}{\text{Agree}}$                $\frac{3}{\text{Undecided}}$                $\frac{4}{\text{Disagree}}$                $\frac{5}{\text{Strongly Disagree}}$

**Table 1a:** outlines what each subject reported for each question. A mean has been calculated for these questions as they are on a scale.

SUBJECT	QUESTIONS			
	1	2	3	4
2	*1,2	1	1	1
3	2	1	1	1
4	2	2	2	2
5	2	3	2	2
6	2	2	2	2
7	1	1	2	3
8	2	1	1	1
9	1	1	2	3
MEAN	1.7	1.5	1.6	1.9
SD	0.5	0.8	0.5	0.8

\*Calculated as 1.5. This subject stated that at times the game was too long, i.e. situational.

2. **SEMANTIC DIFFERENTIAL:** This section used semantic differential questions to gain information concerning each subject's opinion of the game experience.

Questions 5 through 14 are listed below along with how each answer was

scored. Please note that the use of eight places (to choose from) forces the subject to make a decision and not choose a neutral answer.

Your view of the Game experience

5) Satisfying	1	2	3	4	5	6	7	8	Frustrating
6) Boring	8	7	6	5	4	3	2	1	Not Boring
7) Challenging	1	2	3	4	5	6	7	8	Easy
8) Confusing	8	7	6	5	4	3	2	1	Clear
9) Fun	1	2	3	4	5	6	7	8	Not Fun
10) Slow-paced	8	7	6	5	4	3	2	1	Fast-paced
11) Motivating	1	2	3	4	5	6	7	8	Dull
12) Chaotic	8	7	6	5	4	3	2	1	Orderly
13) Informative	1	2	3	4	5	6	7	8	Uninformative
14) Fair	1	2	3	4	5	6	7	8	Unfair

Table 2a: outlines what each subject reported for each question. The table includes the mean score of all subjects on a given question, as well as the mean score of all questions which a given subject has answered.

SUBJECT	QUESTIONS										
	5	6	7	8	9	10	11	12	13	14	MEAN
2	2	1	4	2	3	4	2	2	3	2	2.5
3	1	1	1	1	1	1	1	1	1	1	1.0
4	2	2	3	3	2	4	3	2	3	2	2.6
5	2	1	2	3	1	4	2	2	1	2	2.0
6	2	1	4	3	3	4	3	2	2	2	2.6
7	3	3	1	2	3	7	4	3	3	3	3.2
8	1	1	1	1	1	2	1	1	1	1	1.1
9	2	2	3	1	3	5	3	1	2	2	2.4
MEAN	1.9	1.5	2.4	2.0	2.1	3.9	2.4	1.8	2.0	1.9	2.2
SD	0.6	0.8	1.3	0.9	1.0	1.8	1.1	0.7	0.9	0.6	

3. OPEN ENDED: Questions 15 to 20 are open ended questions. Below are the questions asked.

15) What did you like most about the simulation-game experience?

16) What did you like least about the simulation-game experience?

17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and under what conditions?

18) How would you change the game?

19) Did the posttest measure the material that was presented in the game?

20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

TABLE 3a: outlines the different categories of comments and their content. As well as the number and percentage of subjects who made comments classified under a particular category.

CAT	#(%)	CONTENT
1	3(38%)	learn how and where to obtain relevant information
2	1(13%)	clarifies steps which need to be taken to obtain useful information.
3	2(25%)	enjoy learning about the patients presented (eg. reading the PIB, results of assessments.)
4	1(13%)	learn how to write OT reports.
5	1(13%)	enjoy writing OT reports.
6	2(25%)	opportunity to formulate treatment plans.
7	1(13%)	opportunity to compare own treatment plan to a "model"
8	1(13%)	opportunity to review knowledge acquired
9	1(13%)	discover new ways to approach a case history.
10	1(13%)	approximates a real hospital setting.
11	1(13%)	provides information about the value of other disciplines.
12	2(25%)	good learning experience in a relaxed atmosphere/fun.
13	1(13%)	challenging.

Table 3b: provides a report of all the comments made for question 15 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

15) What did you like most about the simulation-game experience?

SUB	COMMENT
2	It taught me to organize my thoughts on where to get relevant information (1) and how to properly write reports (4). I like reading the info in the red book (PIB) (3).
3	Learning where to look for information (1).
4	Opportunity to do a treatment plan (6) and see if one was close to the target (7). Liked playing the game itself, i.e. looking up info in the referral booklet (PIB) and learning about various aspects of the patient(s) (3).
5	It's a good way of learning while having fun (12).
6	Good way to learn how to gather info on patients (1) and formulate treatment plans (6).

7. Give an opportunity to review past learned experience (8).  
Discover in new ways to approach the case history (9).
8. It approximated a real hospital setting (10) and gave us much information about the value of other disciplines (11).
9. It clarifies the steps to do to obtain useful information about a patient in a simplistic way (2), it is challenging (13) and allows a good learning experience in a relaxed atmosphere (12), like writing the report-good overview (5).

TABLE 3c: outlines the different categories and their content for question 16. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	4(50%)	Rewriting information obtained.
2	1(13%)	Recording (info sheet) information obtained.
3	1(13%)	the rules which are initially difficult to understand.
4	1(13%)	takes too long to gather information.
5	1(13%)	too many individual assessments, should be grouped.
6	1(13%)	long wait between turns.
7	1(13%)	game less challenging by third session.
8	1(13%)	rolling a three or less for the telephone card.
9	1(13%)	writing the report.

TABLE 3d: provides a report of all the comments made for question 16 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

16) What did you like least about the simulation-game experience?

SUB	COMMENT
2	Rewriting the information. (1)
3	Recording the information. (2)
4	Recopying notes from the info sheets to the report sheet (1). (Also hated getting a 1, 2, or 3 when trying to make a phone call!!) (8)
5	The rules are somewhat hard to grasp but once started they get much easier. (3)
6	Getting up on Thursday mornings!!
7	Very too long. Informations are long to gather (4). Most assessments are one by one (it is not like that in a real rehab situation) (5).

- 8 Writing up the treatment plan (9) and repeating much of the same information. (1)
- 9 It was long before getting you to play (6), it is long to copy over all the answers (1), after the third game - a bit less challenging because we know where to get info - and it's getting too easy. (7)

Table 3e: outlines the number of subjects that responded yes or no to question 17.

ANSWER	SUBJECT								TOTAL	%
	2	3	4	5	6	7	8	9		
YES			x	x	x	x		x	3	38
NO	x	x		x	x		x		5	63

TABLE 3f: outlines the different categories and their content for question 17.

Numbered categories denote comments accompanied by the answer yes; and alphabetized categories denote comments accompanied by the answer no.

CAT.	#(%)	CONTENT
1	2(25)	pathology of a disease/ medical information on a disability.
2	2(25)	basic, brief definitions of a disease/disability - health encyclopedia, medical dictionary
3	1(13)	any books.
A	1(13)	should look up information after the game is played.
B	1(13)	should be told what the case history is before game play, so can review the area.
C	1(13)	books may help only for diagnoses - but should be able to obtain this information in the game.
D	1(13)	references would slow down the game

TABLE 3g: provides a report of all the comments made for question 17 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number or letter in brackets after the comment. Please note that some comments addressed question 18 so although they are reported here they are coded under question 18 which asks how they would change the game. These comments are in square brackets [ ].

17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and under what conditions?

SUB	COMMENT
2	NO, because it shows you what you should look up afterwards (A) [Maybe the treatment plan could be given as an assignment.]
4	At times, such as when one is not familiar with the background of a particular disease/disability (1). Basic and brief definitions (eg

- from health encyclopedia) (2).
- 5 No. But we should be given the area of the case before so we can document ourselves about it (B).
- 6 No. I think the more you play, the more you learn. Books may help only for diagnoses - Yet one should be able to find that out thru the game (C).
- 7 Yes, about the pathology of the illness, for a quick review (1).
- 8 No, it would make the game much more slow (D). [But there should be a library in the game, which when we access it would give us information about the condition.]
- 9 Yes, medical dictionary (2) or any other books (3) - would provide more a learning experience and would not change directly our answers or approaches.

**TABLE 3h:** outlines the different categories and their content for question 18. Included in this table are the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#/%	CONTENT
1	2(25%)	add a library location to board, where one can access information about the condition under study.
*2	2(25%)	change bathroom assessment card, so that it is clear that one can assess both hygiene and toileting.
*3	1(13%)	patient interview card should read "patient visit/interview."
4	1(13%)	have one overall self-care evaluation which includes dressing, bathing, transfers, etc (eg Sister Kenny).
5	1(13%)	include evaluation of cranial nerves and reflexes (assessment card)
6	1(13%)	report given as an assignment.
7	1(13%)	opportunity to play two assessment cards during one turn.
8	1(13%)	reduce likelihood of cheating, by changing method of presenting info.
9	1(13%)	use a video to demonstrate a "utopic" game situation
10	1(13%)	provide a summary of the best order (sequence) in which to obtain information
11	1(13%)	include a lecture on the case history.

\*These changes were made prior to the second year gaming sessions.

**TABLE 3i:** provides a report of all the comments made for question 18 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments which addressed question 18 were made in questions 17 and 20. These comments have been included here.



18) How would you change the game?

SUB COMMENT

2 Add a library - to give brief info on a certain condition i.e. head trauma. (1)

3 Wouldn't.

4 Bathroom (assessment) card - misleading. (2)

5 Some of the assessment cards give unintended messages like bathroom where the toilet should be replaced by a bath (2) and interview by visit-interview. (3)

6 Incorporate some of the assessments into 1 i.e. overall self-care evaluation (e.g. Sister Kenny) to replace dressing, bathing, transfers etc.. assessments. (4)

7 Opportunity to pass two assessments at the same time. (7)

8 Include a test of cranial nerves and of reflexes. (5)

9 To increase challenge - give more referrals from doctor so that we have to displace more the mover, e.g. the head nurse is in the lounge:

\*\*\*\*\*

FROM QUESTION 17

2 [Maybe the treatment plan could be given as an assignment. (6)]

8 [But there should be a library in the game, which when we access it would give us information about the condition. (1)]

\*\*\*\*\*

(FROM QUESTION 20)

2 [may somehow give the info in such a way that players couldn't cheat i.e. place info on individual cards, which are numbered. (8)]

7 [A video could be add, demonstrating a "utopic" game situation (9), or a video or lecture summarizing the step 1 to step n (give the best order of getting the info.) (10)]

9 [Lecture on the case history would be very interesting. (11)]

\* Unable to code, as do not understand statement.

Table 3j: outlines the number of subjects that responded yes or no to question 19.

ANSWER	SUBJECT								TOTAL	%
	2	3	4	5	6	7	8	9		
YES	x	-	-	x	-	-	x	x	4	50
NO		-	-	-	-	-			0	00

**TABLE 3k:** outlines the different categories and their content. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT		CONTENT
1	1(13%)	Helped decide what assessments to perform
2	1(13%)	Telephone question not answered in the game situation.
3	2(25%)	Some but not all.

**TABLE 3l:** provides a report of all the comments made for question 19 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

19) Did the posttest measure the material that was presented in the game?

SUB	COMMENT
2	Yes. It help decide what evaluations to give (1). The phoning question wasn't really answered in the game situation. (2)
4	Some, but not all. (3)
6	More or less. (3)

**Table 3m:** outlines the number of subjects that responded yes or no to question 20.

ANSWER	SUBJECT									TOTAL	%
	2	3	4	5	6	7	8	9			
YES						-				0	00
NO	x	x	x	x	x	-	x	x		7	88.

**TABLE 3n:** outlines the different categories and their content for question 20. Numbered categories represent negative comments, and alphabetized categories represent positive comments. This table includes the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	1(13%)	Should not replace practical experience.
A	1(13%)	encourages independent thinking
B	1(13%)	players active in the learning process

**TABLE 3o:** provides a report of all the comments made for question 20 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a

number in brackets after the comment. Please note that some comments addressed question 18 so although they are reported here they are coded under question 18. These comments are in square brackets [ ].  
20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

SUB COMMENT

- 2 No. It's sufficient -[may somehow give the info in such a way that players couldn't cheat i.e. place info on individual cards, which are numbered.]
- 4 No. But some real-life case studies are always exciting. One actually has the opportunity to see the deficits/disabilities. (1)
- 6 This (game) is a different and more interesting way to acquire info since it allows the players to think for themselves (A) and participate in the learning process. (8)
- 7 [A video could be add, demonstrating a "utopic" game situation, or a video or lecture summarizing the step 1 to step n (give the best order of getting the info.)]
- 8 No. I like the game itself.
- 9 No. [Lecture on the case history would be very interesting.]

4. QUESTION 21: has two parts, the answer to the second part is dependent on the subject answering yes. Below is the question.

21) With the appropriate modifications, can you see this game being used to help prepare OT students for work in other areas?

\_\_\_ yes \_\_\_ no

If you answered yes tick off which areas. You can tick off more than one.

\_\_\_ paediatrics \_\_\_ geriatrics \_\_\_ psychiatry \_\_\_ community work

\_\_\_ other, please specify \_\_\_\_\_

Table 4a: outlines the number of subjects that responded yes or no to question 21.

ANSWER	SUBJECT									TOTAL	%
	2	3	4	5	6	7	8	9			
YES	x	x	x	x	x	x	x	x	x	8	100
NO	-	-	-	-	-	-	-	-	-	0	000

Table 4b: outlines those areas subjects felt the game could be used to help prepare OT students to work in.

SUBJECT	AREAS				
	PAEDS	GERIAT	PSYCH	COMM	OTHER
2	x	x	x	x	
3	x	x	x	x	
4	x	x		x	
5	x	x	x		
6	x	x	x		
7	x		x		
8	x	x	x	x	
9	x	x	x	x	
TOTAL	8	7	8	5	0
%	100	88	88	63	00

#### GAME IN CONTEXT OF PROGRAM

5. McGILL PROGRAM: The following questions 1 through 9 ask the subjects to rate the McGill OT program as being strong, weak, or average with respect to certain characteristics. This set of questions was asked twice. Before the start of the gaming sessions during the pretest and at the conclusion of the gaming sessions during as part of the attitude questionnaire. Below is a list of the questions and how they were rated.

Directions: Indicate whether the following are strong, weak, or average characteristics of the McGill OT program.

Characteristics	strong	weak	average
1. theoretical basis	_____	_____	_____
2. preparation for clinical work	_____	_____	_____
3. opportunity to study a variety of case histories	_____	_____	_____
4. opportunity to plan a variety of treatment programs	_____	_____	_____
5. opportunity to write OT reports	_____	_____	_____
6. opportunity to analyse information	_____	_____	_____
7. opportunity for self-evaluation	_____	_____	_____
8. opportunity to receive peer evaluation	_____	_____	_____
<u>RATING</u>	1	3	2

TABLE 5a: outlines the answers given each subject for these questions during the pretest. Included is the average score each subject gave for all the questions as well as the average score given by the subjects for each question.

Before Gaming Sessions:

SUBJECT	QUESTIONS								MEAN
	1	2	3	4	5	6	7	8	
2	2	2	2	1	2	3	3	3	2.3
3	2	2	1	1	3	3	3	3	2.3
4	1	2	2	3	3	2	3	3	2.4
5	1	2	2	3	3	3	3	2	2.4
6	2	3	3	3	3	3	3	3	2.9
7	1	2	2	2	3	3	3	3	2.4
8	2	3	1	1	1	3	3	2	2.0
9	1	3	2	3	3	2	2	3	2.4
MEAN	1.5	2.4	1.9	2.1	2.6	2.8	2.9	2.8	2.4
SD	0.5	0.5	0.6	1.0	0.7	0.5	0.4	0.5	

TABLE 5b: outlines the answers given each subject for these questions during the attitude questionnaire. Included is the average score each subject gave for all the questions as well as the average score given by the subjects for each question.

After Gaming Sessions:

SUBJECT	QUESTIONS								MEAN
	1	2	3	4	5	6	7	8	
2	2	3	2	1	3	3	3	3	2.5
3	1	3	2	2	3	3	3	3	2.5
4	2	2	2	2	3	2	3	3	2.4
5	1	2	3	3	3	2	3	2	2.4
6	1	3	3	3	3	3	3	3	2.8
7	1	2	2	2	3	2	3	3	2.3
8	1	3	3	3	3	2	2	2	2.4
9	1	3	3	3	3	2	1	2	2.3
MEAN	1.3	2.6	2.5	2.4	3.0	2.4	2.6	2.6	2.5
SD	0.5	0.5	0.5	0.7	0.0	0.5	0.7	0.5	

6. GAME CHARACTERISTICS: Questions 9 through 16 are exactly the same as questions 1 through 8; except that the subject is asked to rate the characteristics of the game rather than the McGill OT program.

Directions: Indicate whether the following are strong, weak, or average characteristics of the simulation-game.

Characteristics	strong	weak	average
9. theoretical basis	_____	_____	_____
10. preparation for clinical work	_____	_____	_____
11. opportunity to study a variety of case histories	_____	_____	_____
12. opportunity to plan a variety of treatment programs	_____	_____	_____
13. opportunity to write OT reports	_____	_____	_____
14. opportunity to analyse information	_____	_____	_____
15. opportunity for self-evaluation	_____	_____	_____
16. opportunity to receive peer evaluation	_____	_____	_____
RATING	1	3	2

SUBJECT	QUESTIONS								
	9	10	11	12	13	14	15	16	MEAN
2	-	1	1	1	1	2	1	1	1.1
3	1	1	1	1	1	1	1	1	1.0
4	3	2	1	1	1	1	2	2	1.6
5	1	2	1	1	1	1	1	1	1.1
6	2	1	1	1	1	1	2	2	1.4
7	2	2	3	3	3	2	3	3	2.6
8	1	1	1	1	1	1	2	2	1.3
9	2	1	2	1	2	1	2	2	1.6
MEAN	1.7	1.4	1.4	1.3	1.4	1.3	1.8	1.8	1.5
SD	0.8	0.5	0.7	0.7	0.7	0.5	0.7	0.7	

7. GAME AT MCGILL: Question 17 has three parts. First the subject is asked to answer whether or not simulation- game should be incorporated into the McGill program. If the subject answers yes then they are asked to answer part a) in which they tick off during which years and under what conditions the simulation- game should be used. If they answer no then they are asked to proceed to part b) and provide an explanation for their answer. Below is question 17.

17. Do you think that the simulation-game should be incorporated into the McGill OT program?

\_\_\_ yes (see a below)

\_\_\_ no (see b below)

a) If you answered yes to question 17, check off during which year(s) in an OT student's education you feel that the simulation-game should be used, and how in each year it should be used. You may check off more than one category.

eg. during first year in class as a group;

during second year out of class on an individual basis.

Years	In class		Outside of class	
	Group	Individual	Group	Individual
first	_____	_____	_____	_____
second	_____	_____	_____	_____
third	_____	_____	_____	_____
intern	N/A	N/A	_____	_____

b) If you answered no to question 17, please explain why.

TABLE 7a: ( outlines which subjects responded yes or no to question 17.

ANSWER	SUBJECT									TOTAL	%
	2	3	4	5	6	7	8	9			
YES	x	x	x	x	x	x	x	x	x	8	100
NO	-	-	-	-	-	-	-	-	-	0	000

TABLE 7b: outlines how each subject indicated the simulation-game should be used in the McGill OT program. Please note that the number 4 was used instead of the term intern.

SUBJECT	IN CLASS						OUTSIDE CLASS							
	GROUP			INDIV			GROUP				INDIV			
	1	2	3	1	2	3	1	2	3	4	1	2	3	4
2		X	X									X	X	
3		X	X					X	X					
4	X				X								X	
5	X				X				X				X	
6	X	X	X			X	X	X	X				X	
7		X						X						
8		X	X					X	X					
9		X												
TOTAL	3	6	4	0	2	1	1	4	4	0	0	1	4	0
%	38	75	50	0	25	13	13	50	50	00	00	13	50	00

Biographical Data

8. BIOGRAPHICAL DATA: Questions 1 through 5 solicit biographical data on each subject. Below are the questions asked, how they were scored, and the percentage of respondents falling into the various categories.

Directions: Please tick off the appropriate answer.

1. SEX:     1 male           2 female  
          (25%)           (75%)
2. MOTHER TONGUE:     1 English           2 French           3 Other  
                          (63%)           (38%)           (00%)
3. UNDERGRADUATE YEAR:     2 2nd year           3 3rd year  
                                  (00%)           (100%)
4. PREVIOUS EDUCATION : answer only those questions which are applicable.
  - a) Completed High School outside Quebec     1 yes     2 no  
  (25%)     (75%)
  - b) Attended CEGEP     1 yes     2 no  
  (75%)     (25%)
  - c) Completed a University degree, other than OT     1 yes     2 no  
  (13%)     (88%)  
Name of degree \_\_\_\_\_ Discipline \_\_\_\_\_
  - d) Completed part of a University degree other than OT.  
Name of discipline \_\_\_\_\_     1 yes     2 no  
  (38%)     (63%)
  - e) Language of education in:
 

High School	1 (63%)	English	2 (25%)	French	4 (13%)	Both	3 (00%)	Other
Cegep	1 (50%)	English	2 (13%)	French	4 (13%)	Both	3	Other
University (Answer only if you have studied in a program other than OT)	1 (38%)	English	2 (00%)	French	4 (13%)	Both	3	Other

5. CLINICAL PLACEMENTS:

Number of adult phys med placements 0, 1, 2, 3 etc.

- 0 - 00%
- 1 - 38%
- 2 - 50%
- 3 - 13%



TABLE 8a: outlines the biographical information for each subject.

DEMOGRAPHIC INFORMATION

SUB	SEX	MT.	YEAR	EDUC		DEGREE		LANG		UNIV	PLACEMENT	
				HS	CEG	C	P	HS	CEG		P	MED (A)
2	2	1	3	2	1	2	2	1	1	-	1	1
3	2	1	3	1	2	2	*1	1	1	1	1	1
4	2	1	3	2	1	2	2	1	1	-	2	2
5	1	2	3	2	1	2	*1	4	4	4	2	2
6	2	1	3	2	1	2	*1	1	1	1	3	3
7	1	2	3	2	1	2	2	2	2	-	2	2
8	2	1	3	1	2	*1	-	1	-	1	1	1
9	2	2	3	2	1	2	2	2	2	-	2	2

\* The name of the other degree for each subject is:

SUBJECT	DEGREE
3	BIOLOGY
5	BIOLOGY
7	PHYSIOLOGY/PSYCHOLOGY 2 YEARS
8	LIFE SCIENCES

OT U2

## RESULTS OF ATTITUDE QUESTIONNAIRE

**ATTITUDE QUESTIONNAIRE:** The attitude questionnaire was administered at the end of the last gaming session. The purpose of this questionnaire was to obtain information concerning each subject's attitude towards the simulation-game, and the gaming experience.

1. **SCALED ITEMS:** Questions 1 through 4 are scaled items in which subjects check the place on the scale that best reflects their opinions about the statement. Below are the questions asked and how they were scored.

1) The playing time of the game was

<u>1</u> Too long	<u>3</u> Too short	<u>2</u> About right
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2) The rules and directions of the game were

<u>1</u> Very clear	<u>2</u> Fairly clear	<u>3</u> Not very clear	<u>4</u> Very unclear
------------------------	--------------------------	----------------------------	--------------------------

3) The game play was a valuable learning experience.

<u>1</u> Strongly Agree	<u>2</u> Agree	<u>3</u> Undecided	<u>4</u> Disagree	<u>5</u> Strongly Disagree
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4) The debriefing was a valuable learning experience.

<u>1</u> Strongly Agree	<u>2</u> Agree	<u>3</u> Undecided	<u>4</u> Disagree	<u>5</u> Strongly Disagree
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**Table 1a:** outlines what each subject reported for each question. A total average has been calculated for these questions as they are on a scale.

SUBJECT	QUESTIONS			
	1	2	3	4
10	2	4	1	3
11	2	1	1	2
12	2	2	1	2
13	2	2	1	2
15	3	2	1	5
16	2	1	1	3
17	2	1	1	2
18	3	1	2	3
19	2	1	1	2
20	*2	1	2	2
22	2	1	1	2
23	2	1	1	3
24	**3	1	1	1
25	2	1	2	2
26	3	2	1	2
28	2	2	1	2
29	2	1	2	4
30	***2	1	1	1
31	2	1	1	2
32	2	1	2	2
33	2	1	1	2
35	2	1	2	5
36	1	1	1	1
37	2	2	2	3
38	2	1	2	3
MEAN	2.1	1.4	1.3	2.4
SD	0.4	0.7	0.5	1.0

\* Length about right as a learning experience, but time consuming if done as a course.

\*\* Too short for report writing.

\*\*\* Sometimes too short.

2. SEMANTIC DIFFERENTIAL: This section used semantic differential questions to gain information concerning each subject's opinion of the game experience.

Questions 5 through 14 are listed below along with how each answer was scored.

Please note that the use of eight places (to choose from) forces the subject to make a decision and not choose a neutral answer.

Your view of the Game experience

- 5) Satisfying 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : Frustrating
- 6) Boring 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Not Boring
- 7) Challenging 1 : 2 : 3 : 4 : 5 : 6 : 7 : 8 : Easy
- 8) Confusing 8 : 7 : 6 : 5 : 4 : 3 : 2 : 1 : Clear

9)	Fun	1	2	3	4	5	6	7	8	Not Fun
10)	Slow-paced	8	7	6	5	4	3	2	1	Fast-paced
11)	Motivating	1	2	3	4	5	6	7	8	Dull
12)	Chaotic	8	7	6	5	4	3	2	1	Orderly
13)	Informative	1	2	3	4	5	6	7	8	Uninformative
14)	Fair	1	2	3	4	5	6	7	8	Unfair

Table 2a: outlines what each subject reported for each question. The table includes the average score of all subjects on a given question, as well as the average score of all questions which a given subject has answered.

SUBJECT	QUESTIONS										MEAN
	5	6	7	8	9	10	11	12	13	14	
10	1	1	1	2	2	5	1	2	1	1	1.7
11	2	1	3	1	1	2	1	1	1	2	1.5
12	2	2	2	2	2	2	2	2	2	2	2.0
13	1	2	2	2	2	3	2	1	1	1	1.7
15	1	1	1	2	1	4	1	1	1	1	1.4
16	1	1	1	1	1	4	1	1	1	1	1.3
17	2	1	1	2	2	5	2	2	1	3	2.1
18	1	1	1	7	2	5	2	1	2	2	2.4
19	1	2	2	3	1	4	1	1	1	2	1.8
20	1	1	2	1	1	3	1	1	1	1	1.3
22	2	2	2	2	2	3	2	2	1	3	2.1
23	1	1	1	2	1	5	1	2	1	1	1.6
24	1	1	1	1	2	2	1	2	1	1	1.3
25	2	2	3	2	2	4	2	2	2	3	2.4
26	1	1	1	2	1	2	2	4	1	2	1.7
28	1	1	2	2	1	1	1	1	1	1	1.2
29	2	6	6	1	3	4	3	1	3	1	3.0
30	1	1	1	1	1	4	1	1	1	1	1.3
31	1	1	1	1	1	6	2	1	1	1	1.6
32	1	2	1	2	2	6	2	2	1	2	2.1
33	1	1	2	1	1	2	1	1	1	1	1.2
35	3	3	4	1	4	6	5	1	3	1	3.1
36	3	1	1	1	1	4	1	1	1	1	1.5
37	2	2	2	2	3	4	3	2	2	1	2.3
38	2	2	3	2	2	5	2	2	1	1	2.2
MEAN	1.5	1.6	1.9	1.8	1.7	3.8	1.7	1.5	1.3	1.5	1.8
SD	0.7	1.1	1.2	1.2	0.8	1.4	0.9	0.7	0.6	0.7	

3. OPEN ENDED: Questions 15 to 20 are open ended questions. Below are the questions asked.

15) What did you like most about the simulation-game experience?

16) What did you like least about the simulation-game experience?

17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and under what conditions?

18) How would you change the game?

19) Did the posttest measure the material that was presented in the game?

20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

TABLE 3a: outlines the different categories of comments and their content for question 15. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	5(20%)	learn how and where to obtain relevant information
2	4(16%)	clarifies steps which need to be taken to obtain useful information.
3	2(8%)	enjoy learning about the patients presented (eg. reading the PIB, results of assessments.)
4	2(8%)	learn how to write OT reports.
5	0	enjoy writing OT reports.
6	2(8%)	opportunity to formulate treatment plans.
7	3(12%)	opportunity to compare own treatment plan to a "model"
8	0	opportunity to review knowledge acquired
9	0	discover new ways to approach a case history.
10	3(12%)	approximates reality.
11	1(4%)	provides information about the value of other disciplines.
12	1(4%)	good learning experience in a relaxed atmosphere/fun.
13	1(4%)	challenging.
14	2(8%)	opportunity to problem solve, make decisions.
15	5(20%)	allows one to synthesize knowledge acquired and apply it
16	4(16%)	prepares one for clinical work.
17	1(4%)	freedom to choose the number and order of assessments.
18	2(8%)	learn what assessments to carry out for a given case history.
19	1(4%)	study a new case history each session.
20	1(4%)	how to record information received.
21	1(4%)	learning what to do with referrals.
22	2(8%)	working in a group
23	1(4%)	changing group from one session to the next.
24	1(4%)	learning how much I didn't know.
25	1(4%)	the game is concrete.

Table 3b: provides a report of all the comments made for question 15 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those

with the same code contain similar content. The code is indicated by a number in brackets after the comment.

15) What did you like most about the simulation-game experience?

SUB COMMENT

- 10 The information I learned on report writing. (4)
- 11 Working in a team (22). It's fun (12) and concrete (25). Well designed.
- 12 It gave a lot about where getting information (1), what assessment available and when use these assessment (18).
- 13 The freedom for choice (order, number) of assessments (17) and treatment (6) and possibility to compare with a very good model (7).
- 15 That we had a real case history for once and can practice our theoretical knowledge. (15)
- 16 Apply treatment program (6) - it is good for real clinical work. (16)
- 17 You get into the mood of working in hospital with the frustration (10) learn where to get information (1).
- 18 To see more concretely about assessments on a particular dysfunction (18). I learned what could other professionals could offer us (11) and the challenge to find out the answers of the treatment plan to compare with ours (7).
- 19 It's the reality of the game. I feel like an OTR. (10)
- 20 That it was actually the first time that we could use our "OT knowledge" (15) as a whole and get experience on how it might be "in the real world" (16) as opposed to theory learned in school. Change of players (23).
- 22 Learning what to do with referrals. (21) Finding out info on patient. (3).
- 23 Synthesize all our knowledge to make us problem solve, make decision in situations that we are really going to meet (15, 16). The food!!!
- 24 The realism of the situation (10)- one new case each time (19)- the way we had to get info. (1)
- 25 You learned an efficient method of proceeding, as for collecting. (2).
- 26 Learn a lot about how to go about in management of particular patient (\*), and the way to put down your info (20) as well as to

- do treatment plan. (4)
- 28 Because it is first time that something that we learned at school about OT we can apply it almost for a real life situation (15); it is just you who has to think about problems, solutions. (14)
- 29 I liked being in a position where we actually had to make decisions, not just think about them. (14)
- 30 It provides you with a challenge (13) and allows you to learn what's involved when you must assess a patient. (2)
- 31 Learning how much I did not know! (24)
- 32 Gave me a chance to see what gathering info about a specific pt was like. (1)
- 33 The chance to attempt to put some theory into a more practical context - good practice for trying to remember and incorporate! (15)
- 35 It provide me with an opportunity to review the order in which the OT should use in treating a patient eg. first - got to the medical charts, second - interview the patient, third - do assessments, etc. (2)
- 36 Hopefully it gave me a better idea about what to expect in a clinical situation (as I had none). (16) It helped to organize in my mind how I would proceed in a clinical situation. (2)
- 37 I learn how to go about to get information on a patient before first seeing him. (1)
- 38 I liked reading the model report to find out how complete our report was. (7) Liked learning what was involved in the assessments (3). Liked discussing with others. (22)

\*Statement unclear, unable to code.

**TABLE 3c:** outlines the different categories and their content for question 16. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	3(12%)	Rewriting information obtained.
2	2(8%)	Recording (info sheet) information obtained.
3	0	the rules which are initially difficult to understand.
4	0	takes too long to gather information.
5	0	too many individual assessments, should be grouped.
6	0	long wait between turns.
7	0	game less challenging by third session.
8	0	rolling a three or less for the telephone card.
9	3(12%)	writing the report.
10	4(16%)	not enough time to write the report.

11	1(4%)	report difficult to write as no straight forward method.
12	4(16%)	not enough time to perform all the assessments and consultations
13	1(4%)	debriefing period too long
14	2(8%)	debriefing session.
15	1(4%)	long time to understand the game well
16	1(4%)	should have had 2 sessions instead of three.
17	2(8%)	session too long
18	1(4%)	information desired not always available in the game i.e. questions not always answered.
19	1(4%)	not knowing where to get information desired.
20	3(12%)	answering questionnaires

TABLE 3d: provides a report of all the comments made for question 16 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

16) What did you like least about the simulation-game experience?

SUB COMMENT

10	The rush of trying to get all the assessments and consultations done before the time was up. (12)
11	Find that writing the (treatment plan is the most important thing but I felt always pushed by time. (10)
12	Sometime one debriefing period was too long. (13) After a game, you become tired. Also I find long to rewrite all the assessment information. (1)
13	Writing down the information is a long process. (2)
15	The questionnaire - too long. (20)
16	Never have time too finish. (10, 12)
17	The report at end were very hard to writw because there was no straight forward method - It changed at each game! (11)
18	The time it takes to rewrite down all the information we find in the PIB. (2)
19	The period of discussion after. Because it is too long and you don't really learn. (14)
20	It took three hours. (17)
22	**Making up the objectives - sometimes confusing.
23	I don't know.



- 24 Answer the questionnaires. (20)
- 25 Writing out the report (especially recopying the assessment back into the report sheet). (9, 1)
- 26 Didn't have enough time to complete it. (10,12)
- 28 To write the papers after the game like those I am doing now. (20)
- 29 Writing the report. (9)
- 30 Sometimes there wasn't enough time to perform all the assessments I would have liked to. (12)
- 31 It took a long time to understand the "ins" and "outs" of the game- Took lots of time. (15)
- 32 Not getting the info I wanted (18) or not knowing where to go to get it. (19) Re: info about family attitudes etc.. I found I wanted to ask other things than I got answers for - patient interview.
- 33 The time limit on the report made writing a little hurried - but practice might lessen this feeling. (10)
- 35 The debriefing sessions. (14)
- 36 The game was too long. (17)
- 37 The writing of the report especially the objectives that we had already written when doing game. (9,1)
- 38 Quite time consuming. Perhaps two sessions would have been enough- bad timing. (16)

---

\*\*Statement unclear, not coded.

Table 3e: outlines the number of subjects that responded yes or no to question 17.

SUBJECTS	YES	NO
10		x
11	x	
12	x	
13	x	
15		x
16		x
17	x	
18	x	
19		x
20		x
22		x
23		x
24		x
25		x
26	x	
28	-	-
29	x	
30	x	
31	x	
32		x
33	x	
35		x
36	x	
37		x
38		x
TOTAL	11	13
%	.44	.52

**TABLE 3f:** outlines the different categories and their content for question 17.

Numbered categories denote comments accompanied by the answer yes; and alphabetized categories denote comments accompanied by the answer no. Included in this table is the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	3(12%)	pathology of a disease/ medical information on a disability.
2	2(8%)	basic, brief definitions of a disease/disability - health encyclopedia, medical dictionary
3	0	any books.
4	5(20%)	norms of tests
5	1(4%)	references should be limited.
6	1(4%)	for treatment planning, eg. Trombly, Willard and Spackman
7	1(4%)	not class notes.
8	1(4%)	possibly incorporate info into game.
9	1(4%)	for OT U1
10	1(4%)	only if unfamiliar with disability presented.
A	0	should look up information after the game is played.
B	0	should be told what the case history is before game play, so can review the area.

C	0	books may help only for diagnoses - but should be able to obtain this information in the game.
D	0	references would slow down the game
E	1(4%)	not for OT U2/U3
F	1(4%)	more challenging.
G	1(4%)	only if new material.

TABLE 3g: provides a report of all the comments made for question 17 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number or letter in brackets after the comment.

17) Do you think that you should be allowed to refer to reference materials during the game? If yes, what type and under what conditions?

SUB COMMENT

- |    |  |
|----|--|
| 11 | Yes, eg. to see norms of ROM (4). I think that there should be a limit in the number of references though (5).   |
| 12 | Yes, if we are treating the patient we should know about the condition. (1)  |
| 13 | Yes for treatment planning eg. Trombly, Willard and Spackmann or very general books to have a better idea of possibilities. (6)  |
| 17 | Yes. To refresh your memory about the different disorders that we see. (1)   |
| 18 | Have some reference about norms of testing. (4)  |
| 19 | I don't think so, because you learn more. If you have material that limit the research.  |
| 20 | Not if it's played by OT U2 or U3 (E), but maybe by OT U1 since we didn't know as much about "medical science" (9) (for eg. if don't know what is involve in a hip fracture, it might be more difficult to treat.) |
| 23 | No. It's just OK like this, more challenging. (F)  |
| 24 | No - you have to use common sense and be more practical if you don't use theoretical basis.  |
| 25 | No. Only if new material or above level. (G)   |
| 26 | Yes, it could help us to integrate the norms related to normal ROM (have the chart for normal ROM). (4) But I don't think the class notes would be really helpful. (7)   |
| 29 | I think we should be able to research medical conditions and what  |

complications they involve if the player is not sure of how to progress. (1)

- 30 Yes, only if you are unfamiliar with the disability described.(10)
- 31 Maybe some definitions eg. medical dictionary. (2) Norms for tests if they are used in the game. (4)
- 33 Yes, but possibly could incorporate it into the game, as with norms of tests etc. (8,4)
- 36 Yes for medical terms which may not be understood. (2)

**TABLE 3h:** outlines the different categories and their content for question 18. Included in this table are the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	0	include demonstration in conjunction with written rules.
2	0	add a library location to board, where one can access information about the condition under study.
*3	0	change bathroom assessment card, so that it is clear that one can assess both hygiene and toileting.
*4	0	patient interview card should read "patient visit/interview."
5	0	have one overall self-care evaluation which includes dressing, bathing, transfers, etc (eg Sister Kenny).
6	0	include evaluation of cranial nerves and reflexes (assessment card)
7	0	report given as an assignment.
8	0	opportunity to play two assessment cards during one turn.
9	0	reduce likelihood of cheating, by changing method of presenting info.
10	0	use a video to demonstrate a "utopic" game situation
11	0	provide a summary of the best order (sequence) in which to obtain information.
12	0	include a lecture on the case history.
13	1(4%)	include psychiatric case histories.
14	1(4%)	include treatment activities/methods.
15	3(12%)	rank order assessments in terms of importance.
16	1(4%)	make it more challenging.
17	2(8%)	decrease amount of writing.
18	2(8%)	decrease length of game .
19	1(4%)	increase pace of game.
20	1(4%)	incorporate into a course.
21	1(4%)	clarify rules.
22	2(8%)	use a different media after game to demonstrate treatment procedures.
23	1(11%)	present info learned in game prior to game play.

\*These changes were made prior to the second year gaming session.

TABLE 31: provides a report of all the comments made for question 18 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Some comments made in question 20 addressed question 18 and therefore have been included here.

18) How would you change the game?

SUB COMMENT

- 10 I might include treatment eg. the types of activities you would use in each situation. (14)
- 11 I wouldn't. (Except for references.)
- 12 Some consultations I didn't do, so I still don't know what they are for.
- 15 It is OK as it is but maybe make it shorter. (18)
16. No. I wouldn't change it.
- 18 To give more challenge may be use the dice to play but I find it good to decide where area to go (I know it is a goal) but to find a way to give more challenge??? (16)
- 19 Just incorporate more in a course. (20)
- 22 I wouldn't.
- 23 Not only concentrate on phys med. Also psychiatric situations. (13)
- 24 Having the order of priorities in the assessments which are really necessary, which could be done by other professionals, because I don't think that in a real setting an OT would do all of them. (15)
- 28 Perhaps the rules are not clear at beginning. A bit confusing. (21)
- 30 To include methods of treatment either in the game itself or in the report. (15)
- 31 There was an awful lot of writing to do throughout the game - this is what took so much time. How to change that? I don't know. (17)
- 33 I wouldn't.
- 35 I would make the game a bit faster paced so as to increase motivation and interest on the part of the players. (19)
- 36 Somehow decrease the time. (18) Perhaps only writing the

assessment results once ie. only on the report and not on the previous sheets (only the assessment part.) (17)

- 38 Perhaps put the assessments in order of priorities. (15) It would make the game more challenging.

\*\*\*\*\*

(FROM QUESTION 20)

- 13 [a video could be added at the end of each game to visualize more what could be done by OT. (22)]
- 26 [It would be good idea to have slides after the game to show how the treatment procedure is in real situation. (22)]
- 33 [The information we learned in the game could have been presented first in a video though, since we didn't learn it in any classes. (23)]

Table 3j: outlines the number of subjects that responded yes or no to question 19.

SUBJECT	YES	NO
10	x	
11	x	
12	-	-
13		x
15	x	
16	x	
17	-	-
18	-	-
19	x	
20	-	-
22	x	
23	x	
24	x	
25	-	-
26		x
28	-	-
29	-	-
30	x	
31	-	-
32	-	-
33	x	
35	x	
36	x	
37	-	-
38	x	
TOTAL	13	2
%	52	8

TABLE 3k: outlines the different categories and their content for question 19. As well as the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	1(4%)	Helped decide what assessments to perform
2	0	Telephone question not answered in the game situation.
3	3(12%)	Some but not all.
4	1(4%)	Not sure.
5	2(8%)	Posttest easier to answer than pretest.
6	4(16%)	Reliability question (7,8) not answered in game.
7	1(4%)	Posttest did not test treatment plans.

TABLE 31: provides a report of all the comments made for question 19 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment.

19) Did the posttest measure the material that was presented in the game?

SUB	COMMENT
12	I'm not sure, like I learn a lot, but I was not so sure of my answers. (4)
17	More or less (3) - but the posttest was definitely easier to write than the pretest. (5)
18	I find when you ask for unreliable material, the game didn't test that. (It tested more selecting the good material). (6)
20	Not the question about reliability of information from patients. (6)
23	Yes. I felt more comfortable with the questions. (5)
25	Partially. (3)
29	In terms of assessments it did, (1) but not in terms of treatment plans. (7)
31	Kind of- (3) we really didn't use that many phonecalls during the game though.
32	Yes, except #7 and #8. I don't feel the game addressed those questions or helped us develop a way to answer them properly. (6)
37	Quite so I found the last two questions ambiguous said OT receive wrong info: was it possibility of receiving wrong info. (6)

Table 3m: outlines the number of subjects that responded yes or no to question 20.

SUBJECT	YES	NO
10		x
11		x
12		x
13		x
15		x
16		x
17		x
18		x
19		x
20		x
22		x
23		x
24		x
25		x
26		x
28		x
29	x	
30		x
31		x
32		x
33		x
35		x
36		x
37		x
38		x
TOTAL	1	24
%	4	96

TABLE 3n: outlines the different categories and their content for question 20. Numbered categories represent negative comments, and alphabetized categories represent positive comments. This table includes the number and percentage of subjects who made comments classified under a particular category. Please note a subject can make more than one comment.

CAT	#(%)	CONTENT
1	0	Just a demonstration or observation.
2	0	Should not replace practical experience.
3	1(4%)	simulation/video of patient interview more helpful
A	1(4%)	encourages independent thinking
B	4(16%)	players active in the learning process
C	2(8%)	enables one to apply theory
D	1(4%)	requires one to pay attention and learn
E	2(8%)	simulates reality
F	1(4%)	learn through sharing
G	1(4%)	excellent way to present material
H	1(4%)	makes one realize how much have learned in two years.
I	2(8%)	learn through play
J	5(20%)	medium fun
K	3(12%)	game motivating
L	4(16%)	tired of video/lecture
M	3(12%)	novel teaching tool



TABLE 30: provides a report of all the comments made for question 20 as well as who made them. In addition each comment has been coded, to provide a count of the different types of comments. Therefore, those with the same code contain similar content. The code is indicated by a number in brackets after the comment. Please note that some comments addressed questions 18 so although they are reported here they are coded under question 18. These comments are in square brackets [ ].

20) Would you prefer another medium (eg. lecture, video) to acquire the knowledge and skills presented in the game? Please explain.

SUB COMMENT

- 11 I think that play is the best medium to learn (incorporates fun). (I)
- 12 I really enjoy the medium. (J)
- 13 No, but [a video could be added at the end of each game to visualize more what could be done by OT.]
- 15 No because that way it is motivating (K) and we learn a lot of things by sharing our comments. (F)
- 17 No, the game is great!
- 18 No, a game is the more active media I find. (B)
- 19 No because a game it's more motivating (K), more fun. (J) It really fun because you learn in playing and it's rare (I). We have always lecture and video (L), and this game change the routine. (M)
- 20 No a game is fun. (J)
- 22 Maybe a video would be nice but the game was good- even better than a video would probably.
- 23 No; in three sessions I learned more than in two years OT; well I think it's more that I realized that we had learned a lot. (H)
- 24 No, a game is different and gives student an opportunity to be constructive. (M,C)
- 25 No I think the game enables us to practice or apply the theory. (C)
- 26 [It would be good idea to have slides after the game to show how the treatment procedure is in real situation.]
- 28 No, I find it was OK.
- 29 I think the board game was not sufficient due to the fact that we do not actually get to meet or see the patient therefore perhaps a

simulation of a patient's interview and assessment or video would be helpful. (3)

- 30 No, this game allows you to participate in your learning and to find you're looking for. (B) A lecture/video just presents the info to you and you don't have an active part in learning as you do in the game.
- 31 No-this made us participate (B)-and yet it was fun (J) while we were doing so we've been lectured to and video'ed to enough! (L)
- 32 No we get enough lectures and videos! (L) The game is an excellent way of getting across the material (G) in the game and is more true to life in a hospital (E) than a lecture/video. It made us think. (A)
- 33 No- the game required you to pay attention and learn. (D) It was also fun (J) and therefore motivating. (K) [The information we learned in the game could have been presented first in a video though, since we didn't learn it in any classes.]
- 35 I feel that actively participating in the game is the most beneficial way. (B) Just passively acquiring this information is not a sufficient method to acquire the information.
- 36 No, this seemed much more practical, almost like experiencing the situations. (E)
- 38 No I think the game was an excellent media. Partly because its new and different (M) we always have lecture and video. (L)

4. QUESTION 21: has two parts, the answer to the second part is dependent on the subject answering yes. Below is the question.

21) With the appropriate modifications, can you see this game being used to help prepare OT students for work in other areas?

\_\_\_\_\_ yes \_\_\_\_\_ no

If you answered yes tick off which areas. You can tick off more than one.

\_\_\_ paediatrics \_\_\_ geriatrics \_\_\_ psychiatry \_\_\_ community work

\_\_\_ other, please specify \_\_\_\_\_

SECTION 4a: All subjects (100%) answered YES to question 21.

Table 4: outlines those areas subjects felt the game could be used to help prepare OT students to work in.

SUBJECT	AREAS				
	PAEDS	GERIAT	PSYCH	COMM	OTHER
10	X	X	X	X	
11	X	X	X		
12		X	X	X	
13	X	X	X	X	
15	X	X	X	X	
16	X	X			
17	X	X	X	X	x (any area)
18	X	X			
19			X		
20	X	X	X	X	
22	X	X	X	X	
23	X	X	X	X	
24	X	X		X	
25	X	X	X	X	
26	X	X		X	
28	X	X	X	X	
29	X	X			
30	X	X	X	X	
31	X	X	X		
32	X	X	X		
33	X	X	X	X	x (any area of OT)
35	X	X	X		
36	X	X	X	X	
37	X		X		
38					
TOTAL	22	22	19	15	2
%	88	88	76	60	8

## GAME IN CONTEXT OF PROGRAM

5. McGILL PROGRAM: The following questions 1 through 9 ask the subjects to rate the McGill OT program as being strong, weak, or average with respect to certain characteristics. This set of questions was asked twice. Before the start of the gaming sessions during the pretest and at the conclusion of the gaming sessions during as part of the attitude questionnaire. Below is a list of the questions and how they were rated.

Directions: Indicate whether the following are strong, weak, or average characteristics of the McGill OT program.

Characteristics	strong	weak	average
1. theoretical basis	_____	_____	_____
2. preparation for clinical work	_____	_____	_____
3. opportunity to study a variety of case histories	_____	_____	_____
4. opportunity to plan a variety of treatment programs	_____	_____	_____
5. opportunity to write OT reports	_____	_____	_____
6. opportunity to analyse information	_____	_____	_____
7. opportunity for self-evaluation	_____	_____	_____
8. opportunity to receive peer evaluation	_____	_____	_____
RATING	1	3	2

TABLE 5a: outlines the answers given each subject for these questions during the pretest. Included is the average score each subject gave for all the questions as well as the average score given by the subjects for each question.

Before Gaming Sessions:

SUBJECT	QUESTIONS								MEAN
	1	2	3	4	5	6	7	8	
10	1	3	3	3	3	3	3	3	2.8
11	1	3	2	3	3	2	3	3	2.5
12	2	1	3	2	3	1	3	3	2.3
13	1	3	3	3	3	3	3	3	2.8
15	1	3	1	3	3	1	1	3	2.0
16	1	2	2	2	3	2	2	1	1.9
17	1	2	2	2	3	1	2	2	1.9
18	1	2	3	3	3	2	3	3	2.5
19	1	3	3	3	3	1	3	3	2.5
20	1	3	2	2	1	1	3	3	2.0
22	1	3	3	3	2	2	3	3	2.5
23	1	3	2	3	3	3	2	3	2.5
24	1	3	2	3	3	2	3	3	2.5
25	1	3	3	2	3	2	3	3	2.5
26	1	3	2	3	3	3	2	2	2.4
28	1	2	2	2	3	2	2	2	2.0
29	1	1	2	2	2	2	3	3	2.0
30	1	2	2	2	3	2	3	3	2.3

31	1	2	2	2	3	2	3	3	2.3
32	1	2	3	3	3	2	3	3	2.5
33	1	2	2	3	3	2	3	3	2.4
35	1	3	2	1	3	1	3	2	2.0
36	1	2	3	3	3	1	2	2	2.1
37	1	2	3	3	3	2	3	3	2.5
38	1	2	2	1	2	1	1	2	1.5
MEAN	1.0	2.4	2.4	2.5	2.8	1.8	2.6	2.7	2.3
SD	0.2	0.6	0.6	0.7	0.5	0.7	0.6	0.6	

TABLE 5b: outlines the answers given each subject for these questions during the attitude questionnaire. Included is the average score each subject gave for all the questions as well as the average score given by the subjects for each question.

After Gaming Sessions:

SUBJECT	QUESTIONS								MEAN
	1	2	3	4	5	6	7	8	
10	1	3	3	3	3	3	3	3	2.8
11	1	3	2	3	3	2	3	3	2.5
12	1	3	1	3	3	1	3	3	2.3
13	1	3	3	3	3	3	3	3	2.8
15	1	3	3	3	3	3	1	3	2.5
16	1	2	1	1	2	2	2	2	1.6
17	1	3	2	2	3	2	3	2	2.3
18	1	3	2	3	3	2	3	3	2.5
19	2	1	1	1	1	1	1	2	1.3
20	1	3	2	3	3	1	2	3	2.3
22	1	3	3	3	3	2	3	3	2.6
23	1	2	1	3	3	3	2	3	2.3
24	1	3	2	2	3	3	3	3	2.5
25	2	3	3	2	3	2	3	2	2.5
26	2	3	3	3	3	2	3	3	2.8
28	1	3	3	3	3	2	2	2	2.4
29	1	3	2	3	3	3	3	3	2.6
30	1	2	2	2	3	2	3	3	2.3
31	1	3	2	2	3	3	3	3	2.5
32	1	3	3	3	3	2	3	3	2.6
33	1	3	3	3	3	3	3	3	2.8
35	1	3	2	2	2	2	2	3	2.1
36	1	3	2	2	2	2	3	2	2.1
37	1	2	3	3	3	3	3	3	2.6
38	1	2	2	2	2	1	1	3	1.8
MEAN	1.1	2.7	2.2	2.5	2.8	2.2	2.6	2.8	2.4
SD	0.3	0.5	0.7	0.7	0.5	0.7	0.7	0.4	

6. GAME CHARACTERISTICS: Questions 9 through 16 are exactly the same as questions 1 through 8; except that the subject is asked to rate the characteristics of the game rather than the McGill OT program.

Directions: Indicate whether the following are strong, weak, or average characteristics of the simulation-game.

Characteristics	strong	weak	average
9. theoretical basis	_____	_____	_____
10. preparation for clinical work	_____	_____	_____
11. opportunity to study a variety of case histories	_____	_____	_____
12. opportunity to plan a variety of treatment programs	_____	_____	_____
13. opportunity to write OT reports	_____	_____	_____
14. opportunity to analyse information	_____	_____	_____
15. opportunity for self-evaluation	_____	_____	_____
16. opportunity to receive peer evaluation	_____	_____	_____
	RATING		
	1	3	2

SUBJECT	QUESTIONS								MEAN
	9	10	11	12	13	14	15	16	
10	2	1	1	1	1	1	1	1	1.1
11	-	1	1	1	1	2	2	2	1.4
12	1	1	1	1	1	1	3	3	1.5
13	2	1	1	1	1	1	1	1	1.1
15	1	1	1	1	1	1	1	1	1.0
16	2	1	1	1	1	1	1	1	1.1
17	2	1	1	1	1	2	2	2	1.5
18	3	2	1	1	1	2	2	2	1.8
19	2	1	1	1	1	1	1	2	1.3
20	2	1	1	1	1	1	1	2	1.3
22	2	1	1	1	1	1	1	1	1.1
23	2	1	1	1	1	1	1	1	1.1
24	1	1	2	1	1	1	1	1	1.1
25	2	2	1	1	1	2	2	2	1.6
26	1	1	2	1	1	1	1	1	1.1
28	2	1	1	1	1	1	1	1	1.1
29	3	1	1	1	1	2	3	2	1.8
30	2	1	1	1	1	1	1	1	1.1
31	2	1	1	1	1	1	1	1	1.1
32	2	2	1	1	1	2	2	3	1.8
33	2	1	1	1	1	1	1	2	1.3
35	2	1	1	1	1	2	2	2	1.5
36	2	1	1	1	1	1	1	2	1.3
37	2	1	1	1	1	2	2	2	1.5
38	1	1	1	1	1	1	2	2	1.3
MEAN	1.9	1.1	1.1	1.0	1.0	1.3	1.5	1.6	1.3
SD	0.5	0.3	0.3	0.0	0.0	0.5	0.7	0.6	

7. GAME AT MCGILL: Question 17 has three parts. First the subject is asked to answer whether or not simulation-game should be incorporated into the McGill program. If the subject answers yes then they are asked to answer part a) in which they tick off during which years and under what conditions the simulation-game should be used. If they answer no then they are asked to proceed to part b) and provide an explanation for their answer. Below is question 17.

17. Do you think that the simulation-game should be incorporated into the McGill OT program?

\_\_\_\_\_ yes (see a below)

\_\_\_\_\_ no (see b below)

a) If you answered yes to question 17, check off during which year(s) in an OT student's education you feel that the simulation-game should be used, and how in each year it should be used. You may check off more than one category.

eg. during first year in class as a group;

Years	In class		Outside of class	
	Group	Individual	Group	Individual
first	_____	_____	_____	_____
second	_____	_____	_____	_____
third	_____	_____	_____	_____
intern	N/A	N/A	_____	_____

b) If you answered no to question 17, please explain why.

SECTION 7: ALL (100%) subjects responded YES to question 17.

TABLE 7b: outlines how each subject indicated the simulation-game should be used in the McGill OT program. Please note that the number 4 was used instead of the term intern.

SUBJECT	IN CLASS						OUTSIDE CLASS							
	GROUP			INDIV			GROUP				INDIV			
	1	2	3	1	2	3	1	2	3	4	1	2	3	4
10		x						x						
11		x	x											
12								x						
13		x	x					x					x	x
15	x	x												
16	x	x				x	x	x	x					
17	x	x							x					
18	x	x										x	x	x
19		x												
20								x	x				x	
22	x				x									
23	x	x				x								x
24		x				x			x					
25		x	x											
26		x						x						
28	x	x			x	x	x	x			x	x	x	
29	x	x			x								x	
30	x	x	x			x	x	x	x	x			x	x
31		x	x											
32		x	x									x		x
33	x	x	x				x	x	x	x				
35		x	x											
36		x							x					
37		x			x				x	x			x	x
38	x	x									x	x		
TOTAL	11	22	08	00	04	05	04	09	08	03	02	04	07	06
%	44	88	32	00	16	20	16	36	32	12	08	16	28	24

## Biographical Data

8. BIOGRAPHICAL DATA: Questions 1 through 5 solicit biographical data on each subject. Below are the questions asked, how they were scored, and the percentage of respondents falling into the various categories.

Directions: Please tick off the appropriate answer.

1. SEX: 1 male 2 female  
(4%) (96%)

2. MOTHER TONGUE: 1 English 2 French 3 Other  
(44%) (56%)

3. UNDERGRADUATE YEAR: 2 2nd year 3 3rd year  
(100%)

4. PREVIOUS EDUCATION : answer only those questions which are applicable.

a) Completed High School outside Quebec 1 yes 2 no  
(20%) (72%)

b) Attended CEGEP 1 yes 2 no  
(88%) (12%)

c) Completed a University degree, other than OT 1 yes 2 no  
(08%) (92%)

Name of degree \_\_\_\_\_ Discipline \_\_\_\_\_

d) Completed part of a University degree other than OT. 1 yes 2 no  
Name of discipline \_\_\_\_\_ (28%) (64%)

e) Language of education in:

High School 1 English 2 French 4 Both 3 Other  
(28%) (40%) (32%) (00%)

Cegep 1 English 2 French 4 Both 3 Other  
(24%) (48%) (16%) (00%)

University (Answer only if you have studied in a program other than OT)

1 English 2 French 4 Both 3 Other  
(16%) (16%) (00%) (00%)

5. CLINICAL PLACEMENTS:

Number of adult phys med placements 0, 1, 2, 3 etc.

0 - 44%

1 - 56%



TABLE 8a: outlines the biographical information for each subject.

SUB	SEX	MT	YEAR	DEMOGRAPHIC INFORMATION								PLACE	
				EDUC		DEGREE		LANG		UNIV	P	MED	
				HS	CEG	C	P	HS	CEG				
10	2	1	2	2	1	2	2	1	1	-	1		
11	1	2	2	2	1	2	2	2	2	-	1		
12	2	2	2	1	1	2	2	2	2	-	0		
13	2	2	2	-	1	2	2	4	4	-	0		
15	2	2	2	2	1	2	2	2	2	-	1		
16	2	2	2	2	1	2	2	4	4	-	0		
17	2	2	2	2	1	2	2	4	1	-	0		
18	2	2	2	2	1	2	2	2	2	-	1		
19	2	2	2	1	1	2	*1	2	2	2	1		
20	2	2	2	2	1	2	*1	2	2	1	0		
22	2	1	2	1	1	2	2	1	2	-	1		
23	2	2	2	2	1	2	*1	2	2	2	0		
24	2	2	2	2	1	2	*1	2	2	2	1		
25	2	1	2	2	1	2	*1	4	4	2	1		
26	2	2	2	2	1	2	2	2	2	-	1		
28	2	2	2	2	1	2	2	4	4	-	0		
29	2	1	2	2	1	2	2	2	2	-	1		
30	2	1	2	2	1	2	2	4	1	-	0		
31	2	1	2	1	2	2	*1	1	-	1	1		
32	2	1	2	-	1	2	2	1	1	-	1		
33	2	1	2	1	2	*1	-	1	-	1	1		
35	2	1	2	2	1	2	2	1	1	-	1		
36	2	1	2	2	2	2	*1	4	-	-	0		
37	2	2	2	2	1	2	2	4	2	-	0		
38	2	1	2	2	1	*1	-	1	1	1	0		

\* The name of the other degree for each subject is:

SUBJECT	DEGREE
19	LINGUISTIC CERTIFICATE
20	BIOLOGY
23	BIOLOGY
24	BIOLOGY
25	SPECIALIZED TEACHING
31	PSYCHOLOGY, SCIENCE
33	BSc BIOCHEMISTRY
36	GENERAL SCIENCE
38	BSc BIOLOGY