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ABSTRACT

The Formative Evaluation of a Retirement Simulation Game

The design, development and of a formative evaluation of a simulation game RetireWise is described. The simulation game was created to assist with retirement planning. It serves as both an icebreaker and as an advanced organizer to help participants determine what information they need to collect at a retirement seminar by employing a cooperative method. The study was conducted with 4 groups of participants at two companies. Pre-tests and post-tests were administered immediately before and directly after the simulation game. Two facilitators provided input as did organizers at two companies. Four financial planners and the Director of the Dobson Centre evaluated the simulation game. The results showed that the simulation game enabled the participants to take stock of how well prepared they were for retirement. In many cases, participants realized that they were not prepared and were in a better position as a result of the experience to know what information they needed to collect. The participants took ownership for planning their retirement and recommended the experience to family, friends and colleagues. Comments regarding the evaluation of the simulation game as well as suggestions for further research are discussed.

Acknowledgements

Table of Contents

Appendices

List of Figures

List of Tables

CHAPTER 1

Introduction

Retirement is no longer viewed as simply living out the few remaining years of your life. German Chancellor Otto Von Bismarck, while trying to design one of the first pension plans, assigned 70 as the age of retirement in 1879. Later German officials changed the age to 65. Life expectancy during that period of history was 45 years of age. With advancements made in the medical field, people now live longer and consequently, life in retirement has evolved somewhat since Bismarck's time. The current life expectancy is double what it was in the late 1800s (Dychtwald, 1989). Today retirees have many more options open to them and some people retire and go onto a third career, or some use it to extend their leisure time. The transition is more involved and impacts on their lives for a longer period of time than a few generations ago. Retirement is one of the most difficult transitions according to a 1993 survey from Roper Starch Worldwide in New York (Mergenhagen, 1994). The intention of the retirement simulation game described here is to provide a smoother transition.

Problem Context

After organizing retirement seminars for one organization over a 7-year period, it became apparent to the author that many participants in the seminars played a passive role in the retirement planning process. They did not know what retirement information was applicable to them. Also, they did not know what questions to pose to the speakers and they did not always recognize whether the information available and/or presented was applicable to them.

The seminars were not designed to address these issues. Their primary focus was on the benefit package provided by the organization, which included items such as: pension plans, financial investments, and health care coverage. The following areas were excluded: changes in household budgets, lifestyle, relationships, and leisure activities. The author decided upon a pre-instructional, retirement seminar activity in order to address all these issues, as well as to gain participants' attention, provide relevance to their situation, develop their confidence to ask relevant questions and gain satisfaction from the knowledge that they have gained the necessary information to plan an ideal retirement. This pre-instructional activity is the RetireWise simulation game.

Target Audience

The target audience for the simulation game is men and women aged 45 years of age and over, who live in Canada. They are part of the largest group of potential retirees in history (i.e. the baby boomer generation, persons born between the years 1946 and 1964) (Dychtwald 1989).

The Simulation Game

The simulation game is played on a board 17" long x 22" wide. Three or four participants follow a pathway of stones around the board, based on the roll of the die. Each stone corresponds to a topic. When participants land on a stone, they pick up the matching card that has a numbered question and read the question out loud. The objective is to work cooperatively with each other in order to select appropriate questions for which each participant needs answers with regard to retirement planning.

CHAPTER 2

Rationale and Process Overview

The simulation game was developed with reference to several Learning, Gaming and Simulation theories proposed within the curriculum of Educational Technology. Such theories provided the technical skills necessary to create the game, while the learning theories provided insight as to how people learn.

In particular, the Gaming and Simulation course taught the values, the benefits and the special features of using simulations and games in training situations. Here, examples given of railway safety, how to maximize a food budget by buying the most nutritious food with each dollar and finally preparing visitors for a visit to an ecology museum. These examples pointed out that a game or simulation could be used as part of a tool box of teaching methods for any subject. The breadth and depth depends on the designer's creativity.

Simulations are recommended when it is too expensive or dangerous for the participant to learn a new skill in the real life situation. In such situations, participants working with dangerous tools, such as high temperature furnaces, need to learn how the new equipment functions under realistic conditions. An effective simulation must recreate any incidents or occurrences that participants may encounter in a real life environment.

Practice is an important element in the learning process. For example, medical students may practice surgical techniques using computer-based training which simulates a real operation, where life-threatening problems are built-in to the design. Pilots using flight simulators is another example of this type

of learning. Thus simulations eliminate "real world's" safety issues allowing the student to develop self-confidence with repeat procedures at minimal expense. Malpractice suits or loss of reputation need not be an issue or concern for the participants, since the simulation method permits them to learn without risk to themselves, their peers, the equipment or the environment. Without the employment of a simulation, errors made could have a detrimental impact on all concerned, not to mention costly.

An additional advantage of utilizing a simulation as a teaching tool is repeatability within an environment which replicates reality for both the learner and instructor. The first-time user, such as a pilot, gets a realistic view of the coordination of such elements as the machinery, the flight simulator and various situations.

The simulation may be designed to allow the instructor to accurately gage the participants' learning progress. After the learning process, testing is necessary to ensure the achievement of a pre-determined level of knowledge. Such testing could be built into the design of the simulation and could also record many factors, including the most common-made mistakes. This information could be used to move onto a higher level of testing for the student, if one of the aims of the design is to continually bring the learners to a new and higher level of achievement.

Games may be used with adults or children. An existing game may be easily adapted to specific needs and requirements. In some circumstance an ordinary subject which would be too dry in a lecture style, could be turned into a

fun learning experience. Games may be constructed for win-win or win-lose situations.

With the aforementioned in mind, RetireWise was designed to prepare participants for retirement seminars. Simply providing the information itself is a repeat method which has proven unsuccessful. Questions are recommended as less threatening to participants and provide the first step before receiving information. The RetireWise simulation game was created using questions as the main means of communication since the author's experience of participants in retirement seminars indicated that they could neither recognize information presented to them nor pose questions to the presenters. The use of questions in RetireWise is thus considered the best means of allowing participants to take stock of their current situation in preparation for a retirement seminar. One advantage of using questions is that answers need not be given publicly. Financial matters concerning retirement are very private and participants are not willing to share such information.

An additional advantage to the utilization of questions as opposed to stated facts is that the author does not need to be concerned with providing the latest information on the eight topics. The presenters at the various seminars would be well informed and it is more appropriate that information on legal and financial matters should be provided by professionals in those fields.

Having selected the method, facts on retirement were utilized in order to create the questions. This information was gleaned from the Internet, newspapers, television and radio.

Simulations and Learning Theory

According to Harri-Austein and Thomas (1991), individuals need to be
more self-organized and responsible for their own learning. Without this
involvement others will make the decisions on their behalf. This Self-Organized
Learning (SOL) requires an awareness of personal learning skills, which is
accomplished through reviewing personal experiences. Therefore "each new
event becomes an opportunity for learning, for updating skills and enhancing
competence." (Harri-Austein and Thomas, 1991 p.3).   In this way, individuals
may select the direction of learning, the depth, the quality and the quantity of the
learning material?

A simulation can serve as a pre-instructional activity that: 1) supplies
motivation, 2) highlights misconceptions that would retard learning, 3) supplies
an organizing cognitive structure for receiving new material, 4) equips the
participants with a concrete example of complex abstract concepts (Brant,
Hooper, & Sugrue, 1991). The simulation would serve as an initial feature of the
broader process needed to prepare for retirement. It could serve as an advance
organizer, defined by Mayer and Bromage (1980) as a stimulus that is presented
prior to learning that contains a system for logically organizing the incoming
information unified structure. The following schematic drawing (See Figure 1)
depicts this simulation as the first step in the preparation process. This
framework utilizes questions and assists users in the organization of thoughts.
Thus, the use of questions initiates research for answers one by one. While a list
of questions is researched at a retirement seminar, even more questions will be

initiated as a result. The participant could seek answers through other means such as: individual counseling from various financial institutions, or the availability of registered financial planners, or by searching through books, media and the Internet. Use of these additional resources may generate more questions and the participant would have to decide whether or not to continue with research. If yes, then he/she will continue with more investigative questions. If no, then he/she may be ready to either make a decision about retirement or to put off such decision making to another time.

A simulation according to Thiagarajan (1996) is an instructional technique based on two important premises: 1. People learn better through active experience than passive-listening, and 2. People learn better through interacting with one another than working alone (cited in (Seay, 1997).

People learn better through active experience than passive listening and this premise can be best explained by introducing the theories of Jerome Bruner (1951) and David Ausubel (1963).

Jerome Bruner (1951) was interested in an active method of learning. He referred to it as "meaningful learning and the discovery approach" (cited in Biehler, Snowman, D'Amico & Schmid,1999). Bruner felt that participants need to know what they will learn. Also, they need to understand the framework in which the body of knowledge is embedded, rather than learning by rote without a sense of the whole. They need to get a sense of how one idea relates to the next and how these individual ideas fit into the framework or structure. There are various ways to demonstrate specific ideas. Some can be expressed as an

equation, a formula or a verbal statement, while others may be represented by a diagram or picture.

Ausubel (1963) was interested in meaningful reception learning. Meaningful reception learning occurs when new material is integrated into existing knowledge (Biehler et al, 1999). This is the ideal way to learn because the new information is attached to what the participants already know.

A less effective teaching method provides participants with new material and they are instructed to learn it, usually by rote, as it is presented. In this way participants may not be able to identify with the new material. It may be that the material is not associated with anything that is already known to the participants.

Discovery learning allows a more hands on approach. The instruction includes a practical segment that provides an opportunity for participants to understand the concepts through a pragmatic application. Participants learn how to discover what they do not know and they can anchor the new material to their existing knowledge (Aronson & Patnoe, 1997).

Constructivism is a learning theory that may also be considered a philosophy applied toward learning (Lebow, 1993). Individuals build on what they know by adding a new level of information to suit their own personalized needs. Just as Kaufman emphasizes the end product with users free to select their own path, constructivism also supports this way of thinking. Each person has their own level of knowledge, combined with specific levels of ability to learn new material.

9

The individuals personalize learning and the new material is anchored to the knowledge of each. James Hand (1984) proposes that the more ways the new material is presented the better the learning and the recall will be (cited in Jonassen, 1984).

Once the research has been conducted, each unanswered question may serve as a new level of information. Individuals may choose how much more they want to learn about preparing for retirement.

Using the simulation game, each participant has conducted his/her own needs assessment and has determined his or her own knowledge. Then, the participants make the decision as to whether to conduct further research. If such a decision is made then answers are sought out to all the questions or only a few. In this way, they are applying a constructivist approach by building upon what they know. Thus, each additional question answered becomes a building block that is anchored to their existing knowledge. Each participant will interpret the meaning of a particular issue according to his/her own understanding and situation. In this way they are in control of their own personalized learning.

Retirement Planning Framework
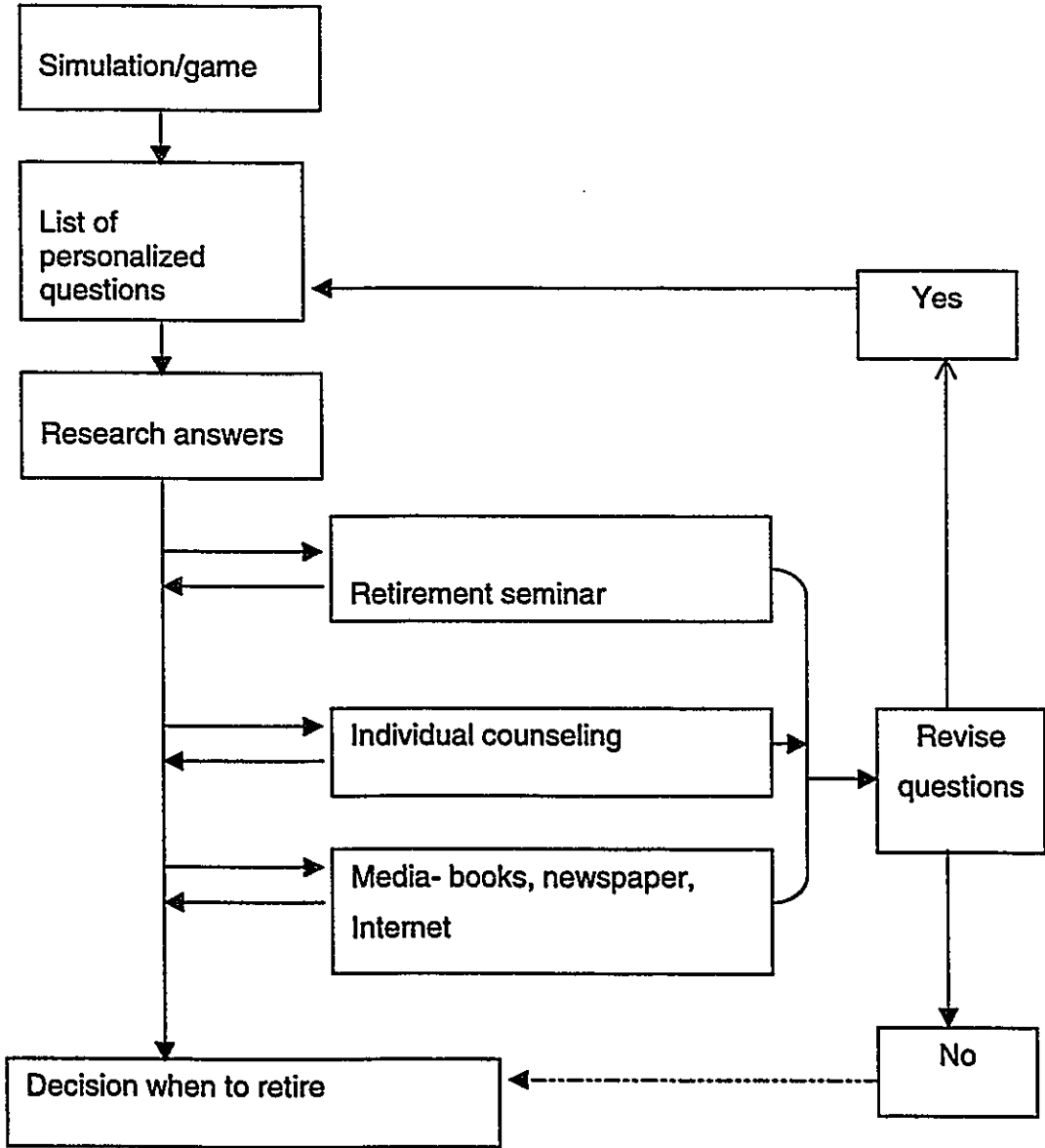
Figure 2. Depicts the retirement planning pathway

Simulations and Instructional Design

Instructional Designers using the constructivist approach are considered to be more interested in the process of learning than the end product (Driscoll, 1994). In order for learning to be successful, specific conditions should be present that do not have a hierarchical order. The recommended conditions are 1. complex learning environment, 2. social negotiation, 3. juxtaposed instructional content, 4. nurture reflexivity and 5. student-centered learning (Driscoll, 1994).

A complex learning environment refers to allowing participants to deal with multifaceted issues or tasks instead of simplifying tasks. Perkins (1991a) suggests that "construction kits" and "phenomenaria" will enable participants to grasp abstract concepts. One example of phenomenaria are simulation games (cited in Driscoll, 1994).

Social negotiation is a critical feature where knowledge is shared and synergy can occur. This collaboration enhances the learning environment and enables all participants to view the situation with new insights and answers. These new insights might not have occurred individually, rather the collective knowledge of the groups allows this to happen (Driscoll, 1994).

Juxtapostion allows the participants to view the new material from different vantage points. If only one view is used then the participants may not grasp the full complexity of the situation. Spiro, Coulson, Feltovich, Anderson (1988), state that "revisiting the same material, at different times in rearranged contexts, for different purposes, and from different conceptual perspectives is essential for attaining the goals of advanced knowledge acquisition" (Driscoll, 1994).

A nurtured reflexivity encourages development of cognitive strategies, thus making participants aware of their own learning or thinking processes. When reflexivity is present, participants develop an attitude that heightens their awareness of how to structure meaning for themselves. Once the awareness is present then the ability to create and investigate new issues and demystify contexts follows. In this way the participants take ownership and are committed to their own learning (Driscoll, 1994).

Student-centred Learning is where the participants decide what, when, and how to learn by being actively involved. Not all participants are interested or able to make these decisions. The instructional material should be designed to accommodate these needs and to assist participants to overcome their inability and to be in control of their own learning (Driscoll, 1994).

When these learning conditions are applied to the simulation game, Table 1 depicts how the simulation game assists the participants in planning for retirement. All the conditions are present in the simulation.

Learning Process	Simulation
1. Complex learning environment	Posed questions that could be dealt with daily when retired.
2. Social negotiation	1.Collaborative learning-hearing questions from three other players 2. Post-simulation discussion
3. Juxtaposed instructional content	Retirement viewed from 8 different topics or 8 different angles
4. Nurture reflexivity	Empower participants to recognize and develop their own metacognition.
5. Student-centered learning	1. Students self-direct their path on the board via the fork in the road, the 2, 3, 4,stones-abreast , free topic, new topic. 2. Students self-select their questions to research.

Table 1. Depiction of learning conditions as applied to the simulation game.

After the simulation, the participant has many topics to pursue, since the scope of the simulation is broader than just financial and medical information. The experience of simulating retirement expands the participant's horizon by introducing several new topics, supporting Bruner's idea that the more important an issue is to the participants, the sooner it should be introduced in the learning (Gagné, 1987). Some individuals would concentrate their research efforts on financial matters, leaving the lifestyle issues until they have retired, only to then discover that they are not well prepared. Potential retirees are the only ones who can decide what information is important to them (Harri-Augstein and Thomas, 1991). Tessmer (1990) attested to the need for layering new material in instructional design. He felt that the information should be provided in segments, rather than all at once. In this way, participants could digest and assimilate the information better. With the simulation, participants could research one topic at a time until all the relevant questions are answered or alternatively select research questions from across the various topics.

Cooperative Learning and its Application to the Simulation

Cooperative learning assists participants to learn from each other by helping one another to achieve shared goals (Abrami, Chambers, Poulsen, De Simone, D'Apollonia, & Howden, 1995). When more than one participant experiences a situation, it opens up the possibilities for discussion.

Johnson and Johnson (1991) refer to a cooperative learning program that they have developed as Learning Together. This program has 4 components: 1. Face to Face, 2. Positive Interdependence, 3. Individual accountability, and 4.

14

The development of interpersonal/group skills. (cited in Aronson and Patnoe, 1997).

Face to face involves a verbal and non-verbal interaction among the participants. Positive interdependence occurs when each person does his/her share to complete a task. Individual accountability refers to the accountability of each participant for his/ her work, together with the reception of feedback from the group. Interpersonal and small group skills are needed to develop familiarity and trust among members of the group if each person is to communicate effectively (cited in Aronson and Patnoe, 1997).

"Cooperation implies verbal communication between and among participants. Such expression of thought does much to reveal gaps in participants' knowledge, which can be remedied by interaction with cooperative partners" (Clement, 1987 p.536). This cooperative method of learning is effective because participants are working together to learn (Abrami et al.1995).

In a cooperative exercise, individual rewards are positively linked. If one can do it, others can too. In the Jigsaw method the group works on a project together. In this case the participants are working on their own project but they all have the common trait of sorting questions needed to prepare for retirement. Each participant is able to learn a piece of information that can be applied to his/her own case. "A learning environment would be productive for learners if they are required to solve problems and if the environment helps to monitor the students and provide information when necessary" (Dijkstra, 1997 p. 4).

Participants test their understanding, against what others indicate they know, by the type of sorting that is done for each question. The questions presented to them have to be sorted into three piles: 1) questions *that need research* 2) *questions that do not* and 3) questions that are *not applicable*. While experiencing the simulation with three other people, they hear more questions read out loud. They will silently test their own knowledge against the others and can witness how others react to these questions. They will be surprised that some people are not concerned with issues that bother them, while others share their concerns. This helps participants to put the situation in perspective. Such a cooperative method exposes the participants to more information.

The simulation has presented the information as a pathway in both the schemata (Figure 1) shown to the participants during the induction and the game board itself. The presentation pathway reinforces the idea that they make choices about the questions that they choose.

CHAPTER 3

Design And Development

Description Of The Simulation Game

The simulation game (RetireWise) is divided into two parts: 1.board game and 2.discussion period. As shown in the schematic drawing (Figure 1), the circular journey is a process that is individual and also the introductory activity in retirement planning. No one person or institution can provide all the answers. Participants are prompted with the aid of the drawing, to deduce that if the information is not found in one place, such as a seminar, then it could be sought elsewhere. Attending a seminar would be only one of the many steps needed in the transition phase prior to retiring. Each individual would be better equipped to handle the transition into retirement with a framework in which to work. The decision to retire may not be made immediately and therefore it is represented in Figure 1 as a dotted line

Board game.

Participants sit in groups of four (See rules in Appendix I), and the one with the highest throw of the die goes first. The die is thrown again and the participant moves his/her piece the number of squares corresponding to the number on the die (See Figure 2 for game board). The participant picks up the card that matches the colored square. The questions must be read out loud and then placed in one of three piles on the place mat in front of the participant:

Questions to research, Questions taken care of and Not applicable. Once this is accomplished, the next person takes his/her turn and repeats the same process. When all four participants reach the finish line the game is over and a post simulation discussion takes place with the full group.

Discussion period.

The group stay at their seats and the facilitator talks to the group to explain what happens next. The participants prioritize four topics for discussion. These topics are: challenges, community, relationships and leisure. Topics concerning legal, financial, health and budget are not discussed as they are best left to the professionals to provide answers. It would not be advisable or ethical to suggest that this information could be gleaned from participating in the simulation.

When the group has decided on which topic to discuss first, then each person counts how many cards from that topic they have in their pile "Questions taken care of". The facilitator forms a volunteer panel of participants to answer questions from the group. The first 3-4 people who either have the most cards or are comfortable discussing the subject form the panel. The facilitator asks for some sample questions from the remaining members of the group. If the panel members cannot answer the question, then the facilitator asks for suggestions from the group. Brainstorming occurs with the group. Each question is discussed for 5 minutes, for a total of 60 minutes.

RetireWise and the Literature

The simulation game board also represents the process of making choices in life with its design as a pathway. The pathway presentation reinforces the idea that they make choices about the questions that they choose. Participants follow this pathway as they move along the board to the finish. This also reinforces the idea of selecting your own pathway to retirement. Participants start by following a common pathway, then after a while a fork in the road appears and requires each one to choose a direction. Later on, specific squares have "*new topic*" and *"free choice"* that again allows participants to make decisions for themselves. The number of squares in the pathway start to increase, first to two abreast then three and finally four. In this way a participant winds along the pathway selecting topics particularly relevant to them.

Through this interactive experience, participants learn from each other in a cooperative manner. Being together in small groups provides additional input without overwhelming anyone and maintains a more personal approach.

Even though the interaction during the simulation appears to be limited to reading the question out loud, much more really happens. Participants hear the questions others draw and the reaction to these questions, on the part of the other players, provides a learning experience through feedback. This feedback may take the form of body language such as facial expression, head movement, stiffness of the shoulders or fingers tapping the table. This happens during: the reading of the question, the pause while thinking or the final decision of where to place the card. Of course verbal comments should not be ignored as obvious feedback. Participants have a tendency to interact beyond what is required

during the simulation, for example, participants may tell each other why he/she has placed a card in a particular pile. A dialogue may result from a particular move.

Another aspect of the simulation process is the understanding of what characteristics are involved in a simulation game. Tansey (1969) describes a simulation process as having three characteristics: 1) a degree of competition, 2) a degree of structure and 3) degree of participation.

1) A degree of competition: Is there one winner or can everyone win? What type of competition is there? What do the participants have to do to finish the activity? Does there have to be a winner? 2) A degree of structure is the way the simulation is designed. What types of rules are used to run the simulation? 3) The degree of participation is to what extent the participants are actively involved in the process (Tansey, 1969).

Another useful framework is offered by Thiagarajan and Stolovitch (1978) indicating that a simulation game has five characteristics or components: 1) conflict; 2) constraints; 3) closure, 4) contrivance; 5) correspondence.

1) Conflict refers to a challenge that exists within the simulation game, for example there may be a competition to gain the highest score. 2) Constraints are the designated rules within the simulation game concerning how moves are made, etc. For example, the person with the highest score, when rolling the die, goes first. 3) Closure is how the simulation game ends, for example, some simulation games end with a winner or loser but others may end when a specific amount of time has passed. 4) Contrivance is the performance in the simulation

20

that does not affect real life. A person may pretend to make decisions as a retired person during the simulation, but he/she can return to work after is it over without any penalty. 5) Correspondence refers to some aspect of real life. The decisions made as a retired person correspond to the decisions they might make during the simulation.

The characteristics of a simulation as it relates to RetireWise are:

Conflict: There is no conflict among the participants. There may only be a conflict within the participant trying to sort the questions. The level of conflict between persons should be low.

Constraints: The rules of the simulation game are not very complex to understand or to follow.

Closure: The simulation ends when all the groups come to the end of the pathway on the board.

Contrivance and correspondence: The simulation game is life-like enough to allow the participants to experience a dry run at being retired. After the simulation game is over they can return to their previous status without penalty. In fact, they benefit from the experience of learning by pretending to be retired and then have the opportunity to plan for retirement.

Realism and playability. A simulation game should have a combination of realism and playability (Jackson, 1991). This section will discuss these two components.

The realism of a simulation is an overall effect of reality. Tansey (1969) outlines that a simulation model can be measured in the following manner: 1)

how truly representative it is of real life 2) how much of what is important in real life is included in the model, 3) how easy it is to understand and 4) how easily understood are the important issues modeled in the process.

The playability of a simulation is defined by the ease of learning the rules and components involved. Also, the simulation game should be attractive to learn, easily understood and followed (Jackson, 1991). The simulation should be snappy to play and most importantly it should be fun. If the simulation game is to be successfully used, the element of fun is far more important than ease of use. Simulations should prove to be a fun experience for most people. However, there are some people who do not relate well to games/simulations and do not enjoy the experience. Charles Petranek (1994) found that some students preferred a lecture format, with note taking, to participating in a simulation (Seay, 1997).

The simulation theory as it applies to RetireWise: The characteristic of realism is present in the simulation game RetireWise. Before participants start to throw the die, they are asked to answer the questions as a retired person. Pretending to be retired helps to add realism to their plans (Jackson, 1991). Many people cannot plan for their retirement because they cannot imagine what it is like to be retired. Experiencing retirement for an hour helps players to begin to understand, and they soon realize that as a person they will not change. In fact, it is their daily routine that will change, with an absence of certain types of activities and responsibilities, with less structure and more flexibility in their schedule.

The post simulation discussion covers what it felt like to be retired and whether everyone is ready for this change. As the simulation of retirement is only temporary, participants can seek answers to those questions/situations for which they have not made arrangements to date. Using Thiagarajan's and Stolovitch's (1978) components of a simulation, this is called contrivance.

They have an opportunity to change the situation. The simulation game allows individuals to begin to understand and prepare to deal with the real life problem of transition to retirement. It presents a simplified version of the problem by breaking the issues into individual questions (Forssén-Nyberg, Kutilainen, Luhtala,& Pahkala, 04/14/99 15:23;25). This is correspondence according to Thiagarajan's and Stolovitch's (1978) characteristics of a simulation.

Playability is increased in this simulation game because it does not have complicated rules or procedures. Participants move their piece along the board, with the roll of each die, and sort questions as posed to them. These rules are not complex, they are easy to understand and to follow. It is expected that participants would have experience playing a game with similar rules. The simulation game is kept light with the use of a game board that makes the activity similar to child's play. It also allows individuals to view their situation from different angles. (Shirts, 04/14/99 15:23;25). This is done by viewing retirement from 8 different topics: budget, financial, legal, health, leisure, community, challenges and relationships.

Objectives and desirable outcomes. The knowledge must develop and continue to change with the activities of the participants (Driscoll, 1994). The

learning must also take place within a context for it to be meaningful. The participants are pretending to be retired while they are sorting their questions. This life-like context serves several purposes: it helps them realize how prepared they are, and that the decisions made are really no different than the ones they make daily while working. They would see that there is less of a solid delineation between retirement and their lives up until now. Pretending to be retired would allow them to gain the experience while still being employed. Also, they are relieved to know that they still have time to complete appropriate arrangements not already initiated.

The simulation was designed given this context and given the literature on Constructivism. Several learning objectives or desirable outcomes have been set for the simulation (Mehren, and Lehman, 1991). In order for these to be achieved there are two performance objectives that need to be reached first. These objectives are: 1) that the participants will compile lists of meaningful questions by sorting through different issues and 2) that they will create and prioritize a 'to do list' of topics for research.

Once these are achieved they will be able to reach the objectives or the desirable outcomes.

Objective #1: Participants will realize that retirement planning is an individual endeavor and cannot be provided by any one person or institution.

Objective #2: Participants will become conscious of the information needed to retire, to verbalize concerns, to seek validation from others on what each person knows and does not know.

Objective #3: Participants will gain confidence that they do have knowledge and understanding of some aspects of retirement planning.

Needs Assessment

This simulation game provided an opportunity for the participants to conduct an assessment of their retirement planning needs. This also has an impact on the needs of the organization and on society. The baby-boomer group is an example of a group of individuals who will affect their organization with their behaviour, because of their sheer numbers. A group of organizations will impact on society collectively with their policies and practices. Society impacts on both the individual and the organization.

A needs assessment is a tool that is used to develop a plan (Kaufman and English, 1979). This plan is employed to define the gap between what one knows and what one needs to know (Kaufman and Herman, 1996).

There are several types of assessments. Kaufman and Thomas (1980) point out the advantages to emphasizing the end product rather than the process. Kaufman and Thomas (1980) further stresses that each person will have different desired outcomes with different levels of abilities to achieve them. By emphasizing the end product, the process is left up to the individual. There is no right or wrong way to achieve the desired end. Emphasis on the means is defined as the resources, methods or procedures (Kaufman and Herman, 1996) which disempower the participants. This would only increase their feelings of no control on the journey. If they keep their attention on the goal of reaching the

25

results, then they can be flexible in achieving it, as the situation requires. Should

the situation change, then they could adapt their approach in order to obtain their

goals. "Planning identifies where to go, it justifies why, and shows how we get

there. It provides the basic criteria for assessing if and when you have arrived at

your destination and calibrates your progress" (Kaufman and Herman, 1996 p.

12).

According to Kaufman, Rojas, and Mayer (1993), a needs assessment

should be conducted on three levels to represent the various stakeholders. The

three levels are 1) micro (individual), 2) macro (organizational) and 3) mega

(societal). If participants in a retirement seminar find the information that they

need, they will be better prepared to accept the benefit. According to Kaufman,

the possible interrelationships among the different types of needs should be

explored in order to include how they should be addressed. As seen in Figure 3

these needs are: 1.outcome, 2.output, 3.product, 4.process, and 5.input.

	Mega-level Outcomes	Macro-level Outputs	Micro-level Products	Processes	Inputs
What should be					
What is					

External
Needs Assessment

Internal
Needs Assessment
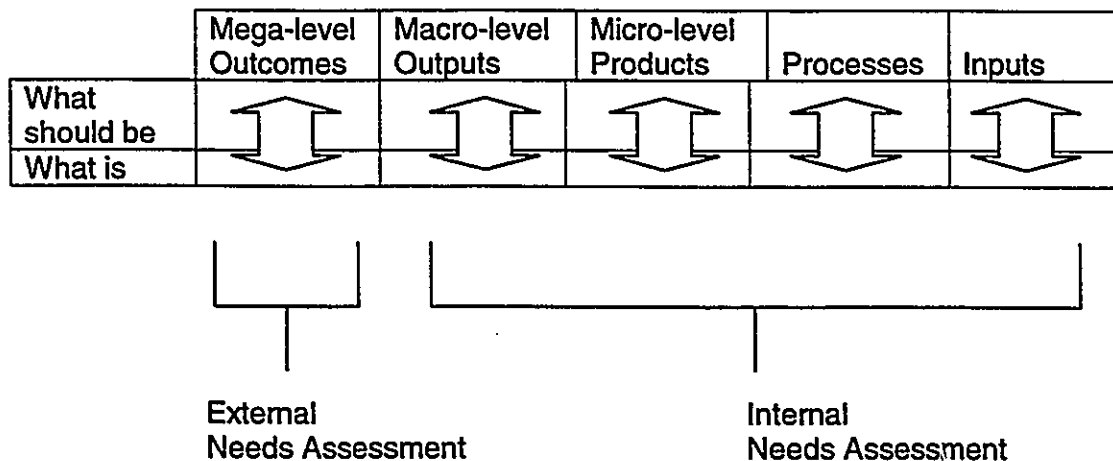
Figure 3. Kaufman's diagram outlining the different types of needs assessment

1. Outcome refers to the results of any intervention. 2. Output is the result of internal operations and efforts made regarding achievements and competencies within the organization. 3. The products could be the services that the organization has to offer. 4. The process is the "how-to-do-its" to create the products, etc. 5. Finally, the input is what the organization puts into the system in terms of money, time, resources, objectives outlined and existing problems.

Some of these needs only occur internally while others are external. The organizational efforts affect the input and the process, while the organizational results are the product and the output. These four occur internally while the outcome is external (Kaufman and English, 1979).

Stafford Beer's Viable Systems (1985) provides another view of micro-, macro- and mega-levels with a slightly different model (See Figure 4). This model is divided into 5 sub-systems. Each system has a different set of responsibilities. System 5 as boss is responsible for monitoring systems 3 and 4 and mediates between them. System 4 is oriented towards growth, change, new threats, new opportunities and toward changing things in the system in order to make it more efficient and more effective (Clemson, 1984). Adapting to this new change or threat is important to all the systems. System 3 is the command and audit channel with the internal and here and now or homeostasis. System 2 is the coordination channel among the operational elements in order to avoid oscillations and balance the loads. System 1 carries out the productive operations. For the purpose of this research the view used will be simplified and
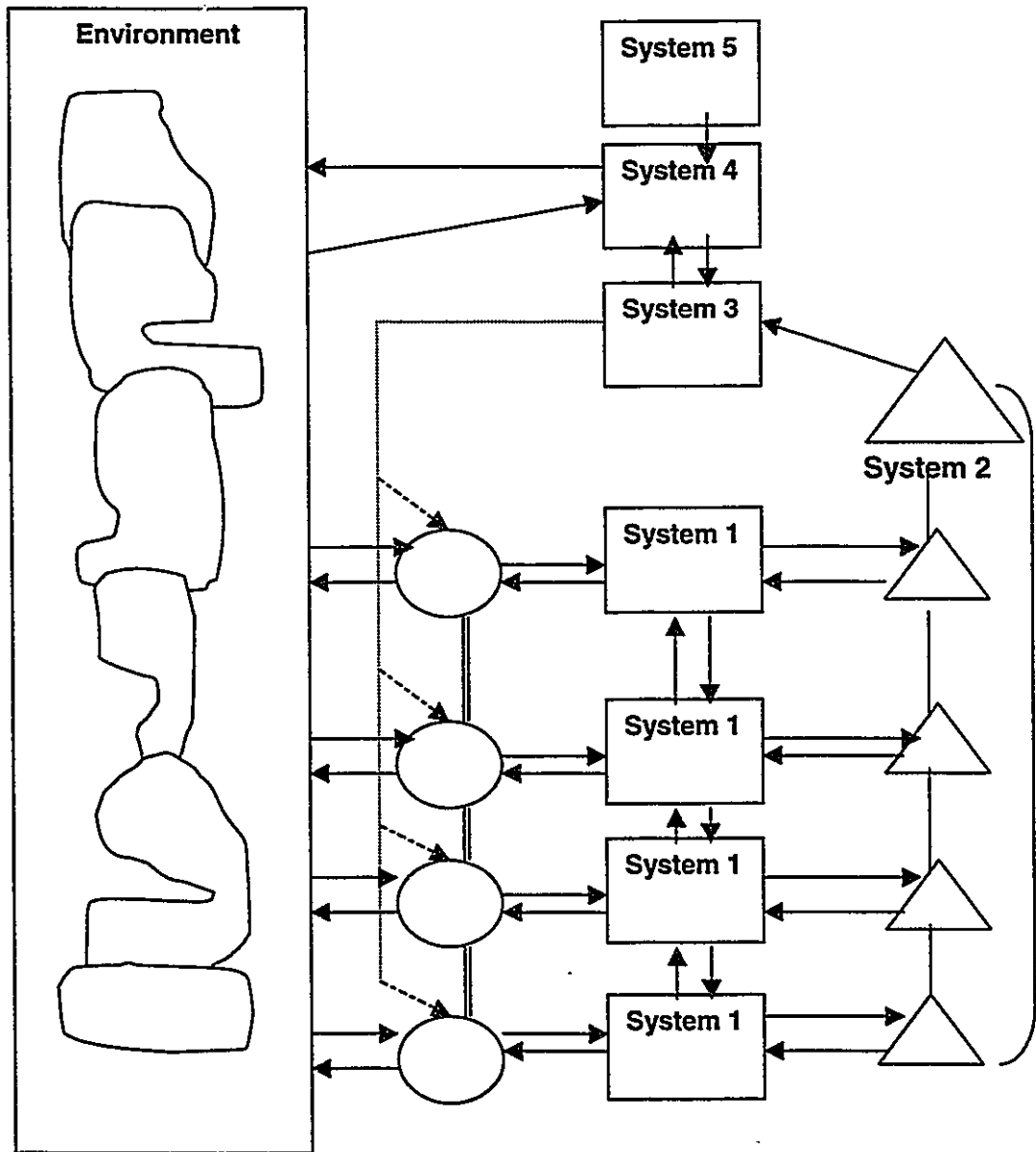
Figure 4. Stafford Beer's Model of a Viable System
(The original reference Diagnozing the System 1985, pp.141,143)

will concentrate on system 4. System 4 interacts with the environment regarding the external and future function to manage learning and change.

Regarding retirement planning, system 4 can be looked at as the level responsible for awareness of future concerns (an ideal retirement), which will adapt to the environment (change in work status) resulting in less income and more available leisure time.

Figure 5. depicts the impact of the stakeholders as being nested and integrated. The employees would be at the very center(A). This would be considered the micro-level that affects the employees as individuals. The ideal vision for this level would be individuals who are prepared for retirement. The next larger circle would be on the macro-level or Subject Matter Experts (SMEs) including the HR representatives, the facilitators, financial planners, the Director of the Dobson Entrepreneurial Centre who represent the company as a whole (B). The next ideal vision here would be that the organization has fulfilled their fiduciary responsibility to their employees.

The needs assessment as it refers to the simulation:
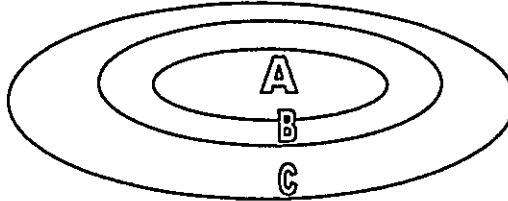
Figure 5. Kaufman's stakeholders shown as concentric circles
A- employees or micro-level, B- SMEs or macro-level, and C- society or mega level.

Impact of retirement on society

The outer circle (C) depicts society or the mega-level, that is the impact that will ripple out and affect everyone in society. The optimal situation would occur when society benefits from well prepared retirees who won't need to draw on social assistance. Instead, society may benefit from experienced, happy individuals with free time and a peace of mind to devote to other segments of society.

Retirement, especially for the baby boomers, will affect everyone in society. It has been shown, over time, that at each instant this age group reaches a new phase in their lives, the impact on everyone is noticeable. For example, Gerber's baby food was manufactured for the first time to meet the need for this sector of society, and jeans changed from a garment used for laboring to a designer garment. The advent of the high tech jogging shoes

evolved from a simple sneaker to a multimillion dollar business (Dychwald, 1989). Retirement will be another milestone for this group. The decision to retire or not to retire will have a rippling effect that will be felt by everyone in society. There will be an exodus from the work place resulting in vacant positions in some areas, and in others there may be people staying at work when they are considered to be no longer productive. As a result, the retired baby boomers will be free to engage in leisure activities such as travelling, sports, volunteer work etc. This group of retirees will affect product manufacturing and the concomitant marketing campaigns.

Volunteer activities. Some retirees may choose to volunteer their time to different causes. Highlights from the 1997 National Survey of Giving, Volunteering and Participating indicates that 23% of those 65 and over volunteered their time 202 hours annually, while those 55-64 gave 30% at 160 hours a year.

Individual activities, not part of an organization, include shopping/driving others, babysitting, writing letters, visiting the sick or elderly, teaching/coaching, etc. With large numbers of volunteers available perhaps the less supported organizations would benefit from their help. For the year 2036, Statistics Canada has projected 160-170 non-working Canadians for every 100 working (1.65:1). This has risen and is a complete turn around from a ration of 1:3 in 1986 (Schellenberg, 1994).

Sectors feeling the impact. There has been a marked difference in specific activities from 1987 to 1997. Environmental/wildlife and multi-domain

31

areas have received the most attention with education/youth development with employment/economic interests receiving the least. With more volunteers available, the more popular outlets will be over-subscribed and individuals will be forced to participate in less supported areas. For example, should the youth sector receive a lot more help this would impact on society as a whole. With a better use of this future resource, the youth would gain from seniors' guidance and experience. Many youths might be saved from dropping out from school, getting involved in crime or not achieving their true potential. The reverse could happen where the young individuals, with the guidance of seniors, may be inspired to reach new heights.

Gender and retirement. Thus far, the discussion has been about potential retirees as a group. However, research shows gender differences and therefore studying the needs of each would make a difference to the future success of both genders. Some research has been done to prove that men and women do not react to retirement in the same way. One such study conducted at the Université du Quebec reveals that gender affects attitudes toward retirement. It appears that women maintain more a positive outlook than men (Alain, 1990). The female subjects in this study, aged 55 and over, had traditional attitudes toward women's roles. For example, most women had less education than men; they were homemakers or, as a result of particular circumstances, worked part time to augment the family income, or they were single mothers.

There may be many reasons for this positive attitude among the women poled. One suggestion is that women are multi-task workers with two jobs, home

and industry, so that retiring from one would be a positive step. The presence of retirees with a positive attitude might have an effect on society in general. Time will tell if this is true in this larger segment of society.

Societal effect and scope of project

For the target audience, once the gaps are determined, the proposed solutions should meet the needs (Tessmer, 1997), on all levels that represent the various parties concerned (Rossett, 1987). For the purpose of this research, it is difficult to make inferences that would affect society. The author will use the Director of the Dobson Entrepreneurial Centre to evaluate the mega level.

In one way, the participants of the simulation become the designers of their own learning path and managers of their own education. The simulation serves as a fun, non-threatening needs assessment of what participants know and don't know by posing a series of questions (Rossett, 1987). This provides an opportunity for participants to recognize and take ownership for issues and problems, rather than allowing others to do that for them (Cognitive and Technology Group at Vanderbilt, 1992).

Banathy (1987) said that these process components "are not completed in a step-by-step, linear fashion, but are carried out through recurring spirals, as we explore and re-explore the different arenas of design inquiry and integrate information and knowledge with our emerging images of the future" (cited in Gagné, 1987). In this way individuals can explore and re-explore the different questions that are posed, until they are either satisfied with the answers or tire of doing research.

According to Bruner (1960,1961), this spiral can be a method of instruction that periodically recycles the same ideas through progressively greater degrees of complexity (cited in Gagné, 1987).

Instructional Design

Instructional designers utilize a model on which to develop and design instruction, in order to improve a specific performance through changes in knowledge, skills and attitudes. There are many types of instructional models that can be used. Two such models are the waterfall model and the layers of necessity model.

Waterfall model

One model frequently followed is the sequential waterfall model patterned after Maher and Ingram (cited in Tessmer, 1990). This model presents ideas that flow from one phase of instruction to the next. The output from one phase becomes the input for the next phase (Tessmer, 1990). A framework would serve as a map to assist the participants in locating where they are now and where they need to be in the future.

In this case, the schema (Figure 1.) will serve as a model on which to build information. The output from phase one becomes the input for the next phase or level (Tessmer, 1990). The model must be practical and easily adopted by individuals with all levels of expertise. The aim of the schema is for the layperson to continue to pursue their own retirement education with the aid of retirement seminars offered by their employers. Each person should understand

how the company retirement seminar plays a role in their planning and how

additional research on an individual basis may be needed to satisfy their needs.

Layers of necessity model

To facilitate this learning process, Tessmer's layers of necessity model would

provide the information on a need-to-know basis.

Figure 6 (Tessmer, 1990) depicts different sized circles with different

levels of color intensity. The darker the color the more intense the instruction.

The first layer is the smallest and represents the simplest layer of instruction. The

second layer is larger and would involve more time and more details. The third

level involves even more information, time and resources etc.

Simple/
Limited

ID Process
Time/

Resources

Quality
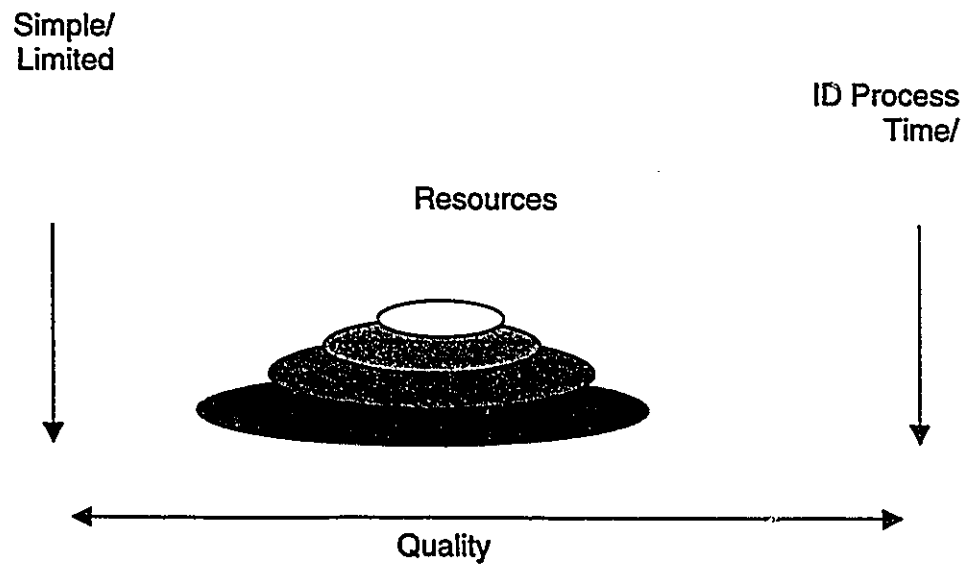
Figure 6. Tessmer's layers of necessity

The model is designed to be "sensitive to time and resource constraint-problems without sacrificing the ID process" (Tessmer, 1990 p. 79). Instruction would be provided on a need-to-know basis. An example of needs to know delivery would be training for a new operational equipment or software.

According to Brant et al. (1991), the simulation should be used as an introductory activity when the subject matter is "inherently complex and the instructional goal was application" (p.479). The individual is helped to set up his/her own action plan for their retirement education. The integrity of the process would not be compromised by the individual's time and resource limitations. For example, if time is limited before a retirement decision needs to be made, then only the first layer of instruction would be possible. The more time and the greater the ability of the individuals, the more sophisticated layers could be applied.

Domain-specific learning theories and their application to the simulation. Instructional design is the process that creates activities /instruction to bring about changes in knowledge, skills and attitudes. (Weston, McAlpine, Bordonaro, 1995). To produce effective instruction different methods may be employed. There are two domains (a) affective and (b) cognitive that would apply in the case of a simulation.

The affective domain is a category of learning outcomes according to Krathwohl and Bloom (cited in Gagné, 1989). It refers to attitudes and values that will modify the behavior of the participants. These attitudes and values are motivations, feelings, attitudes, emotions, anxiety and values (Tennyson, 1992

p.40). Changes in these variables can be very difficult to state, measure or encourage as they manifest themselves in subtle or indirect ways (Biehler et al, 1999).

As shown in Table 2, these educational objectives are in hierarchical order where the participants must receive the ideas before they can respond, place any value on new ideas, organize their thoughts and finally, display, perform or practice any new concepts.

Educational Objectives for Affective Domain

Receiving	Conscious of specifics and open to receive
Responding	Active learning demonstrated through performance
Valuing	Place a value or attachment to a specific entity.
Organization	Comprehends the association between values. Develops a value system and brings them together as a whole
Characterization	Actions coincide with values

Table 2. Taxonomy of Educational Objectives (The original reference in Krathwohl,Bloom, & Masia, 1964)

A simulation assists the participant to adopt an open mind, as many simulations follow the pattern of a child's game. I propose that this simulation is fun, light hearted and non-threatening. Each issue is presented as a single question to be researched as each participant sees fit. This supports Tessmer's layers of necessity model and it corresponds to "Responding" in the Affective

37

Domain. Individuals need to recognize what they know, do not know and need to know (Kaufman & English, 1979). This is preferable to having someone provide information in a shotgun approach.

In the simulation, when participants are open to reviewing new questions they would be "Receiving," while "Responding" is the active participation taken by each individual. Some participants are curious to seek answers to these questions, which corresponds to "Valuing". Attending the retirement seminar, to find the answers to the questions, is "Characterization," which is not part of the simulation. "Organization" is bringing the answers together to create an ideal retirement plan. This is not part of the simulation but ideally would be a result of the retirement seminar.

Cognitive domain (Mehren & Lehman, 1991) is the "recall or recognition of knowledge and development of intellectual abilities and skills" (Bloom,1956 p.7). There are six major classes of objectives: knowledge, comprehension, application, analysis, synthesis and evaluation.

As shown in Table 3, the educational objectives are in hierarchical order where the participants must remember new information, then comprehend the concepts presented and apply them under different conditions. Afterwards, individuals need to be able to analyze the new material by breaking it down into smaller parts and then creating new ideas through synthesizing the given concepts. Finally, they evaluate the value of the new ideas for a particular situation.

Educational Objectives for Cognitive Domain	
Knowledge	Applies to remembering information
Comprehension	Refers to the ability to understand new material.
Application	Uses new information in new situations
Analysis	Breaks material into specific parts
Synthesis	Puts parts together to form a whole (new or original)
Evaluation	Judges the worth of material for a given purpose (p.32)

Table 3. Taxonomy of Educational Objectives by Bloom,Englehart, Furst, Hill & Krathwohl (1956)

With the simulation alone, not all of these educational objectives are achieved. When the simulation game is included in the retirement planning process, as shown in Figure 1, these objectives are achieved. For example, the purpose of the simulation game is to determine participants' knowledge and lack of knowledge. Therefore, remembering knowledge is not applicable as this stage. In the retirement planning process the knowledge will be learned, providing a better chance of remembrance, because the simulation game lays the foundation for new information. By creating a framework, new knowledge can be received, comprehended, and applied. Some analysis has been done on a given topic by breaking down the unknown concepts into the various questions. The participants synthesise according to their specific needs. The various answers to the selected questions are the means creating a personalized "whole" for each person. The post simulation discussion assists with this personalization. Evaluation is what individuals do when presented with new material and they will make a decision to determine if it fits their needs.

On the one hand, as a result of experiencing the simulation, the participants should feel more in control because they are now more aware of the kinds of issues that they need to think about during the simulation and long afterwards. Figure 1 provides them with a visual aid describing what needs to be accomplished. This aid will assist in creating a sense of being in charge of their future.

On the other hand, by introducing all these new variables, additional challenges are being presented to them. Therefore, they may feel less in control, in some ways, because they realize what they do not know.

Model of Motivation and its application to the simulation. According to Keller (1987), it is important to motivate participants. This may be achieved by referring to his ARCS model, of gaining participants' attention by making the material relevant to them, and also gaining their confidence and satisfaction (cited in Smith and Ragan, 1993). ARCS is an acronym with attention referring to getting and keeping the participants' focus on the new material. Relevance is how applicable the information or instruction is to the participants. Confidence on the part of the participants should increase as a result of the experience. Satisfaction is the feeling that the participants should experience as a result of the instruction (See Table 4).

Attention	Simulations are fun, non threatening, and personalized
Relevance	Individualized selection of questions to research
Confidence	Sort out questions which are taken care of/witness others who do not know answers as well as they do
Satisfaction	To know that some areas are not applicable and others are taken care of.

Table 4. Keller's ARCS Model as applied to the simulation

The simulation is non threatening, since the information required is non confidential. Also, it keeps their attention because it is fun to play and the participants' pique their curiosity anticipating how others will react to the questions

Confidence will be improved by observing other's reactions to simulation questions. Individuals will witness other participants who are less informed. They will also witness that there are questions that no one can answer. A small group is more effective because it is more comfortable to admit ignorance to only three other people than to a room full of people. It is possible that the participant may not place the card on the appropriate pile. Ignorance of the answers is an embarrassment, but the availability of research time instills confidence. In order for the simulation to be effective on all levels (micro, macro, mega) it must be attractive to all concerned. Satisfaction is gained by witnessing others in similar or less prepared situations than their own.

CHAPTER 4

Methodology of the Formative Evaluation

Design

The goals of the formative evaluation are to determine if the simulation is efficient, effective and appealing. If an intervention, such as a simulation, is to be effective, it should be evaluated as a part of the solution. The formative evaluation should be carried out during some phase of the design, during the development or once a prototype is complete (Flagg, 1991). The purpose of the evaluation is to determine if the goals of the instruction have been met and to determine the areas for improvement (Weston et al, 1995).

This evaluation takes place at the prototype stage and it determines the strengths and weaknesses of the design (Flagg, 1991) and how to improve the quality of instruction (Cambre, 1981; Scriven, 1967), as well as to determine its usefulness on the three levels (Tessmer, 1997). Gustafson (1981) states that the formative evaluation should be included as a vital part of the instructional design process (Weston et al, 1995). If the design meets the goals then some of the questions asked should determine if the product works the way it was intended, in the setting for which it was designed. It should also be efficient, effective and appealing. If the product is not appealing then no matter how good is it, it will remain on the shelf unused. For research purposes the author tried to determine the answers to these questions. 1. Does it reduce the anxiety of the participants? 2. Does it make them feel more in control of preparing for retirement? 3. Does the simulation function as an effective icebreaker? 4. Do organizers find that it

would enhance their retirement seminars? 5. Does it provide a means to prepare questions for participants to use at a retirement seminar? 6. Would financial planners want to incorporate this tool into their existing seminars offered to corporations?

According to Weston's model (Weston et al, 1995), the formative evaluation design includes both data collection and revision stages (See Figure 7). There are four components: participants, roles, methods and situations to each stage of the evaluation. The constraints affecting the evaluation are also mentioned, e.g., if the sample size was small or whether time was an issue for the evaluator.

The data collection occurred over time and the initial draft was presented to Educational Technology students in July 1998 and also to potential retirees at McGill University. Interviews were used to collect the data and revisions were then made based on the input from this data collection.

Participants and Their Roles

The participants are the individuals who are employed at the two companies and who experienced the simulation game first hand. The role they assumed, according to the Weston et al (1995) model, was as novices who have never experienced a simulation game such as RetireWise. They also, took on the multiple role of evaluator and critic, where they evaluated and critiqued how well the simulation game functioned for themselves as well as how well it could serve family, friends and colleagues.

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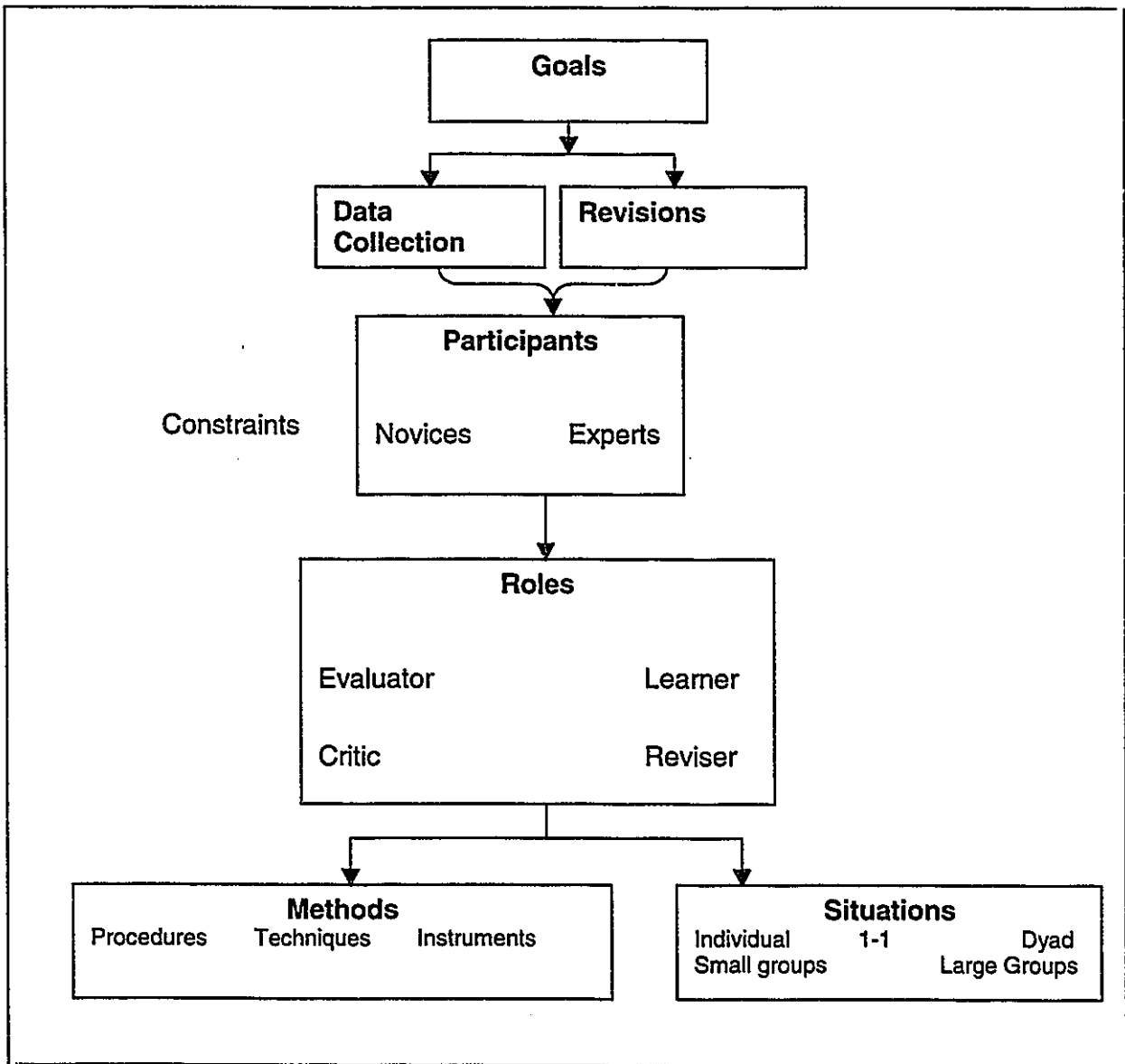
Figure 7. Weston's Model of a Formative Evaluation
(The original reference in Weston et al 1995)

Novices (Participants). Participants from two companies were involved: 1) The International Civil Aviation Organization (ICAO) and 2) Bombardier Inc. For the participants, the simulation should be interesting and serve as a useful tool. Its function is to serve as an advance organizer, to assist participants with retirement planning. It should also reduce participants' level of anxiety, since after completing the simulation each participant should have a better idea of what is needed for their retirement, and be able to produce a "to do list". They should also be more confident researching retirement information.

Experts (Subject Matter Experts or SMEs). There were four types of SMEs: 1) Facilitators who ran the simulation in companies as service providers, 2) Organizers who hired a facilitator, 3) Financial planners who provided another type of service, and 4) The Director of the Dobson Entrepreneurial Centre who provided information on how the simulation would apply to the business community. Three SMEs were selected from within the companies and four were independent.

Facilitator. For example, one facilitator was an independent consultant who was present at the lunch time session at Company #1 in order to review the process as a potential facilitator. The feedback from both critic and evaluator (participant) was provided on the simulation session itself, as well as on the facilitator's ability, timing, audience's reaction and any suggestions for improvements.

Organizers. The organizers were the Human Resource (HR) representatives for Company #1 and Company #2. They were interviewed to determine their input concerning the simulation game. Each representative experienced the game (role of participant) and observed the reactions of the participants. After the exercise, the representatives received comments from the participants to ascertain their opinion (evaluator and critic) of the session.

The HR representative from Company #1 provided feedback (evaluator and critic) on the session as well. Company #1 offered staff a session on retirement planning-lifestyle, two days after the simulation. Traditionally, attendance at this session has been unpredictable. The week after the session, the representative was contacted to determine if the number of attendees at the lifestyle session was equal to the financial component that always drew a good number. Comments on the running of the simulation were solicited as well as the possibility of repeatability another year.

Financial planners. Financial planners were asked many questions in the capacity of evaluators and critics. One question requested whether they would offer this service to their clients as a special evening event or as an open seminar to which friends of clients might be invited. To ensure the success of the simulation, the organizers and financial planners would need to consider the simulation enticing for their intended client audience. The simulation should generate more interested participants from their client base, and perhaps a resulting better attendance at the lifestyle component of a retirement planning session. Two financial planners were from a national company with offices in

Montreal, Toronto, Calgary and Vancouver. Their business is strategic planning for clients' financial portfolios. Another financial planner has offices in both Montreal and Toronto and provides an investment service for clients' funds. This same person also played the role of evaluator and critic.

The Director of the Dobson Entrepreneurial Centre. The Director of the Dobson Entrepreneurial Centre provided information that would apply to the business community at large, from the viewpoint of both evaluator and critic. Methods:

As illustrated in Figure 7, the next step is to define methods. The methods of the formative evaluation are subdivided into instruments, techniques and procedures.

Instruments. The instruments selected for the formative evaluation are structured tools that are chosen according to the number of participants. Various tools can gather data collection from the intended audience. If a questionnaire is the selected method then it must be designed to reveal information that pertains to the product under review (Berdie and Andersen, 1974). In this case questionnaires, pre-tests and post-tests were immediately administered before and after the simulation game. Changes were made to the questionnaires as needed.

Questionnaires. There were different types of questionnaires used and they evolved over time. After the original pre-test and the post-test were used, it was evident that revisions were necessary. Some revisions were made prior to implementation with the second company. The same applied to the consent form.

For Company #1 the Pre-test (See Appendix A) was administered to the participants before the simulation experience. The post-test was administered (See Appendix C) after the discussion period.

While in Company #2 (Implementation Group) the grading scales were changed from percentages to Disagree, Somewhat disagree, Somewhat agree, Agree. Statement #14 was split into two parts in order to elicit clearer answers from the participants (See Appendix B).

In addition to the questionnaire they were asked the following questions. Those who attended the retirement session at Company #2 in previous years were asked if they thought that the simulation could have enhanced the 30-hour information session last year, as also their response to the simulation questions. Did they know most of the answers after attending the 30-hour information sessions offered by their company?

For Group 1(English) in Company #2 the questionnaires used for this group were edited. The wording on a few questions were improved. The format in Statement #14 was changed by adding part a or part b. This was done to entice people to answer only one part of the two-part statement. An additional statement was added to become 15A. This was *"As a result of experiencing this simulation, I feel more in control of what I have to do to prepare for retirement."* Statement 16 was divided into parts with a yes /no option (See Appendix C).

Finally Group 2 (French) the same version of the questionnaire, used with the English group, was administered to this group as well. The only difference

being that a professional, carefully chosen for his ability to work with academic research projects, translated the questionnaires into French (See Appendix D).

Techniques. Technique refers to the "loosely structured heuristic tool such as interviews" (Weston et al, 1995 p.32). In this situation there is an interaction between the interviewers and the interviewee. No two interviews unfold the same way. A semi-structured set of questions could be used to collect the desired data. The order of the questions may vary depending on the interviewee's reactions and responses.

"Techniques and information provide data related to the goals of the formative evaluation and lead to changes that influence the effectiveness, efficiency and appeal of the instruction" (Weston et al, 1995 p.p. 32-33). The lists of semi-structured questions are placed in Appendices E, F, and G.

SME semi-structured interview questions, Company #1. The HR representatives were asked a series of questions (See Appendix E). Company #2. The HR representatives at Bombardier were asked questions similar to those posed to Company #1. They also determined whether this simulation would enhance their retirement planning sessions, and deliberated the possibility of offering the session company-wide. Either way, they determined why it would or would not be appropriate. This information was collected as part of the evaluation.

Financial planners. Two financial planners evaluated the simulation game to determine if it would enhance and increase the effectiveness of their retirement information sessions. They were asked a series of open-ended

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questions (See Appendix F). A third financial planner, who does not provide retirement seminars, was asked similar questions.

Business community. The Director of the Dobson Entrepreneurial Centre was asked a sequence of questions about the simulation (See Appendix G). Situations

Also as seen in Figure 5, the "situations" must be described. This section refers to the context used during the formative evaluation. Weston (1995) outlines five categories: one to one (the HR representative for the organization), dyad (financial planners), small group (company #2) and large group (company #1). A single participant is an individual who acts alone. In the other four cases, an evaluator dealt with two or more participants (Weston et al, 1995).

An overview of this formative evaluation follows Kaufman's levels. The participants are the focus, with the human resource representatives as the organizers providing information on an organizational level. The financial planners evaluate from a process point of view and as a service hired by organizations. The Director of the Business Centre reviewed it from a business point of view with its implications for the mega or societal level. Procedures are discussed in the Procedure for Formative Evaluation.

Time line

The dates followed for this research project are noted below.

July 1998		Prototype shown to Ed Tech students
November	24, 1998	Company #1 (Game ran by L.C.H.)
February	4, 1999	Financial Planners #1
January	26, 1999	Company #2 Implementation group (Game ran by L.C.H.)
February	26, 1999	Financial Planner #2
April	20, 1999	Company #2, Group 1 (Game ran by.L.C.H.)
April	26, 1999	Company #2, Group 2 (Game ran by D.H.)

Procedures for Formative Evaluation

Following Weston's model (Weston et al, 1995), the author contacted the

Human Resource representatives in several companies. After a few weeks of

telephone calls, ICAO (Company #1) and Bombardier (Company #2) agreed to

discuss the possibilities of running the simulation for their employees. These

companies were chosen for two reasons. 1) They offer retirement seminars to

their staff and 2) they might be potential users of the simulation as a final

product.

Company #1 decided that the simulation would be a good way to

introduce their retirement planning seminar. The simulation would be run during

a one-hour lunch period, truncating the discussion period to 10 minutes.

Company #2 would not run their retirement session until April, but the

organizers agreed to assemble a group of likely attendees and past participants

in order to evaluate the simulation game. They were interested in assessing staff

response to this experience, as to whether it would enhance their existing 30-hour seminar and would serve as a useful introductory activity. Once access was gained, dates were set to run the simulation.

Company#1:

There were 24 adults participants. When the participants arrived the room was already set up in two groups of parallel tables with chairs placed on all sides. Each table had a game board, 4 place mats, die, 4 playing pieces, 8 sets of questions, and 4 pencils. (See Appendix H) A flip chart was placed at the front of the room together with a worktable for the author's use.

The participants were greeted as they entered the room. Once the organizer introduced the author, background information was given concerning the creation of the simulation. The author introduced the independent facilitator, Janet Boeckh at that time. Before the consent form could be signed, the author considered that the rules of the simulation needed to be outlined, to ensure the participants were fully aware of the dimensions of the simulation (See Appendix I). Once the explanation was given by the author (See Appendix J), the consent forms were signed (See Appendix A.) The participants completed the pre-tests and kept them at their place (See Appendix A).

The simulation started and the author circulated among the groups to ensure that everyone understood what to do, and was also available to answer any questions. There were latecomers who needed to be briefed individually and to be integrated into the existing groups. The author continued to circulate to

observe how the simulation was progressing, to trouble shoot and to answer any questions.

The simulation ran for 45 minutes, followed by the initiation of a discussion period. There were volunteers from within the groups who posed questions that they found of particular interest, such as " How would the loss of a significant person in your life affect your day to day living?" Answers to the questions posed were solicited from the group. The post-simulation discussion period lasted only 5-10 minutes.

Participants were given a blank "Prioritized list of topics to research" to complete (See Appendix O). Then they were asked to fill out the post-test (See Appendix A.) During this time instructions were given to place all the completed tests and the consent form in individual envelopes provided for each person. Upon completion a full list of questions were distributed (See Appendix P). The participants were thanked for their input and a small gift of an after dinner mint was distributed to each person, before they left to return to work.

Company #2 Implementation group

The same procedure was followed as for company #1, with a slight variation. The consent form was signed before the rules were read out. Then, the notion of blank cards was introduced to this group.

The simulation game ran in the same manner. The discussion period was open to the full group, however no one volunteered questions during the 15-20 minute period.

Company #2 Group 1

The procedure ran in a similar fashion to the Implementation Group. During the introduction an announcement was made that the full list of questions would be distributed at the end of the session. This was done at the request of the organizers. One organizer felt that participants needed to know this in order to avoid them taking notes. To assist in keeping track of the interesting questions that they heard, a form or crib sheet was created for the participants. The organizers also requested this additional form. This form was easy to create and to employ because each question had a number associated with it, and participants circled the number below the appropriate topic heading (See Appendix M).

The Facilitator who would conduct the workshop in French was there as an observer and assisted initiation. The suggestions from Facilitator #1 and Financial Planner #2 were incorporated into the introduction and the discussion.

The changes made involved the introduction and discussion period at the request of Company #2. The organizers wanted the questions answered during their subsequent presentations, in order to avoid the possibility of conflicting information being generated (See Appendix L).

An explanation was given as to why they had to pretend that they were retirees. 1) To experience what it is like to be retired and to see if they would answer questions the same way regardless of their work status. 2) To realize that they may have a lot of preparation to do and to take advantage of the time they still have to make the necessary arrangements. A comment from the second

financial planner also added to this discussion period, when he stated that the questions were similar to jigsaw puzzle pieces without a picture. The notion of visualizing what they want their retirement to be like, helped to overcome the picture-less jigsaw puzzle in order to aim for the ideal retirement, that only they can do as individuals.

The basis for this discussion was suggested by the first Facilitator, in order to determine how prepared the audience was for retirement. The group was asked how prepared each person felt on a scale of 1-10, with 10 being the best. Those who raised their hands were noted on a paper and after the simulation the animator repeated this question, in order to compare the reactions of the initial respondents. Some felt less prepared and other felt comfortable enough to make comments.

Company #2 Group 2

This group was conducted in French with a different facilitator whose mother tongue was French. The author was present to assist the facilitator with the running of the game and to ensure that the introduction and discussion sections had similar content to those sections conducted in English. Samples of the consent form, pre-test, and post-test, are placed in Appendix D. The full list of questions can be found in Appendix Q, with the Crib sheet located in Appendix N.

CHAPTER 5

Results

The results from the pre-tests and post-tests were evaluated using Wilcoxon signed-rank test as the statistical tool to determine the significance of the results.

General Observations

Company #1. The simulation was run during a one-hour lunch session, which reduced the time to allow the activity to unfold as designed. Due to the type of work conducted at Company #1, the employees were selected from around the world. The company was not required to follow the Act Respecting the Abolition of Compulsory Retirement and Providing Amendments to Certain Legislation. (Bill 15, April 1982). Staff knew that they were due to retire by age 60 and those hired after January 1990 would retire by age 62. This arrangement was set at hiring, was part of the pension plan and culture in the organization.

As a result, their needs and interests were international and the type of questions created in this simulation did not satisfy their thirst for information beyond the Canadian borders. There was insufficient time for the participants to complete blank cards that would allow them to pose their most urgent questions. Had these new questions been integrated into the rest of the cards, someone around their table-could have drawn the question. This way some of their needs may have been satisfied.

When couples sat together, the author observed than only one person would make the decisions for both. At that time the notion to separate couples came to mind and this was incorporated into the sessions offered at company #2.

Company #2. The culture in this organization was similar to that which exists in the rest of the province, where retirement at age 65 is no longer required. Therefore, it could be said that staff had a very different opinion about retirement than employees at Company #1.

At the time of the Implementation Group the game was only available as an English version. Thus, a few of the participants were not familiar with certain English expressions such a "finding yourself in a rut"; however others within the groups served as translators. This was very helpful although it slowed down the pace of the game and those who did not understand French missed out on some conversations.

During the discussion period, the need to translate reduced the effectiveness of the post simulation period. Thus, it was proven that the simulation should be available in the participants' mother tongue.

The results have been organized into five tables for each group that experienced the simulation game. The pre-test and post-test results are in separate tables. Then a table is presented with the combined scores, comparing the pre-test to the post-test results. The combined results were computed by adding the disagree and somewhat disagree responses together, to form a negative response. The same method was used for the agree and somewhat agree responses. The additional statements (#9, #10, #12, #13, #14b, #15 and

#16) in the post-test stand alone. They concern the experience of the simulation game and the discussion period. These results are discussed separately from the pre-test and the post-test results.

Participants at Company #1. There were 12 males and 12 females present, ranging in age from 51-60 years of age. When the results from the pre-test and the post-test were entered into Minitab's statistical software, the pairwise difference was calculated followed by a Wilcoxon Sign calculation. The results showed no significant effect for the group as a whole with a P value greater than .05. When these same results were split by gender or age, there was no significant effect. The following table outlines the responses for the pre-test administered to the participants at Company #1. The sample size for each question is indicated, as well as the number of blank answers. The sample size for each statement is indicated below the statement, as well as the number of blank answers.

Table 5 represents the results of the pre-test for Company 1. There is a balance between knowing and not knowing what is needed for retirement. The group is split as to whether or not the thought of retiring causes them anxiety, with just a few more disagreeing. Yet, they understand the challenges of preparing for retirement (66%) but they are not definite about where to collect the information 33.3% represented each group with the response of either somewhat disagreement and somewhat agreement. The majority do not know how to collect the information, with 37.5% disagreeing and 41.7% somewhat disagreeing

with the statement. Fifty-two point four percent somewhat disagree about feeling in control of collecting the information needed.

Pre-test responses for participants at Company #1				
Statements N=24	0- 25%	26-50%	51-75%	76-100%
1. I have an understanding of the challenges facing me in retirement. N=24	8.3% (2)	25% (6)	33.3% (8)	33.3% (8)
2. I understand what information I need to collect to prepare for retirement. N=24	12.5% (3)	33.3% (8)	45.8% (11)	8.3% (2)
3. I know where to collect this information. N=24	29.2% (7)	33.3% (8)	33.3% (8)	4.2% (1)
4. I know how to collect it. N=24	37.5% (9)	41.7% (10)	20.8% (5)	0
5. The thought of retiring causes me some anxiety. N=24	41.6% (10)	12.5% (3)	29.2% (7)	16.7% (4)
6. It is the preparation for retirement that is causing me some concern. N=21	33.3% (7)	33.3% (7)	28.6% (6)	4.7% (1)
7. I am prepared for retirement (3 blank answers) N=21	4.7% (1)	42.8% (9)	33.3% (7)	19% (4)
8. I feel in control in terms of collecting the information I need. (3 blank answers) N=21	14.3% (3)	52.4% (11)	19.1% (4)	14.3% (3)
9. I can envision what it is like to be retired. (3 blank answers) N=21	4.8% (1)	28.6% (6)	38.1% (8)	28.6% (6)
10. I have a list of things to do to prepare for retirement. (3 blank answers) N=21	38% (8)	19.1% (4)	23.8% (5)	19.1% (4)

Table 5. Depiction of the pre-test results

Scores from the post test (See Table 6) indicate that for the statement regarding understanding the challenges facing the participants in retirement, 62.5% were somewhat in agreement. Similar scores occurred for the statement "I understand what information I need to collect," with 54.2% somewhat in agreement. Yet for the statement' "where " and "how to collect" the results are

predominately negative, with 29.2% disagreeing and 41.6% somewhat

disagreeing for " where"; 33.3% disagreeing and 37.5% somewhat disagreeing

for "how". It is interesting to note that 54.8% are somewhat in agreement that

they can envision what it is like to be retired.

Post-test responses for participants at Company #1				
Statements N=24	0-25%	26-50%	51-75%	76-100%
1. I have an understanding of the challenges facing me in retirement. N=24	8.3% (2)	12.5% (3)	62.5% (15)	17% (4)
2. I understand what information I need to collect to prepare for retirement. N=24	12.5% (3)	25% (6)	54.2%% (13)	8.3% (2)
3. I know where to collect this information. N=24	29.2% (7)	41.6% (10)	29.2% (7)	(0)
4. I know how to collect it. N=24	33.3% (8)	37.5% (9)	29.2% (7)	(0)
5. The thought of retiring causes me some anxiety. N=24	33.3% (8)	29.2% (7)	33.3% (8)	4.2% (1)
6. It is the preparation for retirement that is causing me some concern. N=24	16.7% (4)	50% (12)	25% (6)	8.3% (2)
7. I am prepared for retirement. N=24	16.7% (4)	29.2% (7)	37.5% (9)	16.7% (4)
8. I feel in control in terms of collecting the information I need. (1 blank answer) N=24	16.7% (4)	45.8% (11)	33.3% (8)	4.2% (1)
11.(9[i]) I can envision what it is like to be retired (2 blank answers) N=22	9.1% (2)	22.7%(5)	54.6% (12)	13.6% (3)
14. (10[ii]) Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (7 blank answers) N=17	47.1% (8)	35.3% (6)	17.7% (3)	0

Table 6. Depiction of the percentages for the responses to the post-tests.

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[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is #10 in the Pre-test.

The participants had a better "understanding of challenges facing them in retirement" (See Table 7). The results changed from 66% to 79.5% or an increase of 20.5%. It is interesting to note that they had a poor understanding of "where to collect the information". These results changed from 37.5% to 29.28%. The author was led to wonder whether the participants became more confused or overwhelmed as a result of experiencing the simulation. When asked if the thought of retirement caused anxiety, more participants disagreed with the statement. The results changed from 54.2% down to 62.5% and yet 62.5% did not feel in control of collecting the information needed. The statement, "the preparation needed for retirement causes anxiety" remained constant at 66.6% disagreeing with the statement. Being able to create a "to do" list changed in a negative direction from 42.9% to 17.5%.

Combined responses for test scores at Company #1				
Statements	Negative Pretest	Negative Post test	Positive Pretest	Positive Post test
1. I have an understanding of the challenges facing me in retirement.	33.3%	20.8%	66.7%	79.2%
2. I understand what information I need to collect to prepare for retirement.	45.8%	37.5%	54.2%	62.5%
3. I know where to collect this information	62.5%	70.8%	37.5%	29.2%
4. I know how to collect it.	79.2%	70.8%	20.8%	29.2%
5. The thought of retiring causes me some anxiety.	54.2%	62.5%	45.8%	37.5%
6. It is the preparation for retirement that is causing me some concern.	66.7%	66.7%	33.3%	33.3%
7. I am prepared for retirement	47.6%	45.8%	52.4%	54.2%
8. I feel in control in terms of collecting the information I need.	66.7%	62.5%	33.3%	37.5%
9./11[i] I can envision what it is like to be retired.	33.3%	31.8%	66.7%	68.2%
10./14.[ii] I have a list of things to do to prepare for retirement.	57.1%	37.5%	42.9%	17.5%%

Table 7. Comparison of positive to negative scores for the pre-test/post-test.

As seen in Table 8, 43.5% of the participants were somewhat in agreement that the questions in the simulation were thought provoking. When asked if the simulation game encouraged them to make changes to their way of thinking, 28.6% were somewhat in agreement and 47.6% were in complete agreement.

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[i] Statement #11 is #9 in the Pre-test.

[ii] Statement #14 is #10 in the Pre-test.

Responses for Additional Post-test statements at Company #1				
Statements N=24	0-25%	26-50%	51-75%	76-100%
9. The questions in the simulation were thought provoking (I blank answer) N=23	8.7% (2)	8.7% (2)	43.5% (10)	39.2% (9)
10. It was easier to deal with some issues because they were presented as part of a simulation. (I blank answer) N=23	30.4% (7)	21.7% (5)	26.1% (6)	21.7% (5)
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. (1 blank answer) N=23	21.7% (5)	26.1% (6)	34.8% (8)	17.4% (4)
13. In part 2, the discussion with the full group provided me with additional information. (2 blank answers) N=22	45.5% (10)	18.2% (4)	31.8% (7)	4.5% (1)
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (8 blank answers) N=16	25% (4)	12.5% (2)	37.5% (6)	25% (4)
15. The simulation game encouraged me to make changes to my way of thinking. (3 blank answers) N=21	14.3% (3)	38.1% (8)	28.6 (6)	47.6% (4)

Table 8. Post test results for additional statements.

Overall the simulation was recommended to colleagues, friends and family in that order (See Table 9).

16. I would recommend this simulation to: (3 blanks answers) N=21	Yes	No
a. family members(N=15)	79%	21%
b. friends(N=17)	85%	15%
c. colleagues(N=18)	90%	10%

Table 9. Recommendations of the simulation game to other people.

Additional comments. Several comments were made regarding information for international retirees and a suggestion was made to provide more time, to allow for completion of all the questions. One commented that the board game had too many "new topic" and "free choice" squares.

Others used the following phrases to describe their experience as "enjoyable," "good thought provoking, "opens our minds" and "very useful exercise." In contrast one commented that "it was a waste of time (in the form of game)".

The discussion period was considered to be too short since everyone should be encouraged to answer all questions. Some questions were thought to be difficult to sort, using the existing headings of "Questions to research", Questions taken care of" and "Non applicable."

Participants at Company #2 (Implementation Group). A large enough sample size was not formed, despite every effort. The simulation was re-scheduled four times with a number of personal invitations made; however the final sample size was seven people. Two of the participants were the organizers and the remaining five were participants within the target population. Two of the five had attended the 30-hour seminar provided by the company in the previous year. The organizers participated to round out the groups and to also provide input from first-hand experience.

When the data were evaluated, no significance was found at all. The Implementation group was comprised of only seven people. Results are presented in Table 10. Everyone had some understanding of the challenges at 71.4% and some understanding of the information (57.1%) needed to collect to prepare for retirement. The thought of retiring caused some anxiety for 57.1% and more anxiety for 28.6%. The questions in the simulation were thought

provoking for 85.7% of the group. The majority of the group could envision what it is like to retire.

Pre-test responses for participants at Company #2 Implementation Group				
Pre-test N=7				
Statements	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement. N=7	0	0	71.4% (5)	28.6% (2)
2. I understand what information I need to collect to prepare for retirement. N=7	0	0	57.1 (4)	42.9 (3)
3. I know where to collect this information. N=7	0	14.3% (1)	71.4% (5)	0
4. I know how to collect it. N=7	0	28.6% (2)	71.4% (5)	0
5. The thought of retiring causes me some anxiety. N=7	0	14.3% (1)	57.1 (4)	28.6% (2)
6. It is the preparation for retirement that is causing me some concern. N=7	0	28.6% (2)	57.1 (4)	14.3% (1)
7. I am prepared for retirement. N=7	28.6% (2)	14.3% (1)	28.6% (2)	28.6% (2)
8. I feel in control in terms of collecting the information I need. N=7	0	28.6% (2)	28.6% (2)	42.8% (3)
9. I can envision what it is like to be retired. N=7	14.3% (1)	0	85.7% (6)	0
10. I have a list of things to do to prepare for retirement. N=7	0	28.6% (2)	57.1 (4)	14.3% (1)

Table 10. Depiction of the percentages for the responses to the pre-tests.

The post-test indicated that 85.7% of the group agree somewhat and 14.3% agreed with the challenges facing them in retirement (See Table 11). No one disagreed with this statement. Fewer people knew where to find the information with 57.1% in somewhat agreement after the simulation experience.

The scores for the statements, "How to collect the information" remained at 71.4% in somewhat agreement. -"The thought of retiring causing some anxiety" with a score of 71.4% in somewhat agreement. The majority of the group was somewhat clear about envisioning what it is like to be retired, although no one disagreed with the statement out right.

Post-test for Company #2 Implementation Group				
Statements N= 7	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement.N=7	0	0	85.7% (6)	14.3% (1)
2. I understand what information I need to collect to prepare for retirement. N=7	0	14.3% (1)	57.1% (4)	28.6% (2)
3. I know where to collect this information. N=7	0	42.9% (3)	57.1% (4)	0
4. I know how to collect it. N=7	0	28.6% (2)	71.4% (5)	0
5. The thought of retiring causes me some anxiety. N=7	0	14.3% (1)	71.4% (5)	14.3% (1)
6. It is the preparation for Retirement that is causing me some concern. N=7	14.3% (1)	42.9% (3)	14.3% (1)	28.6% (2)
7. I am prepared for retirement. N=7	14.3% (1)	42.9% (3)	42.9% (3)	0
8. I feel in control in terms of collecting the information I need. N=7	0	57.1% (4)	42.9% (3)	0
11(9'). I can envision what it is like to be retired. N=7	0	28.6% (2)	42.9% (3)	28.6% (2)
14. (10ii) I have a list of things to do to prepare for retirement. (3 blank answers) N=4	0	0	50% (2)	50% (2)

Table 11. Depiction of the percentages for the post-test responses.

*i Statement #11 is #9 in the Pre-test . ii Statement #14 is #10 in the Pre-test.

Comparing the post-test scores to the pre-test scores showed some interesting results as seen in Table 12. . There is an agreement on a better understanding of the challenges for retirement, after experiencing the simulation and the discussion period. The scores remained constant across all groups? The participants' post-tests indicated lower scores on understanding what information to collect, after experiencing the simulation game and the discussion. The score changed from 100% in agreement to 85.1%, with a decrease of 14.9%. There is an agreement on how to collect the information, since the how to collect is constant at 71.4% with the pre-test. Fewer people knew where to find the information after the simulation game with a decrease from 85.7% to 57.1% and a decline of 20%.

The preparation for retirement (statement #7) shifted from 57.1% in agreement in the pretest to only 42.9% agreeing in the post-test; this is a decline of 24.8%. The ability to envision retirement changed from 85.7% to 71.4%. Individuals felt less prepared for retirement, less in control of collecting information after experiencing the simulation. The same holds true for being less able to envision retirement.

Combined Responses for test scores at Company #2 Implementation Group				
Statements N= 7	Negative Pretest	Negative Post test	Positive Pretest	Positive Post test
1. I have an understanding of the challenges facing me in retirement.	0	0	100%	100%
2. I understand what information I need to collect to prepare for retirement.	57.1%	14.3%	100%	85.5%
3. I know where to collect this information	14.3%	42.8%	71.4%	57.1%
4. I know how to collect it.	28.6%	28.6%	71.4%	71.4%
5. The thought of retiring causes me some anxiety.	14.3%	14.3%	85.7%	85.7%
6. It is the preparation for retirement that is causing me some concern.	28.6%	57.1%	71.4%	42.9%
7. I am prepared for retirement	42.9%	57.1%	57.1%	42.9%
8. I feel in control in terms of collecting the information I need.	28.6%	57.1%	71.5%	42.9%
9. /11¹ I can envision what it is like to be retired.	14.3%	28.6%	85.7%	71.4%
10. /14". I have a list of things to do to prepare for retirement.	28.6%	0	71.4%	100%

Table 12. Comparison of combined pre-test post-test scores

In Table 13, the strongest scores are 57.1% for statements asking if the simulation was thought provoking and if the discussion with the full group provided additional information. For both these statements the group was somewhat in agreement.

For this group 60% did not have a "to do" list and were somewhat in agreement that they could make one now. When the somewhat in agreement score is combined with the agreement score the total is 100%.

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[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is #10 in the Pre-test.

Responses for Additional Post-test statements at Company #1 Implementation Group				
Additional Statements N=7	Disagree	Somewhat disagree	Somewhat agree	Agree
9. The questions in the simulation were thought provoking. N=7	0	14.3% (1)	57.1% (4)	28.6% (2)
10. It was easier to deal with some issues because they were presented as part of a simul;tion. N=7	0	14.3% (1)	42.9% (3)	42.9% (3)
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. N=7	0	28.6% (2)	28.6% (2)	42.9% (3)
13. In part 2, the discussion with the full group provided me with additional information. N=7	0	14.3% (1)	57.1% (4)	28.6% (2)
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (2 blanks answers) N=5	0	0	60% (3)	40% (2)
15. The simulation game encouraged me to make changes to my way of thinking. N=7	0	0	42.9% (3)	57.1% (4)

Table 13. Additional statements beyond the pretest-post-test.

The Implementation Group would recommend the simulation game experience to family members at 71.4%, to friends at 85.7% and to colleagues 100% (See Table 14).

16. I would recommend this simulation to:	Yes	No
a. family members (2 blank answers) N=5	71.4%	0
b. friends N=7	85.7%	14.3%
c. colleagues N=7	100%	0

Table 14. Recommendations of the simulation game to other people.

Additional comments. A larger group would permit more oral questions and discussion. Again, comments were made regarding the sorting of categories and the way questions were worded making it difficult to complete the task.

Two participants, who had previously attended the company seminar the previous year, both commented that they wished they had experienced the seminar before the 30-hour session. Another commented that "it gets you started to think of retirement". This is what convinced the organizers to offer it company-wide.

Two organizers were younger in age than the target audience and they couldn't relate to some questions. It is as though they felt, that by the time they would be ready to retire, they would have made arrangements for various issues.

It became evident that the simulation game should be run in the participant's mother tongue. One person commented that she would have like to experience it in French.

Participants at Company #2 (Group 1). There were 11 participants, 10 males and one female present, ranging in age from 46 to 60. The only female participant was a spouse of one of the employees.

Corresponding with Table 15, 63% were in somewhat agreement with understanding the challenges facing them in retirement. For statement #2, 54.5% were somewhat in agreement with what information they needed to collect for retirement. Only 45.5% knew somewhat where to collect the information and 54.5% were somewhat in agreement with how to find the information. In this group, the majority disagreed that the thought of retirement caused anxiety and no one could totally agree on the following: that they were prepared for retirement, in control of collecting the information needed, or able to envision

retirement. Half the group could somewhat agree that they were in control in

terms of collecting the information needed.

Pre-test for Company #2 Group #1				
Statements N=11	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement. N=11	0	18.2% (2)	63.6% (7)	18.2% (2)
2. I understand what information I need to collect to prepare for retirement. N=11	27.3% (3)	9.1% (1)	54.5% (6)	9.1% (1)
3. I know where to collect this information. N=11	18.2% (2)	36.4% (4)	45.5% (5)	0
3. I know how to collect it. N=11	18.2% (2)	27.3% (3)	54.5% (6)	0
5. The thought of retiring causes me some anxiety. N=11	27.3% (3)	36.4% (4)	27.3% (3)	9.1% (1)
1. It is the preparation for retirement that is causing me some concern. (3 blank answers) N=8	0	37.5% (3)	37.5% (3)	25.0% (2)
7. I am prepared for retirement. (3 blank answers) N=8	25.0% (2)	37.5% (3)	37.5% (3)	0
8. I feel in control in terms of collecting the information I need. (3 blank answers) N=8	25.0% (2)	25.0% (2)	50.0% (4)	0
9. I can envision what it is like to be retired. (3 blank answers) N=8	25.0% (2)	37.5% (3)	25.0% (2)	0
10. I have a list of things to do to prepare for retirement. N=9 (3 blank answers)	37.5% (3)	25.0% (2)	25.0% (2)	12.5% (1)

Table 15. Depiction of the percentages for pre-test responses

After experiencing the simulation, 54.5% could somewhat agree that they

understood the challenges facing them in retirement, where to collect the

information and how to collect it, with the overall effect causing some

anxiety.(See Table 16) The statements covering what information was needed,

the thought of retirement causing anxiety, feeling in control and finally envisioning

retirement , all scored 45.5%. There was not general agreement that they knew how to collect the information, the thought of retirement causing anxiety, they were prepared for retirement or that they felt in control of collecting the information.

Post-test for Company #2 Group #1				
Statements N=11	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement.	0	27.3% (3)	54.5% (6)	18.2% (2)
2. I understand what information I need to collect to prepare for retirement.	0	36.4% (4)	45.5% (5)	18.2% (2)
3. I know where to collect this information	9.1% (1)	27.3% (3)	54.5% (6)	9.1% (1)
4. I know how to collect it.	9.1% (1)	36.4% (4)	54.5% (6)	0
5. The thought of retiring causes me some anxiety.	18.2% (2)	36.4% (4)	45.5% (5)	0
6. It is the preparation for retirement that is causing me some concern.	9.1% (1)	18.2% (2)	54.5% (6)	18.2% (2)
7. I am prepared for retirement.	27.3% (3)	36.4% (4)	36.4% (4)	0
8. I feel in control in terms of collecting the information I need. (1 blank answer)	9.1% (1)	45.5% (5)	45.5% (5)	0
11. (9[i])I can envision what it is like to be retired (2 blank answers)	9.1% (1)	9.1% (1)	45.5% (5)	36.4% (4)
14.a(10[ii]) I have a list of things to do to prepare for retirement. . (8 blank answers)	0	0	100% (3)	0

Table 16. Illustration of percentages for the post-test responses.

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[i] Statement #11 is #9 in the Pre-test.
[ii]Statement #14 is #10 in the Pre-test.

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The combined scores indicated a decline of 11.1% in understanding the challenges from 81.8% to 72.7%, as shown in Table 17. Understanding what to collect and how to collect the information remained constant at 63.6% and 54.5%, respectively. There were increases in knowing where to collect the information (from 45.5% to 63.6%), the thought of retirement (36.4% to 45.5%) and the preparation causing some concern(62.5% to 72.7%). A drastic change was in the ability to envision retirement , with 37.5% before and 90.9% after experiencing the simulation game. Creating a "to do" list scored the same with 37.5% before and 100% after the simulation encounter.

Combined Responses for test scores at Company#2, Group 1				
Statements	Negative Pretest	Negative Post test	Positive Pretest	Positive Post test
1. I have an understanding of the challenges facing me in retirement.	18.2%	27.3%	81.8%	72.7%
2. I understand what information I need to collect to prepare for retirement.	36.4%	36.4%	63.6%	63.6%
3. I know where to collect this information	54.5%	36.4%	45.5%	63.6%
4. I know how to collect it.	45.5%	45.5%	54.5%	54.5%
5. The thought of retiring causes me some anxiety.	63.6%	54.5%	36.4%	45.5%
6. It is the preparation for retirement that is causing me some concern.	37.5%	27.3%	62.5%	72.7%
7. I am prepared for retirement	62.5%	63.5%	37.5%	36.4%
8. I feel in control in terms of collecting the information I need.	50%	54.5%	50%	45.5%
9./11(') I can envision what it is like to be retired.	62.5%	18.2%	37.5%	81.8%
10./14("). I have a list of things to do to prepare for retirement.	62.5%	0	37.5%	100%

Table 17. Comparison of positive to negative scores for the pre and post-test.

[i] Statement #11 is # 9 in the Pre-test. ii Statement #14 is #10 in the Pre-test.

Additional statements posed to the participants provided us with positive information that 90.9% of the participants learned more as a result of hearing questions from three other people.(See Table 18) The simulation encouraged 90.9% of the participants to change their way of thinking.

Participants were somewhat in agreement at 81.8% that the questions in the simulation were thought provoking and 54.5% indicated that it was easier to deal with some issue as part of the simulation. As a result of experiencing the simulation 72.7% of the participants were feeling somewhat in control. There were 77.7% who did not have a "to do" list before and could produce one after experiencing the simulation game.

Additional post-test results for Company #2 Group #1				
Statements N=11	Disagree	Somewhat disagree	Somewhat Agree	Agree
9. The questions in the simulation were thought provoking N=11	0	9.1% (1)	9.1% (1)	81.8% (9)
10. It was easier to deal with some issues because they were presented as part of a simulationN=11	0	9.1% (1)	36.4% (4)	54.5% (6)
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. N=11	0	9.1% (1)	54.5% (6)	36.4% (4)
13. In part 2, the discussion with the full group provided me with additional information. N=11	0	18.2% (2)	36.4% (4)	45.5% (5)
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now.(2 blank answers) N=9	0	0	22.2% (2)	77.78% (7)
15a The simulation game encouraged me to make changes to my way of thinking N=11	0	9.1% (1)	81.8% (9)	9.1% (1)
15b. As a result of experiencing the simulation, I feel more in control of what I have to do to prepare for retirement. N=11	9.1% (1)	9.1% (1)	72.7% (8)	9.1% (1)

Table 18. Additional post-test statements.

Overall the participants would definitely recommend the simulation game to all three categories.(See Table 19) One person did not recommend it to colleagues.

16. I would recommend this simulation to:	Yes	No
a. family members N=11	100%	0
b. friends N=11	100%	0
c. colleagues N=11	90%	10%

Table 19. Recommendations of the simulation game to other people.

Participants at Company #2 (Group 2)

This group consisted of 15 French speaking participants, 11 males and four females present ranging in age from 46 to 60. Only one female participant was a spouse of one of the employees. The remaining three females were participants of the company. When the data collected was calculated using a Pairwise Difference and then the Wilcoxon Sign Test, only one statement indicated a significant result. This statement # 1 "I have an understanding of the challenges facing me in retirement." had a P-value of .009 when the group was divided by age and only for those 51-55 years of age.

As seen in Table 20, when it came to understanding the challenges facing them, 46.7% were somewhat in agreement while 33.3% were in agreement. Only 33.3% were in agreement that they could understand what was needed to collect and the same percentage were somewhat in agreement. No one was in agreement that they knew how to collect the information and 60% were

somewhat in agreement. Fifty percent of the group were somewhat able to

produce a "to do" list to prepare for retirement.

Pre-test for Company #2 Group 2				
Statements N=15	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement. N=15	0	20.0% (3)	46.7% (7)	33.3% (5)
2. I understand what information I need to collect to prepare for retirement. N=15	6.7% (1)	26.7% (4)	33.3% (5)	33.3% (5)
3. I know where to collect this information. N=15	13.3% (2)	40.0% (6)	40.0% (6)	6.7% (1)
4. I know how to collect it. N=15	6.7% (1)	33.3% (5)	60% (9)	0
5. The thought of retiring causes me some anxiety. (1 blank answer) N=14	28.6% (4)	35.7% (5)	21.4% (3)	14.3% (2)
6. It is the preparation for retirement that is causing me some concern. N=15	33.3% (5)	13.3% (2)	40% (6)	13.3% (2)
7. I am prepared for retirement. N=15	20% (3)	26.7% (4)	33.3% (5)	20% (3)
8. I feel in control in terms of collecting the information I need. (1 blank answer) N=14	7.2% (1)	50% (7)	28.6% (4)	14.3% (2)
9. I can envision what it is like to be retired. N=15	13.3% (2)	33.3% (5)	13.3% (2)	40% (6)
10. I have a list of things to do to prepare for retirement. (1 blank answer) N=14	14.3% (2)	7.14% (1)	50% (7)	28.6% (4)

Table 20. Depiction of percentages for pre-test responses.

After the simulation 60% were somewhat and 33.3% were in agreement

that they understood the challenges facing them in retirement (See Table 21).

No one was in disagreement regarding their understanding the challenges and

what information to collect. For the statement, "the thought of retirement causing

anxiety", 57.1% were somewhat in agreement while 14.3% were in agreement. Half the group could envision retirement after experiencing the simulation.

Post-test for Company #2 Group 2				
Statements N=15	Disagree	Somewhat disagree	Somewhat Agree	Agree
1. I have an understanding of the challenges facing me in retirement. N=15	0	6.7% (1)	60% (9)	33.3% (5)
2. I understand what information I need to collect to prepare for retirement. N=15	0	20% (3)	40% (6)	40% (6)
3. I know where to collect this information. N=15	6.7% (1)	46.7% (7)	33.3% (5)	13.3% (2)
4. I know how to collect it. N=15	13.3% (2)	26.7% (4)	46.6% (7)	13.3% (2)
5. The thought of retiring causes me some anxiety. (1 blank answer) N=14	14.3% (2)	14.3% (2)	57.1% (8)	14.3% (2)
6. It is the preparation for retirement that is causing me some concern. N=15	13.3% (2)	33.3% (5)	40% (6)	13.3% 2)
7. I am prepared for retirement. N=15	20% (3)	33.3% (5)	26.7% (4)	20% (3)
8. I feel in control in terms of collecting the information I need. N=15	20% (3)	20% (3)	40% (6)	20% (3)
11. (9')I can envision what it is like to be retired (1 blank answers) N=14	7.1% (1)	14.3% (2)	28.6% (4)	50% (7)
14. (10''')Did you have a "to do" list for retirement before playing the game? If no, then can you create a "to do" list? (8 blanks answers) N=3	0	0	100%	0

Table 21. Illustration of percentages for post-test responses.

The combined scores of "somewhat agree" and "agree" showed an increase in the understanding the challenges in retirement from 80% to 93.3%

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[i] Statement #11 is # 9 in the Pre-test
[ii] Statement #14 is #10 in the Pre-test.

which is an increase of 17%.(See Table 22) A greater increase occurred

regarding understanding what information to collect, which changed from 66.6%

to 80% with an increase of 20%.

The areas that remained unchanged are knowing where and how to collect the

information. The preparation for retirement also remained the same at 53.3%.

There was a 12.4% decrease in participants being prepared for retirement after

the simulation game. Yet 60% felt in control in terms of collecting the information

after the experience and 42.9% before. Fewer participants (50%) could write a

"to do" list after the simulation game than before (78.6%).

Combined Responses for test scores at Company #2 Group 2				
Statements	Negative Pretest	Negative Post test	Positive Pretest	Positive Post test
1. I have an understanding of the challenges facing me in retirement.	20%	6.7%	80%	93.3%
2. I understand what information I need to collect to prepare for retirement.	33.4%	20%	66.6%	80%
3. I know where to collect this information	43.3%	53.3%	46.7%	46.7%
4. I know how to collect it.	40%	40%	60%	60%
5. The thought of retiring causes me some anxiety.	64.3%	28.6%	35.7%	71.4%
6. It is the preparation for retirement that is causing me some concern.	46.6%	46.7%	53.3%	53.3%
7. I am prepared for retirement	46.7%	53.3%	53.3%	46.7%
8. I feel in control in terms of collecting the information I need.	57.1%	40%	42.9%	60%
9./11[i] I can envision what it is like to be retired.	46.7%	21.4%	53.3%	78.6%
10./14[ii]. I have a list of things to do to prepare for retirement.	21.4%	50%	78.6%	50%

Table 22. Comparison of combined positive to negative scores for pre / post-test

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[i] Statement #9 in the Pre-test is #11 in the Post-test.

[ii] Statement #10 in the Pre-test is #14 in the Post-test.

The additional statements provided some interesting information (See Table 23).

Sixty percent of the participants thought the simulation was thought provoking

and for 53.6% it was easier to deal with some issues because they were

presented as part of a simulation. For the statement, "The discussion with the

full group provided me with additional information", the results showed that

58.3% were somewhat in agreement with only25% in agreement. Forty-six

percent felt more in control as a result of experiencing the simulation game.

Additional Post-test results for Company #2 Group 2				
Statement N=15	Disagree	Somewhat disagree	Somewhat agree	Agree
9. The questions in the simulation were thought provoking. N=15	6.7% (1)	6.7% (1)	26.7% (4)	60% (9)
10. It was easier to deal with some issues because they were presented as part of a simulation. (2 blank answers) N=13	0	15.4% (2)	30.7% (4)	53.6%
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. (1 blank answer) N=14	0	7.1% (1)	50% (7)	42.9% (6)
13. In part 2, the discussion with the full group provided me with additional information. (3 blank answers) N=12	0	16.7% (2)	58.3% (7)	25% (3)
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (1 blank answer) N=14	7.1% (1)	14.3% (2)	35.7% (5)	42.9% (6)
15a The simulation game encouraged me to make changes to my way of thinking. (1 blank answer) N=14	14.3% (2)	7.1% (1)	50% (7)	28.6% (4)
15b. As a result of experiencing the simulation, I feel more in control of what I have to do to prepare for retirement. (2 blank answers) N=13	7.7% (1)	15.4% (2)	30.8% (4)	46.2% (6)

Table 23. Additional statements beyond the pre-test/post-test.

Here, again, Table 24 shows that the participants would recommend the

simulation game to all three categories. One person did not respond and the

remaining two would recommend it to friends or to colleagues and friends only.

16. I would recommend this simulation to:	Yes	No
a. family members	92.3%	7.7%
b. friends	100%	0
c. colleagues	100%	0

Table 24 Recommendations for the simulation game to other people.

Additional comments. After the session was over, two participants came to tell us two issues on their minds: 1) the simulation provided an excellent opportunity to learn cooperatively. The table that they shared had a wealth of information that they would have like to have a longer exposure. 2) For this reason the simulation should have taken another two hours to cover all that they wanted. In contrast, one commented that there was too much discussion for each question. Another one recommended a more accurate color match between the squares on the game board and the question cards.

To look for any trends across the different groups, a table comparing the combined positive results for each question has been created.

Table 25 shows the following results. There was a definite culture difference between the two companies. The need for international information beyond the scope of the simulation game may have affected how the simulation game was viewed for company #1. The three groups in company #2 had similar reactions to the simulation game. The Implementation group and Group #1 had a better grasp at 100% each being able to write a "to do" list compared to company #1 and company #2 Group #2 with scores of 47.8% and 50%, respectively . Company#1 (33.3%) was not concerned about the preparation for retirement compared to 72.7% for group #1 and 53.3% for group #2 were.

Statements	Company #1 N=24	Company #2		
		Implementation Group N=7	Group #1 N=11	Group #2 N=15
1. I have an understanding of the challenges facing me in retirement.	79.2%	100%	72.7%	93.0%
2. I understand what information I need to collect to prepare for retirement.	62.5%	85.7%	63.6%	80.%
3. I know where to collect this information	29.2%	57.1%	63.6%	46.7%
4. I know how to collect it.	29.2%	71.4%	54.6%	60%
5. The thought of retiring causes me some anxiety.	37.5%	85.7%	45.5%	71.4%
6. It is the preparation for retirement that is causing me some concern.	33.3%	42.9%	72.7%	53.3%
7. I am prepared for retirement	54.2%	42.9%	36.4%	46.7%
8. I feel in control in terms of collecting the information I need.	37.5%	42.9%	45.5%	60%
9./11[i] I can envision what it is like to be retired.	68.2%	71.9%	81.8%	78.6%
10./14[ii]. I have a list of things to do to prepare for retirement.	17.5%	100%	100%	50%
9. The questions in the simulation were thought provoking	82.7%	85.7%	90.9%	86.7%
10. It was easier to deal with some issues because they were presented as part of a simulation.	68.2%	85.8%	90.9%	84.3%
12. In part 1, I learned more as a result of hearing the questions from the other people at my table.	52.2%	71.5%	90.9%	92.9%
13. In part 2, the discussion with the full group provided me with additional information.	36.4%	85.7%	81.8%	83.3%
14b . I did not have a "to do" list for retirement before playing the game, I can make a list now.	62.5%	100%	100%	78.6%
15a The simulation game encouraged me to make changes to my way of thinking.	47.6%	100%	90.0%	78.6%
15b. As a result of experiencing the simulation, I feel more in control of what I have to do to prepare for retirement.	N/A	N/A	81.8%	77.%

Table 25. Comparison across all groups by statements.

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[i] Statement #11 in the Post-test is #9 in the Pre-test.
[ii] Statement #14 in the Post-test is #10 in the Pre-test.

Facilitator #1. While the simulation was being run in company #1, the independent facilitator took notes. After the session feedback was given to the author. This information proved to be very useful and was incorporated into the session offered at Company #2.

At the beginning of the lunch-time session a more complete explanation is needed to situate the simulation. The facilitator recommended asking the audience how many participants were ready for retirement on a scale from one to ten, with ten being the best. Then the facilitator would ask those individuals who considered themselves a 10 to raise their hands. The number of raised hands would be counted. Then ask for those who evaluated their preparedness as 'nine' to give a show of hands and so on. Participants would see that they are not alone in their state of preparedness or lack of preparedness depending on the case.

Then continue to explain how the idea for the simulation came about as a result of organizing retirement sessions at one organization for seven years. This previous experience showed the author that most people are not aware of what is needed to plan for retirement and they cannot imagine what this change in status would be like. Also, they do not know where to start preparing for their retirement. The simulation was created to assist with the preparation.

Then Figure 1 should be shown to explain how the simulation fits into retirement planning and that while the simulation is being run, the players are pretending to be retired while sorting through the various questions. This temporary change in status would teach them that the situations they will deal

with on a daily basis are no different once they are retired. The simulation would provide a slice of reality with a safety net (Zukerman, 1973).

Next the objective of the simulation should be explained. This is to collect a set of individually selected questions to use for research purposes later. Then the simulation board should be shown to demonstrate how to proceed. This independent facilitator felt that the players would have a clearer idea if they were to see and hear the different steps rather than just hear the explanation. By seeing the different squares on the board, *Start, Finish, Free Choice, New Topic* and the different sections on the place mats, the players could proceed more quickly. This suggestion would benefit participants by hearing and seeing the how the game runs. Consequently, the facilitator would not have to spend as much time with each group clarifying issues.

Finally, an explanation about the research being conducted should be given to the group before the simulation was started. Each player signed the consent form and then completed the pre-test. They were both placed in the individual envelopes provided for them. An explanation was given regarding the post-test being completed at the end. Finally, a full list of questions was handed out before everyone left. This way no one had to write down any of the questions because that had been done for them.

Facilitator #2. A second facilitator was present at a session for initiation. While he was present he was able to observe what was on-going. He noticed tour people in particular and them to gage how the session unfolded.

One person was in a poor mood when he arrived at the session. Another person appeared to be a cynical at the beginning of the session. A third person commentated that he was not sure why he needed to experience the simulation game and not just receive a list of questions. The fourth person was very jovial and quite outspoken.

The facilitator noticed that the man in a poor mood, left in an upbeat almost happy mood. The second person did leave a bit less cynical and said that the enjoyed the session. It was observed that during the simulation game he participated actively. The third person said that he realized the value of the simulation and his only problem with retirement that he did not have sufficient funds. The fourth person actively participated and makes many comments through out the discussion period. While the game was running he enjoyed the experience so much he moved the other players pieces back many squares when they left the table. He said that in this way he could play longer.

SME:Company #1. In general, the comments were positive from the participants. In particular it was felt that more time was needed to discuss questions. The participants commented the discussion period was too short. In fact, the organizer suggested stopping the simulation after a few questions were read out loud, then let each group select a few choice questions to discuss as a group.

At the retirement planning session the following week many people had brought a copy of the questions handed out at the lunch time session. The exact number is not known as no one counted the number of people who had copies.

At that time, comments were made to the organizer during the subsequent retirement session that the lunchtime session was helpful.

When asked if the organizer would recommend the simulation to organizers at other organization, the response was "definitely yes, but not unconditionally". It would be useful for organizations that run comparable retirement planning sessions. The discussion period should be interspersed with the running of the simulation to allow individuals to gain some insight into different answers. The simulation serves as an interesting way to start a retirement program.

SME: Company #2. (Implementation Group). The two organizers had similar comments regarding the reactions to the simulation. One commented that it served as an excellent icebreaker. She observed when the participants first sat in groups, they did not know each other, their body language was stiff and they communicated to each other in a polite somewhat formal manner. After the simulation was underway for a period of time, the stiff in the shoulders and backs seemed to go away. Jokes were being told and lots of laughter could be heard.

The organizer wanted to repeat the session for the larger groups scheduled for April without the post simulation discussion period the way it was designed. The discussion period should cover the notion of how the questions should be used to prepare the participants for the 30-hour seminar. It was felt that the simulation should be run a week before their full 30-hour program. This would allow participants time to evaluate their sorted questions and to take

ownership of them. The organizer felt that after the simulation the participants would be better prepared to create their own questions and this extra time would provide them with the time to do so.

Financial Planners: There were financial planners from two separate institutions. The first group interviewed was as a dyad with an extra person dropping for a short period of time.

For Financial Planners #1, the dyad proved to be very interesting as one individual would build on the comments of the other. One financial planner felt that the simulation should have a competitive component to it then the male population would be more inclined to participate. The female financial planner did not feel that this was so. She commented that most clients do not want to figure out what they need to prepare for retirement. This simulation has a list of questions that has done most of the legwork for them. She did comment that should an audience in one of her presentations have experienced the game, they would be better prepared to ask questions. She did say that perhaps she would have to work harder to answer those queries.

Financial Planner #2 felt that company employees would be interested to participate within five years of retirement. He commented that if they were more than 5 years from retirement they might not be interested. Of course financial issues should be dealt with earlier. The simulation game could serve to meet the employees needs within companies. It would help the organizer within a company to meet their social responsibility and have staff retire successfully.

When asked if he would use this type of product, he answered by saying that he does not do the type of work that would benefit from a simulation. He did go on to say that financial planners who are involved in retirement planning would profit from using this tool. When asked if financial planners would share the idea of the simulation with other financial planners he answered by saying that financial planner do not tend to share with each other, especially as this would be considered as a special feature that other planners do not have. Therefore, they would keep the information about the existence of such a simulation to themselves. He commented that it would be a good tool to get the retirement planning process going and to enlarge the pool of clients.

When asked if the attendance at the lifestyle component of a retirement planning session would be higher as a result of experiencing the simulation game, he answered affirmatively. He said that as a result of the simulation game the participants would be better prepared to ask more directed questions to the professionals. He did feel that this would be a useful tool for those who are lacking knowledge in financial matters. His hesitation is that this is a jigsaw puzzle with no picture and no context to in which to work. It would be good if the financial planner had visuals to improve the context. When asked if there were areas that needed improvements, he offered to provide additional questions to the investment section. His additional comments were that this simulation would be a terrific tool for a lot of financial planners. It would be useful for finding new prospects. It would also be good for new retirees as part of a social event.

CHAPTER 6

Discussion

This instructional tool, designed to lay the foundation for retirement

planning, provided a new and interesting opportunity for participants to prepare

themselves for a retirement seminar offered by their respective companies.

Following the Weston et al. model (1995), the discussion section refers to

each level of evaluation conducted. This will include participants, facilitators,

organizers, financial planners and the director of the Dobson Centre. The

strengths and weakness will be revealed. This section addresses the questions

posed in Chapter 4, in the appropriate sector to which it applies.

Participants and Roles

In this section the participants played the roles of novices, evaluators and

critics of the simulation game. The strengths and weaknesses revealed from the

data collected highlighted. The global questions that will be addressed are:

Does it reduce the anxiety of the participants?

Does it make them feel more in control?

Strengths. According to (Jackson, 1991) one purpose of simulation game

is to create a sense of realism. The simulation game RetireWise provided

realism by giving the opportunity for participants to pretend to be retired,

experience the questions posed and evaluate how prepared they are for

retirement.

The results show that at company #1, 52.2% agreed with the above

statement. The Implementation Group at company #2 agreed only 42.9%, while

36.4% of Group 1 were in agreement and 46.7% were in agreement for Group 2. The results showed that the participants at company #2 were not prepared for retirement. The strength in this simulation is providing the participants with a dose of reality without the risks of actually being retired while unprepared. They still have time to rectify the situation by attending a company retirement seminar with professionals presenting on the various pertinent issues. Thiagarajan and Stolovitch(1978) refer to this as contrivance and correspondence where the participants see or experience reality without risks.

Perhaps the participants in company #1 were more prepared because the terms of their employment require them to retire by age 60 to 62 years of age depending on their start date. Company #2 is not an international institution and does not have mandatory retirement thus making the individual retirement date nebulous.

Another example of how the simulation game injects realism is the fact that the questions were thought provoking. All four groups responded with 82.7% and over that in agreement.

Another way of looking at the thought provoking aspect of the simulation game is that it serves as a pre-instructional activity, according to Brant et al (1991) highlighting misconceptions that might retard learning and supplying an organizing structure for receiving new material. This pre-instructional activity serves as a needs assessment for the participants. Kaufman contends that when the participants as stakeholders are actively involved they are empowered by emphasizing the end product, a well planned retirement.

The participants also felt that it was easier to deal with some issues because they were presented as part of a simulation. I would project that the second purpose of the simulation game playability, is in effect here. The simulation game is light-hearted, non-threatening and therefore serious questions and issues can be addressed without making the participants uncomfortable. Playability supports Jackson's theory (1991) and Garry Shirts (04/14/99 15:23; 25) on the important components of a successful simulation.

Two questions posed in the Methodology section were: 1. Does it reduce anxiety of the participants? 2. Does it make them feel more in control of preparing for retirement?

Does it reduce anxiety of the participants? There are two statements in the questionnaire that deals with anxiety. These are statement #5, "The thought of retirement causes me some anxiety" and statement #6, "It is the preparation for retirement that is causing me some concern." The responses were not consistent among the groups. Group 1 and Group 2 at company #2 had high scores at 85.7% and 71.4%, respectively. This may be explained by the realism of the simulation that points out how unprepared many participants are. In contrast, participants at company #1 and the Implementation group at company #2 had low scores regarding anxiety at 37.5% and 45.5% agreement respectively.

For the Implementation group, the thought of retirement itself caused anxiety but not the preparation for retirement. For Group 2 both issues caused anxiety. From the results the author can speculate on different causes. The

realism in the simulation game points out to the participants their lack of preparedness. This realization could cause some anxiety. In contrast those participants with low scores could be as a result of the simulation game assisting them by organizing their thoughts. This represents an example of Mayer & Bromage (1980) idea of an advanced organizer that is a stimulus presented prior to learning and contains a system for logically organizing the incoming information into a unified structure.

The second question posed in the Methodology section is "Does it make them feel more in control?" Statements #8 and 15b address this issue. Statement #8 states "I feel in control in terms of collecting the information I need." Statement 15b reads " As a result of experiencing the simulation I feel more in control of what I have to do to prepare for retirement." Here again the results are split for statement #8. Company #1, the Implementation group and Group 1 at company #2 scored 37.5%, 42.9% and 4F 5% respectively. Group 2 agreed with the statement at 60%. Only Group 1 and 2 at Company #2 had an additional statement #15b in their Post-test questionnaires. Both groups scored 81.8% for Group 1 and 77.0% for Group 2. One interpretation of this is that the participants took ownership of their retirement. This empowerment follows Kaufman's ideas about needs assessments that concentrate on the end product.

Another interpretation of these results supports individual accountability. Johnson and Johnson (1997) stated that one of the four components of cooperative learning is individual accountability. When accountability happens,

the participants may feel more in control of their future. The objectives of the simulation game outlines the process of what should be accomplished by the end of the two-hour experience. Participants realize that retirement planning is an individual endeavor that can not be provided by any one person or one institution. Keeping the spouses separated forced the partners to think independently. They would then choose to discuss the results after the experience. When this idea was first presented they looked puzzled but after the experience they agreed with this method. This notion supports Johnson and Johnson's idea of individual accountability (cited in Aronson and Patnoe, 1997). They become conscious of what information is needed to retire helping them realize what they don't know. Consequently, they do not feel in control of their present preparations for retirement.

Following the idea of cooperative learning the participants stated that they learned more as a result of hearing the questions from the other people at the table. An interesting note is that the scores seem to increase the more the simulation game was used. The participants at company #1 agreed with this statement 52.2% while company #2 showed a stronger response. The participants in the Implementation Group indicated that 71.5% agreed, while Group 1 showed 90.9% and Group 2 92.9% in agreement with the idea.

Working in groups can serve as a cooperative exercise. Individuals are working on their own situations but learn from and support each other in assimilating the new material presented as suggested by Abrami et al (1995), Johnson and Johnson (1991) Aronson and Patnoe (1997). This form of

instruction increases morale, confidence and interest. I observed that, generally speaking, the participants were engaged with the simulation. There were lots of conversations at the different tables accompanied by plenty of laughter. This appeared to help develop interpersonal and small groups skills. Some participants did not want the game to end so soon. Several groups were having a good time and were not in a rush to finish. Two participants came to tell the author and the French speaking facilitator that they thoroughly enjoyed themselves and their only complaint is that they did not have sufficient time playing the simulation game. They would have liked to have another hour or two because the group they were with had such useful information to share. One man in Group 1 was in a very negative frame of mind when he arrived for the 2-hr session. During the simulation game he became involved. When he was ready to leave after the session, he was in a positive, happy mood. The author, the French facilitator and the organizer noticed this change in his mood.

Does it serve as an icebreaker? The majority of the participants liked the simulation. During the experience, there was a lot of laughter heard through out the simulation in all four groups (company #1, company #2, Implementation, Group 1 Group 2). In this respect the simulation game served as an icebreaker. By the end of the session, the participants were relaxed with each other and generally seemed to enjoy each other's company. In the case of Group #2 in Company #2, two participants found their counterparts at their table very informed and the exchange of information proved so useful that they did not want

to end the session. They brought this lack of sufficient time to the author's attention.

From an instructional design point of view the simulation was successful in breaking down a complex problem, preparing for retirement, into a simplified version of the problem by breaking the issues into individual questions. (Forssén-Nyberg, Kutilainen, Luhtala, Pahkala, 04/14/99 15:23;25).

The simulation game also uses Keller's ARCS model where the attention of the participants is captured. It is relevant because the simulation game is about each participant planning a successful retirement. It may develop some confidence for them. For Groups 1 and 2 in company #2, the participants agreed 81.8% and 77% that as a result of experiencing the simulation, they feel more in control of what they have to do to prepare for retirement. Confidence comes when participants feel in control and have a sense of what they want to achieve. The list of questions helps them determine what it is that they want in their retirement. There is a certain sense of satisfaction that they have experienced the simulation game. They have witnessed some people who know more than they do and then are others who knew less. Just as there will be some who are more prepared for retirement, in contrast there will be others who are less prepared.

Weaknesses. The group discussion for Company #1 as delivered it was not useful for the participants, possibly too short and not specific to their needs for international information. The simulation game did not encourage this same group to make changes to their way of thinking.

One participant stated that "it was a waste of time (in the form of a game)" which confirms Charles Petranek's findings that not all students relish this type of experience (Seay, 1997).

The simulation game did not provide a means to outline where and now to find the information. In this respect the simulation game, especially the introduction and the discussion did not assist the participants in addressing these issues.

Facilitators

In this section the question to be addressed is: Does the simulation function as an effective icebreaker? From the observations made by the two facilitators the author cannot comment on the first facilitator's views because no comments were made regard this issue. The second facilitator noticed how the participants reacted to the experience. In fact, the individual who arrived at the session in a poor mood and left in an upbeat mood caught his attention as did the other three men with strong opinions. These observations were discussed after the session and he commented that everyone appeared to have enjoyed themselves. The experience served as an effective icebreaker.

The recommendation by the first facilitator to include a question in the introduction to ask how many participants are prepared for retirement is another form of informal needs assessment. It also lays the foundation to develop a discussion session post simulation. During that time the question could be posed again and everyone would witness the responses. The group would learn from each other that some people think that they are prepared then as a result of the

simulation realize that they are not. Others will feel that they are more prepared than they thought. Johnson and Johnson(1997) would refer to this as positive interdependence when participants share their experiences to complete a task.

Weaknesses. Facilitator #1 found the introduction session when the rules of the simulation were explained to be weak. Not enough explanation was given to anchor the situation and make participants realize what it was all about. Without a clear context, the session was not meaningful learning as Bruner (1951) recommended that learners need to know what they will learn.

Organizers

In this section the following three questions will be addressed: These are:

- Does the simulation game function as an effective icebreaker?

- Do the organizers find that it would enhance their retirement seminars?

- Does it provide a means to prepare questions for the participants to use at a retirement seminar?

Does the simulation game function as an effective icebreaker?

The organizers in both companies felt that the simulation game served as an appropriate icebreaker. This follows Brant et al (1991) theory that the simulation should be used as an introductory activity when the subject matter is "inherently complex and the instructional goal was application" (p 479). The organizer at Company #1 was pleased with the results. She does consider the simulation to enhance the retirement seminar and will consider using this activity again next year. The only concern was the scheduling of an attractive time to ensure maximum attendance.

With Company #1 the discussion period was truncated to 10 minutes. The comments received pointed out that the discussion period was too short. More people should be encouraged to answer the questions. The full discussion period provided additional information for all three groups at company #2. This enhancement supports interdependence aspect of cooperative learning where each person brings information to the group and enriches the experience. (Johnson and Johnson, 1997).

With the implementation group at Company #2, there were too few people and a language barrier that hampered the discussion. It became apparent that the language barrier affected not only the non-English speaking person but those who did understand English as well. Those who did not understand French missed out on the conversation and became frustrated just as the English-speaking participants did when the conversation was in French. The pace was much slower and the participants became restless.

During the retirement seminars at company #2, the simulation game was the first activity on the agenda. The organizer was present on and off during the session. She commented that the participants appeared to be having a good time. She was interested to see the contrast between those who experienced the simulation and those who did not attend the session. During the sessions that followed the simulation game she planned to remind the participants that there had been a simulation game prior to the start of the 30-hour seminar. She felt that this was important for all to know in case it was referred to during the

question and answer section at one of the presentations. She did not want anyone who did not attend the simulation game to feel left out.

Do the organizers find that it would enhance their retirement seminars?. A questionnaire will be created by the organizer to determine what participants thought about how the simulation game affected their preparation for and success at the company retirement seminar. This questionnaire will be administered on the last day of the seminar.

Financial Planners

One Financial Planner felt that there should be an obvious challenge in completing the simulation in keeping with Thiagarajan and Stolovitch (1987) characteristics of a simulation game. This notion was incorporated into the introductory instructions. The challenge exists and it is for each person to sort or select a useful set of questions that they need to research. Such an explanation had been added to the introduction for company #2 Groups 1 and 2 to ensure that the challenge was well situated.

Does it provide a means to prepare questions for participants to use at a retirement seminar?

The dyad of financial planners commented that the list of questions in the simulation game provided a very good start for the target audience preparing for retirement. One person in the dyad commented that most people either do not have the time or do not want to take the time to think of the areas they need to research. This simulation has done a lot of the work for them. The well-phrased

questions will assist them in preparing for a seminar supporting the Forssén-et al notion of breaking a complex problem into individual questions (04/14/99 15:23;25). The participants will be more comfortable asking questions during the seminar. In some ways this might make more work for the financial planners because they will have a more informed audience.

The second Financial Planner reviewed the questions and added more questions to the investment section. It adds credence to the simulation game and gives confidence to the author to know that this category is well covered. The other topics were written based on presentations by professionals and from research in different books, the Internet, newspapers etc.

The organizer at company #2 made an interesting observation *"If the simulation part were to be condensed then fewer people (three) should sit around the table, and for longer discussion and playing* time have four to six people."
Do organizers find that it would enhance their retirement seminars?
Would financial planners want to incorporate this tool into their existing seminars offered to corporations?

Both Financial Planners felt that the simulation game would enhance retirement seminars and would be a useful tool for financial planners. The president of the national company was interested in incorporating the simulation into the tool of activities offered to financial planners across Canada. Another financial planner commented that it would also be useful for different church and community groups.

Director of the Dobson Entrepreneurial Centre

Strengths. The Director's comments confirmed that the simulation game

had a good design. By meeting the needs of the target audience, the objectives

for the simulation game are met. These objectives are

- Objective #1: Participants will realize that retirement planning is an individual endeavor and cannot be provided by any one person or institution.

- Objective #2: Participants will become conscious of what information is needed to retire, verbalize concerns, to seek validation from others on what each person knows and does not know.

- Objective #3:Participants will gain confidence that they do have knowledge and understanding of some aspects of retirement planning.

For objective #1, participants realized that the planning is individual

because each person had a different pile of questions on their placements.

For objective #2, participants commented on their Post-tests that they

understood what information they needed to collect to prepare for retirement.

Company #1 and Group 1 of company#2 had moderate agreements at 62.5%

and 63.6% while the remaining two groups showed a stronger agreement at

85.5% and 80%.

For objective #3 confidence of the participants is not as straight forward to

measure as the other objectives. Building confidence may occur through

understanding what is needed, feeling in control, envisioning retirement, knowing

where and how to collect information plus having a "to do" list to follow. The data

collected for all these areas shows that the majority of the groups scored over

50% for each issue. Only Group 2 in company #2 felt in control while the remaining groups had much weaker responses. Yet every group could envision their retirement and either did have a "to list" or could write one up as a result of the simulation.

Weaknesses. Before the simulation is ready to go to mass production, it must be test in many more companies to prove its value. While doing so additional improvements will come about. This process will increase the credibility of the simulation game.

Constraints of the Study

There were several types of constraints. For example, there was an issue of time. Company organizers were concerned about adding another component to their existing retirement seminar. They were not sure that staff would spend another evening engaged in a retirement activity. Spouses were invited to the retirement seminar and to participate in the simulation game although it was not compulsory. If spouses worked far away from the company employees then additional time would be needed for travel time. This late start might deter others from attending.

It was difficult to make companies aware of the existence of the simulation. Several weeks were spent telephoning company representatives to try to instill some interest in the simulation. It was not easy convincing them that it could be a useful tool. Some company representatives, who were interested in the product, did not receive permission from their department heads to allow their staff to be involved in the study.

When the author received permission from the two companies to run the simulation, it was not known until the very last minute how many participants would be participating in the activity. In fact at Company #1 there were far more participants than expected and even though extra questionnaires were made there were a few participants who did not receive a copy to fill out. The sample sizes for some of the groups were small and in the case of company #1, it became smaller than necessary due to insufficient questionnaires.

Data collection from participants was restricted to questionnaires prior to and right after experiencing the simulation. All four groups of participants did not seem to like completing the questionnaires. This may have affected the results. Follow up studies would be useful to determine their reactions to the simulation experience over time. Also, data collection with a control group would be useful to compare the different results

CHAPTER 7

Recommendations

Recommendations will be discussed in two sections: Improvements to the simulation game and future research. These improvements are based on the data collected from participants at the two companies, the various SMEs consulted and the Director of the Dobson Centre.

Improvements to the Simulation Game

There are three main areas that need improvement. These are the list of questions, the game board and the placemats.

List of questions. As the questions play a key part in the simulation game there is an ongoing need to research and improve them. It would be useful to have the "health" and "legal" topics reviewed by professionals. The sections on relationships should be expanded to include other issues regarding different types of relationships not contained in the list to date. Of course once this is done then the list will need to be continually updated to keep pace with the changes in the various topics.

Also the wording needs to be reviewed to ensure that each one can be sorted into the three categories provided. Additional questions should be added to adapt to different client needs. These could be added to the packages of questions as the situation requires. For example, at Company #1 if questions regarding living abroad were added this may have met their need for an international scope.

Both the introduction and the discussion section of the simulation game could involve the participants more. Some participants did not realize that a full list of questions would be distributed at the end of the session. Obviously this needs to be made clearer in the future.

The use of pre-test and post-test appeared to bother some individuals. No comments were made but there was some reluctance to complete the forms. If this activity could be integrated into the introduction and the discussion period so that the participants could compare their pre-test and post-test results for differences or similarities, then the participants may be more enthusiastic to complete the forms. They may be surprised at their answers as a result of experiencing the simulation game.

Game board. A professionally designed board with an improved layout would result in more squares or stones on the pathway. More squares or stones on the pathway would allow participants to be exposed to more questions and reduce the problem of having some groups finishing the game too quickly. Perhaps a new design would involve having the key with the icons placed differently so that a more winding pathway could be created.

Placemat. The headings for the sorting process need to be revised. Comments received from the participants pointed out that the three headings, *Questions to research, Questions taken care of* and *Not Applicable* were difficult to use at times. Perhaps more concise heading of *Complete, To do* and *Not applicable* should be considered.

Future research

Data collection. The statements numbers in the pre-test and post-test should match. This would be more efficient, it would save time and avoid possible errors.

Additional data would be advantageous to pinpoint ways that the simulation helps participants to prepare for a company retirement seminar. Collection of data could be in the form of interviews with participants. Some individuals react better to specific questions posed one on one. Others might speak more in a focus group. This would be conducted directly after the post simulation and again after they have attended the retirement seminar to determine if the series of questions did assist them in organizing their thoughts. It would also be useful to know if there were areas not covered in the list of questions provided with the simulation.

In contrast, it would be interesting to meet with other participants from a retirement seminar who did not experience the simulation game. It would be useful to be able to compare the two experiences and determine if there are any other areas which could be incorporated into the simulation game either in the form of questions or as part of the discussion period.

Another format for the simulation game would be on an Intranet where the various employees of a company could log onto a system. Individuals would go through the process at their workstation or from home. An individual would still

be moving around the game board with 3 other people and would witness different ways of sorting the questions. The Intranet would be created allowing three other people to log on the same board by company-specified criteria such as income, rank, education or interest. Data from previously games could be collected and presented in the form of comments or statistics. For example, comments from previous participants could be represented by different voices to benefit with cooperative learning. At the end of the game, the individual could get a print out of all the questions or he/she could select only those which need research. They could also include those questions which other people in their group drew.

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APPENDICES

Appendix A

Please check the boxes that apply to you.

☐ Male   ☐ Female

Age: ☐ 40-45   ☐46-50   ☐51-55   ☐56-60   ☐61-65

Choose the box that indicates the degree to which the statements reflect your thoughts.

1. I have an understanding of the challenges facing me in retirement.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

2. I understand what information I need to collect to prepare for retirement.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

3. I know <u>where</u> to collect this information.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

4. I know <u>how</u> to collect it.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

5. The <u>thought</u> of retiring causes me some anxiety.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

Please turn over

6. It is the <u>preparation</u> for retirement that is causing me some concern.

   ☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

7. I am prepared for retirement.

   ☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

8. I feel in control in terms of collecting the information I need.

   ☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

9. I can envision what it is like to be retired.

   ☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

10. I have a list of things to do to prepare for retirement.

   ☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

Any further comments are welcome:

_____

_____

_____

Thank you for taking the time to complete the form.

Choose the box that indicates the degree to which the statements reflect your thoughts.

1. I have an understanding of the challenges facing me in retirement.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

2. I understand what information I need to collect to prepare for retirement.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

3. I know where to collect this information.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

4. I know how to collect it.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

5. The thought of retiring causes me some anxiety.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

6. It is the preparation for retirement that is causing me some concern.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

7. I am prepared for retirement.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

8. I feel in control in terms of collecting the information I need.

   □ 0-25%   □ 26-50%   □ 51-75%   □ 76-100%

Please turn the page

9. The questions in the simulation were thought-provoking.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

10. It was easier to deal with some issues because they were presented as part of a simulation.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

11. I can envision what it is like to be retired.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

12. In part 1, I learned more by hearing the questions from the other people at my table.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

13. In part 2, the discussion with the full group provided me with additional information.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

14. I did have a "to do" list for retirement before playing the game; now I can make changes to the list as a result of playing the simulation.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

or

I did not have a "to do" list for retirement before playing the game, I can make a list now.

☐ 0-25%   ☐ 26-50%   ☐ 51-75%   ☐ 76-100%

15. The simulation game encouraged me to make changes to my way of thinking.

☐ 0-25%   ☐ 26-50%   ☐ 51-75% ·   ☐ 76-100%

16. I would recommend this simulation game to:

    family members   ☐ yes   ☐ no

    friends   ☐ yes   ☐ no

    colleagues   ☐ yes   ☐ no

17. Were there any topics omitted? Please specify_____

_____

_____

_____

18. How would you recommend improving the simulation in terms of questions, design or the group discussion?

_____

_____

_____

Please comment on any aspect of the experience.

_____

_____

Thank you for taking the time to complete the form.

Consent to participate in research

I voluntarily agree to participate in a research study conducted by Chris Hood, as part of her thesis work in Educational Technology at Concordia University.

I understand that the primary purposes of the research are:

- to evaluate this simulation, while in the development stage, in terms of design effectiveness.

- to determine if it serves as an advance organizer (a teaching aid to assist learners to acquire, to organize and to retain new information).

- to find out if the collaborative group process adds a positive element to a learning experience.

I understand that:

- I will be completing a pre-test before experiencing the simulation and a post-test afterwards.

- my identity will not be attached to my responses.

- the data from the study will be part of a Master's thesis and may be published later.

- I am free to withdraw my consent and to discontinue my participation at any time without giving notice and without negative consequences.

- I am participating in this research with the full understanding that it is for the advancement of knowledge.

Name:_____

Witness
signature:_____

Date: November 23, 1998.

I would like to thank you in advance for helping me with my research.

Appendix B

Please check the boxes that apply to you.

☐ Male   ☐ Female

Age: ☐ 40-45   ☐ 46-50   ☐ 51-55   ☐ 56-60   ☐ 61-65

Choose the box that indicates your level of agreement with these statements.

1. I have an understanding of the challenges facing me in retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

2. I understand what information I need to collect to prepare for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

3. I know <u>where</u> to collect this information.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

4. I know <u>how</u> to collect it.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

5. The <u>thought</u> of retiring causes me some anxiety.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

6. It is the <u>preparation</u> for retirement that is causing me some concern.

◻ disagree   ◻ somewhat disagree   ◻ somewhat agree   ◻ agree

7. I am prepared for retirement.

◻ disagree   ◻ somewhat disagree   ◻ somewhat agree   ◻ agree

8. I feel in control in terms of collecting the information I need.

◻ disagree   ◻ somewhat disagree   ◻ somewhat agree   ◻ agree

9. I can envision what it is like to be retired.

◻ disagree   ◻ somewhat disagree   ◻ somewhat agree   ◻ agree

10. I have a list of things to do to prepare for retirement.

◻ disagree   ◻ somewhat disagree   ◻ somewhat agree   ◻ agree

Any further comments are welcome:

_____

_____

_____

Choose the box that indicates your level of agreement with these statements.

1. I have an understanding of the challenges facing me in retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

2. I understand what information I need to collect to prepare for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

3. I know _where_ to collect this information.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

4. I know _how_ to collect it.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

5. The _thought_ of retiring causes me some anxiety.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

6. It is the _preparation_ for retirement that is causing me some concern.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

7. I am prepared for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

8. I feel in control in terms of collecting the information I need.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

9. The questions in the simulation were thought-provoking.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

10. It was easier to deal with some issues because they were presented as part of a simulation.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

11. I can envision what it is like to be retired.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

12. In part 1, I learned more by hearing the questions from the other people at my table.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

13. In part 2, the discussion with the full group provided me with additional information.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

14. I did have a "to do" list for retirement before playing the game; now I can make changes to the list as a result of playing the simulation.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

or

I did **not** have a "to do" list for retirement before playing the game, I can make a list now.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

15. The simulation game encouraged me to make changes to my way of thinking.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree ☐ agree

16. I would recommend this simulation game to:

family members	☐ yes	☐ no
friends	☐ yes	☐ no
colleagues	☐ yes	☐ no

17. Were there any topics omitted? Please specify_____

_____

_____

18. How would you recommend improving the simulation in terms of questions, design or the group discussion?

_____

_____

_____

19. Please comment on any aspect of the experience. (USE REVERSE SIDE)

_____

_____

_____

Consent to participate in research

I voluntarily agree to participate in a research study conducted by Chris Hood, as part of her thesis work in Educational Technology at Concordia University.

I understand that the primary purposes of the research are:

- to evaluate this simulation, while in the development stage, in terms of design effectiveness.

- to determine if it serves as an advance organizer (a teaching aid to assist learners to acquire, to organize and to retain new information).

- to find out if the collaborative group process adds a positive element to a learning experience.

I understand that:

- I will be completing a pre-test before experiencing the simulation and a post-test afterwards.

- my identity will not be attached to my responses.

- the data from the study will be part of a Master's thesis and may be published later.

- I am free to withdraw my consent and to discontinue my participation at any time without giving notice and without negative consequences.

- I am participating in this research with the full understanding that it is for the advancement of knowledge.

Name:_____

Signature:_____

Date: January 26, 1999.

I would like to thank you in advance for helping me with my research.

Appendix C

Please check the boxes that apply to you.

☐ Male   ☐ Female

Age: ☐ 40-45   ☐46-50   ☐51-55   ☐56-60   ☐61-65

Choose the box that indicates your level of agreement with these statements.

1. I have an understanding of the challenges facing me in retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

2. I understand what information I need to collect to prepare for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

3. I know <u>where</u> to collect this information.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

4. I know <u>how</u> to collect it.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

5. The <u>thought</u> of retiring causes me some anxiety.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

6. It is the <u>preparation</u> for retirement that is causing me some concern.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

7. I am prepared for retirement.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

8. I feel in control in terms of collecting the information I need.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

9. I can envision what it is like to be retired.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

10. I have a list of things to do to prepare for retirement.

    ☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

Any further comments are welcome:

_____

_____

_____

Choose the box that indicates your level of agreement with these statements.

1. I have an understanding of the challenges facing me in retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

2. I understand what information I need to collect to prepare for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

3. I know where to collect this information.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

4. I know how to collect it.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

5. The thought of retiring causes me some anxiety.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

6. It is the preparation for retirement that is causing me some concern.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

7. I am prepared for retirement.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

8. I feel in control in terms of collecting the information I need.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

9. The questions in the simulation were thought-provoking.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

10. It was easier to deal with some issues because they were presented as part of a simulation.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

11. I can envision what it is like to be retired.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

12. In part 1, I learned more as a result of hearing the questions from the other people at my table.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

13. In part 2, the discussion with the full group provided me with additional information.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

14. Did you have a "to do" list for retirement before playing the game?

a. **If yes,** then can you make changes to the list as a result of playing the simulation.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

b. **If no,** then can you create a "to do " list.

☐ disagree   ☐ somewhat disagree   ☐ somewhat agree   ☐ agree

15a. The simulation game encouraged me to make changes to my way of thinking.

☐ disagree ☐ somewhat disagree ☐ somewhat agree ☐ agree

15b. As a result of experiencing this simulation, I feel more in control of what I have to do to prepare for retirement.

☐ disagree ☐ somewhat disagree ☐ somewhat agree ☐ agree

16. I would recommend this simulation game to:

a. family members ☐ yes ☐ no

b. friends ☐ yes ☐ no

c. colleagues ☐ yes ☐ no

17. Were there any topics omitted? Please specify_____

_____

_____

18. How would you recommend improving the simulation in terms of questions, design or the group discussion?

_____

_____

19. Please comment on any aspect of the experience. (use reverse side if necessary)

_____

_____

Consent to participate in research

I, voluntarily, agree to participate in a research study conducted by Chris Hood, as part of her thesis work in Educational Technology at Concordia University.

I understand that the primary purposes of the research are:

- to evaluate this simulation, while in the development stage, in terms of design effectiveness.

- to determine if it serves as an advance organizer (a teaching aid to assist learners to acquire, to organize and to retain new information).

- to find out if the collaborative group process adds a positive element to a learning experience.

I understand that::

- I will be completing a pre-test before experiencing the simulation and a post-test afterwards.

- my identity will not be attached to my responses.

- the data from the study will be part of a Master's thesis and may be published later.

- I am free to withdraw my consent and to discontinue my participation at any time without giving notice and without negative consequences.

- I am participating in this research with the full understanding that it is for the advancement of knowledge.

Name:_____

Signature:_____

Date: April 20, 1999.

I would like to thank you in advance for helping me with my research.

Appendix D

Veuillez cocher les cases qui s'appliquent à vous.

☐ Femme   ☐ Homme

Âge: ☐ 40-45   ☐ 46-50   ☐ 51-55   ☐ 56-60   ☐ 61-65

Choisissez la case qui convient à votre niveau d'accord avec les énoncés suivants.

1. Je comprends les défis que la retraite me présente.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

2. Je comprends l'information que je dois obtenir pour me préparer à la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

3. Je sais où obtenir cette information.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

4. Je sais comment l'obtenir.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

5. L'idée de prendre ma retraite me cause une certaine inquiétude.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

6. C'est la préparation à la retraite qui me cause du souci.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

7. Je suis prêt pour la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

8. Je me sens en contrôle en ce qui concerne l'obtention de l'information dont j'ai besoin.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

9. Je peux envisager être à la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

10. J'ai une liste de choses à faire pour me préparer à la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

Vos commentaires sont les bienvenus :

_____

_____

_____

Choisissez la case qui indique votre niveau d'accord avec ces énoncés.

1. Je comprends les défis que la retraite me présente.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

2. Je comprends l'information que je dois obtenir pour me préparer à la retraite.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

3. Je sais où obtenir cette information.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

4. Je sais comment l'obtenir.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

5. L'idée de prendre ma retraite me cause une certaine inquiétude.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

6. C'est la préparation à la retraite qui me cause du souci.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

7. Je suis prêt pour la retraite.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

8. Je me sens en contrôle en ce qui concerne l'obtention de l'information dont j'ai besoin.

☐ en désaccord ☐ quelque peu en désaccord ☐ quelque peu d'accord ☐ d'accord

9. Les questions de la simulation m'ont fait réfléchir.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

10. Il était plus facile de traiter certaines questions parce qu'elles ont été présentées en tant qu'élément d'une simulation.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

11. Je peux envisager être à la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

12. Dans la partie 1, j'ai appris davantage grâce aux questions posées par les autres participants.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

13. Dans la partie 2, la discussion avec le groupe au complet m'a fourni de l'information supplémentaire.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

14. Aviez-vous une liste de choses à faire en préparation de votre retraite avant de participer au jeu ?

a.Si oui, pouvez-vous apporter des changements à la liste en raison d'avoir fait la simulation.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

b.Si non, alors pouvez-vous créer une liste de choses à faire.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

15.a. Le jeu de simulation m'a encouragé à faire des changements dans ma façon de penser.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

15.b. Grâce à la simulation, je me sens plus en contrôle de ce que je dois faire pour me préparer à la retraite.

☐ en désaccord   ☐ quelque peu en désaccord   ☐ quelque peu d'accord   ☐ d'accord

16. Je recommanderais ce jeu de simulation à :
a. des membres de ma famille	☐ oui.	☐ non
b. des amis	☐ oui.	☐ non
c. des collègues	☐ oui.	☐ non

17. Y avait-il des thèmes qui ont étés oubliés ? Veuillez les indiquer

_____

_____

_____

18. Qu'est-ce que vous recommanderiez afin d'améliorer la simulation en ce qui à trait aux questions, à la conception ou à la discussion de groupe ?

_____

_____

19. Veuillez nous faire part de vos commentaires en ce qui concerne un aspect ou un autre de l'expérience.
(UTILISEZ LE VERSO)

Consentement de participation à la recherche

J'accepte, volontairement, de participer à une étude de recherche entreprise par Chris Hood, qui fait partie de sa thèse en technologie éducative à l'Université Concordia.

Je comprends que les buts primaires de la recherche sont :

- d'évaluer cette simulation, pendant l'étape de développement, en termes de son efficacité de conception.

- de déterminer si elle sert d'organisateur anticipé (une aide pédagogique permettant aux étudiants de saisir, organiser et retenir des nouvelles informations).

- de déterminer si le processus de collaboration de groupe ajoute un élément positif à une expérience d'apprentissage.

Je comprends que :

- je compléterai un test avant la simulation et un autre après.

- mon identité ne sera pas jointe à mes réponses.

- les données de l'étude feront partie d'une thèse de maîtrise et pourront être publiées par la suite.

- je suis libre de révoquer mon consentement et d'interrompre ma participation à tout moment sans préavis et sans conséquences négatives.

- je participe à cette recherche avec l'entière compréhension qu'elle a pour but de promouvoir la connaissance.

Nom:_____

Signature:_____

Date: le 26 avril, 1999

Je vous remercie d'avance pour votre contribution à ma recherche.

Appendix E

SME semi-structured interview questions

Company #1

The HR representatives were asked the following questions.

- Would he/she repeat the lunch time session?

- How did the reduced time format affect the simulation?

- Would he/she recommend it to organizers at other organization?

- What areas should be improved?

- Did he/she notice if the handouts were used at the other retirement sessions?

Company #2

- The HR representatives at Bombardier were asked the similar questions as those posed to Company #1. Also they determined if this simulation would enhance their retirement planning sessions. The organizers determined if the session should be offered company-wide.

Appendix F

Two financial planners were asked the following questions:

- Would the financial planner want to incorporate the simulation into future sessions?

- Would they recommend it to the companies that hire them to offer retirement planning sessions?

- Do they feel that the company's employees would be interested to participate?

- Would they consider it as a means to meet clients' needs?

- Would they share the idea of the simulation with other financial planners?

- Do they consider it as a special feature that other planners do not have?

- Would they like to keep this tool to themselves?

- Do they feel that the attendance at the lifestyle component of a retirement planning session would be higher as a result of experiencing the simulation game?

- Do they feel that the participants would be better prepared to ask more directed questions to the professionals?

- Would it make their existing retirement sessions more effective?
- Would it serve as a useful tool for those individuals who are lacking a financial background?

Appendix G

Business community

The Director of the Dobson Entrepreneurial Centre will be asked the following questions about the simulation:

- Would it meet the needs of specific age groups e.g. baby boomers?

- Would it meet the needs of other age groups?

- Have relevant topics been omitted?

- Could it be adapted for other English speaking countries?

- Are the issues concerning retirement the same as for English speaking people?

Could it be translated into French?

Appendix H

Materials

Simulation

Apparatus

- Game boards and 4 place mats for each table
- 1 die for each game board
- 4 different colored playing pieces for each game board
- Pens or pencils
- Flip charts with felt pens

Physical Set up

- Private room for activity
- Round or square tables appropriate for playing cards or bridge with adequate light for reading
- 4 comfortable chairs for each table
- Flip chart at the front of the room
- Refreshments and snacks

Procedure for playing the simulation

- Set up the room before players arrive
- Place game board in the center of each table
- Place 4 plastics playing men at the start square of each board
- Place the colored cards around the board in cardholders
- Place consent forms, pre-tests, post-tests in envelopes at each person's place.
- Greet players as they enter the room
- When all are seated welcome the group
- Introduce how the game was created etc.
- Explain the game is part of a research project for a graduate degree
Read the rules out loud. Ask if there are any questions.

RetireWise™ par Christine Hood

Questions taken care of

Questions taken care of?

Not applicable

Not applicable

Questions to Research

Questions to Research

Pas d'informations supplémentaires

Pas d'informations supplémentaires

Informations supplémentaires

Informations supplémentaires

Non applicable

Non applicable

152

Appendix I

Rules of the simulation

- No answers to questions are required
- No need to reveal anything unless you want to.
- Four people will sit around the table.
- Each person will throw the die.
- The person with the highest score will go first by throwing the die again and move to the number of spaces on the board that corresponds to the number on the die.
- Pick up a card that has the same color as the square the person landed on.
- Read the question out loud. Place the card in one of three piles: *"Research to do"*, *"Non-applicable"* or *"Questions taken care of"*.

  "Questions to research" means that the answer to the question is not known and requires research.

  "Non-applicable" This question is not relevant.

  "Questions taken care of," means that the answer to the question is known and does not require additional research.

  The board has a pathway that starts out as a single line of squares, which later has a fork in the road. Can go either way. The pathway splits into two, then three and finally four squares across to provide choices to the player.

- The objective of the simulation is to collect an individualized set of questions that need answers. Early on in the game there is a single path with topics laid out, then opportunity to pick topics not chosen before. By this time you might have a better idea of what topics to collect. Therefore a player could move the piece in a straight line, a zigzag or what ever way forward to reach a particular topic.
- There are also squares "free choice" used to select any topic desired or "new topic" one which the player has not encountered yet.
- There is no advantage to finish before anyone else. Those who finish first can benefit by listening to the questions others draw and observe the various

reactions or start the path again and collect more cards. There are no repeated questions. This can still be a learning tool.

- When you hear a question that some else has you may want to take note. Circle the No on the sheet(mark differently from your own) SHOW CRIB SHEET. Can make notes on the back
- Blank cards are available for topics which participants are concerned about. Before starting the game, individuals can write out questions for areas where they have a concern or they have very special needs that they feel may not be included in the original set of questions.
- Pre test
- Play game
- Discussion period
- Post test
- Wrap up

Appendix J

Introduction

Background
I would like to introduce a fellow student, Daniel Heon. Daniel will be running the session in French next week and he is here to observe and to participate in a group if he wishes. (Used for Group 1 only)
I have organized retirement seminars for a company for 7 years. As a result of planning and sitting through many I began to realize that many participants were not able to ask questions or recognize when the information presented to them was useful.

The idea of this simulation came as a result of this experience plus my studies at Concordia University in Educational Technology where we learn to design and develop training programs.

Take Stock
How many people feel that they are prepared for retirement? On a scale of 1-10 with 10 being best, who would rate themselves as a 10, a 9, an 8 etc?

(Flipchart)
The simulation is the first step in the preparation for retirement. I have a drawing that shows how the simulation fits into the full picture with the overall goal as a successful retirement.

For the duration of the simulation you are retired!!!!

The objectives today are: (Flipchart)
1) To prepare a list of questions that needs answers.
2) To prepare or revise a to do list to prepare for retirement
3) To understand how questions and the to do list fit into your plan for retirement preparation.

Rule of the simulation:
(Hold game board up to demonstrate to group)
Before we begin to play, it would be to your advance to sit in a group without your spouse or partner. This way you could compare answers later if you like.

Appendix K

Post simulation discussion:

Now that the game part is finished, I would like you to prioritize those topics to research which are most important to you. The topics that we will be looking at are: challenges, community, leisure, relationships. The remaining four topics are should be discussed with professionals.

Once way of determining this would be to count the number of cards in the research pile which are from one of these specific topics. We will discuss the first two or three topics as a group time permitting.

Each person could come to the front and number in order his or her selections. Once these results are tallied we will build a panel of "experts". My aim is to show that there is a wealth of knowledge in this very room. We can find a lot of interesting and useful information from sources than a retirement seminar.

Once the topics are tallied then ask the group who has the most of this number one topic in their "take care of " pile. Those who do and would like to be part of the panel may come to the front. Any one who feels that they have a lot to contribute to this topic may also join the panel.

Now that the panel has been assembled, who has questions in their "Research" pile that they would like to pose.

Once the responses to the first questions have been exhausted, repeat the process until the time is up or no more questions are posed.

N.B. For Company #1 time would not permit a selection of a panel so questions were handled differently. Questions were requested from individuals who wanted to brainstorm the topic with the group. This was repeated as time permitted.

Who has any question that you would like to pose to the group and we may then brainstorm the topic with the group? (When someone raised his/her hand)

Read the question out loud.
Does anyone have any suggestions to give to this person? Any one else?

I would like to ask some general questions.

How did it feel to be retired?
(No difference right?)

Purpose of being retired in the simulation has two reasons behind it:
1) You have a better idea of what it feels like to be retired "more or less no different"
2) You experienced all the things you did not do prior to your mini-retirement.
Now you have the opportunity to so some research if you want.

How were the cards divided into piles? Lets see a show of hands for those individuals who had their piles split equally among "to do", "done" "N/A":

Did any one have the majority of their cards in N/A?

What does this show us? (That many people are in the same situation.)

Were you surprised at the outcome?
 -Did you have more issues under control than you think.

Are you surprised at how much there is to do?
Any one discouraged?

Now you have some defined questions to start to work with.
Let's select one topic area, other than the professional topic such as Legal, Financial, Budget and Health, that has the most outstanding questions in the research pile. The reason that we are doing this is that there is a wealth of information in this room. We can all benefit from listening to each other.
Now that we have chosen a topic, who has questions from this category that they wish to present to the group for comments.

Are there other questions in that category? Let's select another topic?
 (Repeat again until the topics are exhausted)

What would be your next step? Let's go back and look at the diagram we saw earlier.

Look at goals and objectives
Do they still apply?
What would be your ideal retirement!!!
If these are jigsaw pieces with no picture then look as some of the possibilities.
(Show the different pictures):
New career
Spending time with family and friends
Leisure/travel/sport

Appendix L

Post simulation discussion:

How did it feel to be retired?
(No difference right?)

Purpose of being retired in the simulation has two reasons behind it:
1) You have a better idea of what it feels like to be retired "more or less no different"
2) You experienced all the things you did not do prior to your mini-retirement.
Now you have the opportunity to so some research if you want.

How were the cards divided into piles? Lets see a show of hands for those individuals who had their piles split equally among "to do", "done" "N/A":

Did any one have the majority of their cards in N/A?

What does this show us? (That many people are in the same situation.)

Were you surprised at the outcome?
-Did you have more issues under control than you think.

Are you surprised at how much there is to do?
Any one discouraged?

Now you have some defined questions to start to work with and you have registered for a 30-hr seminar which will provide a lot of the answers. In fact, the presenters have seen these questions so that they will be prepared for your questions.

You could think of these questions as jigsaw pieces but without a picture. Each person may have a different picture that they are working on depending on their plan for retirement.
What would be your next step? Let's go back and look at the diagram we saw earlier.

Look at goals and objectives
Do they still apply?
What would be your ideal retirement!!!
If these are jigsaw pieces with no picture then look as some of the possibilities.
(Show the different pictures):
New career
Spending time with family and friends
Leisure/travel/sport

Appendix M

Budget
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Challenges
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Community
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

Health
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Investment
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31

Legal
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Leisure
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25

Reiationship
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Appendix N

Budget
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Communauté
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22

Défis
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23

Investissements
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25 26 27 28 29 30 31

Juridique
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20

Loisirs
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18 19 20 21 22 23
24 25

Santé
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15 16 17 18

Rapports interpersonnels
1 2 3 4 5 6 7 8 9 10 11 12 13 14 15

Appendix O

Prioritized List of topics to research

1.

2.

3.

4.

5.

6.

7.

8.

Appendix P

Budget

1. Are you following an expense plan?
2. Now that you are retired are you spending more on entertainment?
3. What type of expenses might occur for which you have not planned?
4. Do you think you will spend less on clothing, now that you are retired?
5. Would your local transportation costs go down now that you are retired?
6. Have your food expenses changed, now that you are retired?
7. What type of costly event would cause you distress?
8. Do you think that you will spend more on vacation travel now that you are not working? Have you budgeted for this?
9. Do you go out to dinner more or less now that you are not working?
10. Are your income tax deductions lower now that you are not working?
12. How much do you spend on restaurant expenses?
13. Which expenses have gone down now that you have stopped working?
14. If a significant other is no longer present, would that cause a financial burden for you? or Have you already experienced a financial burden as you are alone?
15. Before you retired did you compare your projected monthly allowance with your projected retirement budget?
16. Did both you and your spouse plan to retire at the same time?
17. Have you taken into account the three phases of retirement: honeymoon, reflective years and care years with different financial needs for each?
18. Have you planned to travel in the first phase of your retirement where you are physically more mobile?

Challenges

1. How would the loss of a companion in your life affect your day to day living?
2. A major appliance (e.g. fridge, stove, VCR, TV) just broke and cannot be fixed. How would you handle this financially?
5. Have you set specific goals for different stages in your retirement?
7. Have you thought of getting a pet for company?
8. What type of crisis might you encounter and do you have a back up plan?
9. Who looks after you now, if you become ill?
10. What do you want to accomplish now that you are retired?
11. How do you plan to fill the 6-8 hours a day you previously devoted to work?

12. How long do you think you could live in your present home before it becomes either too expensive or too large for you? For example, are there stairs which could make getting around difficult?
13. Do you keep track of your spending?
14. Your health situation changes and you are not as mobile as you were, how do you plan to spend your time?
15. Your family has moved away and they have asked you to follow them. Would you? What do you have to consider when making a decision to go or not to go?
16. You are having trouble going shopping for groceries and cooking for yourself /family, would you accept help from a community service such as Meals on Wheels.
17. Do you have children or grandchildren in college who need financial help?
18. Do you stay in the house for days without speaking to or without seeking the company of others?
19. You have several empty bedrooms as the children have moved away, would you consider renting a room to a college student?
20. Have you thought of looking for a part-time job to bring in extra money? How will the extra money affect income taxes etc?
21. The house requires more maintenance than you can do? Keeping the grass cut and the snow cleared are physically more demanding now than before. Would you hire someone to do the work?
22. Your present neighbourhood is changing by friends moving away. What do you do? Move or make new friends?
23. Do you buy on impulse or time your purchases to coincide with sales?

Community

1. Are there community activities in your neighbourhood which interest you?
2. Do you have friends outside work or would you want to increase your network? If so, how would you go about doing that?
3. Are you interested in new learning opportunities, if so what kind?
4. Have you thought about volunteer work? What kind would you choose?
5. Would spending time in your community interest you?
6. Have you thought about doing volunteer work in a local hospital?
7. Do you know if the local school has a volunteer program to assist children with their reading or their mathematics etc?
8. Do you intend to spend time in the grandparents' foster program at your local children's hospital?
9. Does your community have a library? Do they need help?
10. Have you heard of Meals on Wheels? Would you help prepare or deliver meals?

11. What do you like about the community that you live in? This would be useful to know should you decide to relocate?
12. What is important to you in a community? This would be useful to know should you decide to relocate?
13. Do you know of another community that would satisfy your living requirements?
14. What do you like least about the community that you live in? Do you think that you could find another community that has all the features that you do like without the feature that you do not?
15. If you could change one thing in the community that you live in, what would that be?
16. Do you have a religious affiliation? Do you derive a lot of satisfaction from it or do you feel that you would like to find another place to practice your religion?
17. Do you have a Garden Club in your area? Would that interest you?
18. Is there some community activity that you have always wanted to become involved in but could not because you were working?
19. Would you consider helping out at a senior citizens' residence?
20. Do you plan to live in the same area as your grown children? What if they are transferred, shortly, after you relocate there? Would you be comfortable living there without them?
21. Do you plan to relocate to a new area after vacationing there? Have you returned during the off-season?
22. Do you have friends in the new area and is it important to have them as contacts?

Health

1. Do you drink about 8 glasses (8 oz) of water a day?
2. Do you enjoy going for walks regularly?
3. What type of exercise do you do?
4. Do the exercises you follow, involve both a cardiovascular and a muscular workout?
5. Do you know what is the ideal fat intake per day according to the Canadian Heart Foundation?
6. Do you follow the Canada Food Guide when choosing what you will eat?
7. Do you have trouble sleeping?
8. Do you smoke? Are you trying to quit?
9. Are you exposed to second-hand smoke?
10. Do you see a physician regularly according to your health requirements and your age?
11. Do you see a dentist regularly?
12. Do you know your family medical history in terms of congenital problems?
13. If you are trying to economize on grocery costs, which items would you eliminate and why?
14. Do you feel physically fit?

15. Do you find yourself in an unhappy or depressed state each week?
16. Do you ever skip meals? If yes, how often in a week?
17. Do you take vitamins?
18. Do you get a flu shot in the winter? Have you read the reports on the pros and cons on the subject?

Investment

1. Have you selected a RIF?
2. At what age does the Life Annuity have to be transferred?
3. When can the RRSP be taken out during retirement?
4. What is a LIF?
5. Can the Life Income Fund be paid out in a flexible manner?
6. What are strip bonds?
7. What are mutual funds?
8. How can you reduce your marginal tax rate when taking money out of an RRSP?
9. What are interest-bearing bonds?
10. Should you invest money in the stock market, now that you are retired?
11. Do you know what an impaired annuity is?
12. What is the difference between a joint annuity and a life annuity?
13. Can you out live an annuity?
14. Can you out live a RIF?
15. How can life insurance reduce taxes?
16. Who inherits the annuity if you pass away?
17. Can you contribute to an RRSP even though you are retired?
18. Can you invest in a trust for your grandchildren and benefit from a tax break?
19. How much Provincial pensions do you receive?
20. How do you manage a RIF?
21. What is a LIRA?
22. What is meant by an asset class?
23. What are the various types of mutual funds? List 5 different ones
24. What is an equity fund?
25. What is an asset allocation fund?
26. What is a bond fund?
27. What is the difference between a balanced fund and an asset allocation fund?
28. How can you reduce risk in your portfolio?
29. For most people, what is the greater risk...outliving your money or losing your money in a mutual fund?

30. What role does Universal Life Insurance play in investments?
31. What is a segregated fund?

Legal

1. Are your legal papers in order?
2. Do you have a will?
3. Do you have a "living will" in case you are incapacitated?
4. Do you need a will?
5. How do you revoke your will?
6. Where is a safe place to keep a will?
7. What is a Power of Attorney?
8. What is a Trust fund?
9. What are the different types of wills and which type would be the most suitable for you?
10. Who should draw up the will?
11. What are the duties of an executor?
12. Have you selected an executor?
13. Does the appropriate person know where your will is kept?
14. Is there a difference between a will that has been drawn up by a lawyer or by a notary?
15. Are you aware of the estate tax laws and how they will affect your heirs?
16. Are you aware of the difference between an estate beneficiary and a designated beneficiary?
17. Have you left clear instructions regarding your funeral preferences?
18. Have you identified your heirs and their needs?
19. Have you paid off your mortgage?
20. Have obtained your deed of acquittance once you have paid off your mortgage?

Leisure

1. How are you spending your free time now that you are not working 7 hours a day?
4. Do you know if there is longevity in your family? If not, should this be taken into account when planning world travel?
5. Now that you have more free time do you entertain more?
6. Are you involved in a particular weekly activity?
7. Have you expanded your leisure activities now that you are not working?
8. When you were working, what hobby did you enjoy and wished you had more time to pursue?
9. Do you plan to experiment with new hobbies such as collecting, building things, bird watching etc?
11. Do you consider volunteer work a satisfying leisure activity?

12. Do you feel that you are able to satisfy both your creative-side and your analytical-side now that you are not working etc?
13. Do you have friends with similar interests or hobbies?
14. Do you prefer solitary activities or those which involve other people?
15. Have you ever assessed your leisure preferences?
16. Are you aware of the Elderhostel program?
17. Do you have a balanced agenda of activities that taps into a wide range of interests, abilities and skills?
19. Do you experience a lot of satisfaction when you are involved in your leisure activities?
20. Have you ever thought of returning to school for fun?
21. Would you be interested in renting a RV to travel?
22. Do you consult your doctor before embarking on a long trip?
23. Have you investigated tours designed for senior citizens?
24. Do you think that participating in volunteer work is a self-rewarding activity?
25. When looking for an activity, would you want to be doing, collecting, making or learning something new?

Relationship

1. Do you think that your significant other has had difficulty adjusting to the fact that you are retired?
2. Do you feel that you are still growing as a person now that you are retired?
3. Are you content with your life and what you have accomplished to date?
4. Are you in touch with former colleagues from work? If not, do you miss them?
5. How has retirement affected your relationship with your neighbours?
6. Have relationships with your friends been affected positively or negatively by your retirement?
7. Has retirement changed your relationship with your siblings?
8. How has retirement affected your self-esteem?
9. Have you retired before your spouse? How has this affected the relationship?
10. Do you feel that your relationships have lost their spontaneity?
11. Are you interested in developing new relationships? What type of relationship would you prefer?
12. How often would you like to see your grandchildren?
13. How often would you like to have family members visit you?
14. How often would you want to visit friends who live out of town?
15. Now that you are retired do you want to use the opportunity to develop a closer relationship with your grandchildren?

Appendix Q

Budget

1. Suivez-vous un budget ?
2. Maintenant que vous êtes retraité, dépensez-vous plus sur le divertissement ?
3. Quel type de dépenses inprévues pourriez-vous avoir ?
4. Pensez-vous dépenser moins sur les vêtements, maintenant que vous êtes retraité ?
5. Vos frais de transport locaux diminueront-ils maintenant que vous êtes retraité ?
6. Vos dépenses de nourriture one-elles changé, maintenant que vous êtes retraité ?
7. Quel type d'événement coûteux vous mettrait en détresse?
8. Pensez-vous que vous dépenserez plus sur les voyages de vacances maintenant que vous ne travaillez pas ? Avez-vous fait des plans à cet égard ?
9. Sortez-vous plus ou moins pour souper maintenant que vous ne travaillez pas ?
10. Vos déductions d'impôt sur le revenu sont-elles inférieures maintenant que vous ne travaillez pas ?
12. Combien dépensez-vous sur les repas au restaurant?
13. Lesquelles de vos dépenses ont diminué maintenant que vous avez arrêté de travailler ?
14. Si votre conjoint n'était plus présent, est-ce que cela vous causerait un fardeau financier ? Ou éprouvez-vous déjà un fardeau financier parce que vous êtes seul ?
15. Avant d'être retraité aviez-vous comparé votre allocation mensuelle projetée avec votre budget de retraite projeté ?
16. Votre conjoint et vous aviez-vous projeté de prendre vos retraites en même temps ?
17. Avez-vous pris en considération les trois phases de la retraite: lune de miel, années de réflexion et années de soins, et les différents besoins financiers que comporte chacune de ces phases ?
18. Avez-vous prévu de voyager durant la première phase de votre retraite pendant qu'il vous est plus aisé de vous déplacer ?

Communauté

1. Y a-t-il des activités communautaires dans votre voisinage qui vous intéressent ?
2. Avez-vous des amis à l'extérieur du travail ou souhaiteriez-vous agrandir votre cercle d'amis ? Si oui, comment vous y prendriez-vous ?
3. Aimeriez-vous acquérir de nouvelles connaissances ? Si oui, lesquelles ?

4. Avez-vous pensé au bénévolat ? Quelle type de bénévolat choisiriez-vous?
5. Est-ce que passer du temps dans votre communauté vous intéresserait ?
6. Avez-vous pensé faire du bénévolat dans un hôpital local ?
7. Savez-vous si unce école dans votre quartier a un programme de bénévolat pour aider les élèves en lecture ou en mathématicques, etc. ?
8. Avez-vous l'intention de consacrer du temps à un programme de grands-parents «adoptifs» dans un hôpital local ?
9. Est-ce que voture communauté a une bibliothègue ? Ont-ils besoin d'aide?
10. Avez-vous entendu parler de la Popote roulants (service de repas à domicile ? Est-ce que vous aideriez à preparer ou à livrer des repas ?
11. Qu'est-ce que vous aimez au sujet de la communauté dans laquelle vous vivez ? Il serait utile de le savoir si jamais vous décidiez de déménager.
12. Qu'est-ce qui est important pour vous dans une communauté ? Il serait utile de le savoir si jamais vous deviez déménager.
13. Connaissez-vous une autre communauté qui réspondrait à vos exigences de vie ?
14. Qu'aimez-vous le moins au aujet de la communauté dans laquelle vous vivez?? Pensez-vous être en mesure de trouver un autre communauté qui aurait toutes les caractéristiques que vous aimez sans celles que vous n'aimez pas ?
15. Si vous pouviez changer une chose dans la communauté dans laquelle vous vivez, de quoi s'agirait-il ?
16. Avez-vous une affiliation religieuse ? Êtes-vous satisfait de votre religion ou estimez-vous que vous voudriez trouver un auture endroit pour pratiquer votre religion ?
17. Avez-vous un club de jardinage dans votre quartier? Est-ce que cela vous intéresserait ?
18. Y a-t-il une certaine activité communautaire dans laquelle vous avez toujours voulu être impliqué mais à laquelle vous ne pouviez vous consacrer parce que vous travailliez ?
19. Considéreriez-vous travailler dans une résidence de personnes âgées ?
20. Projetez-vous vivre dans le même quartier que vos enfants adultes ? S'ils se faisaient muter, peu après que vous déménagiez auprès d'eux, seriez-vous à l'aise à cet endroit sans eux ?
21. Projetez-vous déménager à un nouvel endroit après y avoir passé des vacances ? Êtes-vous retourné pendant la saison morte ?
22. Avez-vous des amis dans le nouvel endroit et est-ce important pour vous de les avoir en tant que personnes ressources ?

Défis

1. Comment la perte de votre conjoint affecterait-elle votre vie quotidienne ?
2. Un appareil important (par example réfrigérateur, poêle, magnétoscope, télévision) ne fonctionne plus et ne peut pas être réparé. Comment feriez-vous face à ceci financièrement ?

5. Vous êtes-vous fixé des objectifs spécifiques pour les différentes phases de votre retraite ?
7. Avez-vous pensé à vous procurer un animal de compagnie ?
8. À quel type de crise pourriez-vous faire face et avez-vous un plan de secours ?
9. Qui s'occupe de vous maintenant, lorsque vous devenez malade ?
10. Que voulez-vous accomplir maintenant que vous êtes retraité ?
11. Comment projectez-vous occuper les 6 à 8 heures par jour précédemment consacrées au travail ?
12. Combien de temps pensez-vous êtes en mesure de vivre dans votre maison avant qu'elle ne devienne trop chère ou trop grande pour vous? Par exemple, y a-t-il des escaliers qui pourraient rendre vos déplacements difficiles ?
13. Prenez-vous note de vos dépenses ?
14. Votre état de santé change et vous ne vous déplacez plus aussi facilement qu'avant, comment prévoyez-vous occuper votre temps ?
15. Les membres de votre famille on démenagé et ils vous ont demandé de les suivre. Le feriez-vous ? Que vous faut-il prendre en considération avant de décider d'y aller ou pas ?
16. Il est devenu difficle de faire votre épicerie et de cuisiner pour vous ou votre famille, accepteriez-vous de l'aide d'un service communautaire tel que la Popote roulants (service de repas à domicile) ?
17. Avez-vous des enfants ou des petits-enfants à l'université qui ont besoin d'aide financière ?
18. Restez-vous dans la maison pendant des jours sans parler à autrui ou sans rechercher la compagnie d'autres personnes ?
19. Vous avez plusieurs chambres à coucher vides car les enfants sont partis, considéreriez-vous en louer une à un étudiant d'université ?
20. Avez-vous pensé à travailler à temps partiel pour gagner de l'argent supplémentaire? Comment cet argent supplémentaire affectera-t-il vos impôts sur le revenu etc. ?
21. La maison exige plus d'entretien que ce que vous êtes en mesure d'accomplir. Tondre le gazon et déblayer la neige sont physiquement plus exigeants maintenant qu'avant. Engageriez-vous quelqu'un pour effectuer ces tâches ?
22. Votre voisinage actuel change parce que vos amis déménagent. Que faites-vous ? Déménagez-vous ou vous faites-vous des nouveaux amis ?
23. Faites-vous des achats impulsifs ou planifiez-vous vos achats pour coïncider avec les soldes ?

Investissements
1. Avez-vous choisi un FERR ?
2. À quel âge une rente viagère doit-elle être transférée ?
3. Quand pouvez-voous encaisser votre REER pendant la retraite ?
4. Qu'est-ce qu'un FRV ?
5. Un fonds de revenu viager peut-il être déboursé de manière flexible ?

6. Qu'est-ce qu'une obligation à coupons détachés ?
7. Qu'est-ce qu'un fonds mutuel ?
8. Comment pouvez-vous réduire votre taux d'imposition marginal quand vous encaissez votre REER ?
9. Qu' est qu'une obligatiion portant des intérêts ?
10. Devriez-vous investir dans le marché des actions, maintenant que vous être retraité ?
11. Savez-vous ce qu'est une rent diminuée *(impaired anuity)* ?
12. Quelle est la différence entre une rente conjointe et une rente viagère ?
13. Pouvez-vous survivre à une rente viagère ?
14. Pouvez-vous survivre à un FERR ?
15. Comments une assurance-vie peut-elle réduire les impôts ?
16. Qui hérite de la rente si vous décédez ?
17. Pouvez-vous contribuer à un REER si vous êtres à la retraite ?
18. Pouvez-vous instituer une fiducie familiale *(trust fund)* vos petits-enfants et bénéficier d'un allégement fiscal ?
19. Combien les régimes des rentes provinciaux vous rapportent-ils?
20. Comment gérez-vous un FERR ?
21. Qu'est-ce qu'un CRI ?
22. Qu'est-ce qu'une classe d'actifs ?
23. Quel sont les différents types de fonds communs ? Nommez-en 5.
24. Qu'est-ce qu'un fonds de capitaux propres ?
25. Qu'est-ce qu'un fonds d'allocations d'actifs ?
26. Qu'est-ce qu'un fonds obligataire ?
27. Quelle est la différence entre un fonds équilibré et un fonds d'allocation d'actifs ? (vous pourriez utiliser différentes variations sure celle-ci)
28. Comment pouvez-vous réduire le risque dans votre portefeuille ?
29. Pour la plupart des personnes, quel est le plus grand risque ...survivre à son argent ou perdre son argent dans un fonds commun ?
30. Quel rôle l'assurance-vie universelle joue-t-elle dans les investissements ?
31. Qu'est-ce qu'un fonds isolé ?

Juridique
1. Vos documents juridique sont-ils en ordre ?
2. Avez-vous un testament ?
3. Avez-vous signé un mandat en cas d'inaptitude ?
4. Avez-vous besoin d'un testament ?
5. Comment révoqueriez-vous votre testament ?
6. Quel endroit est un lieu sûr pour garder un testament ?
7. Qu'est-ce qu'une procuration ?
8. Qu'est-ce qu'une fiducie familiale *(trust fund)* ?
9. Quels sont les différentes catégories de testaments, et laquelle vous conviendrait le mieux ?
10. Qui devrait rédiger un testament ?
11. Quelles sont les fontions d'un exécuteur testamentaire ?
12. Avez-vous choisi un exécuteur testamentaire ?

13. Est-ce que la personne appropriée sait où se trouve votre testament ?
14. Y a-t-il une différence entre un testament qui a été rédigée par un avocat ou par un notaire ?
15. Connaissez-vous les règles qui gouvernent la fiscalité successorale et savez-vous comment ces règles affecteront vous héritiers ?
16. Connaissez-vous la differénce entre un héritier à titre universel et un héritier à titre particulier ?
17. Avez-vous laissé des instructions claires concernant vos funérailles ?
18. Avez-vous identifié vos héritiers et leurs besoins ?
19. Avez-vous payé votre hypthèque et avez-vous obtenu mainlevée de cette hypthèque ?

Loisirs
1. À quoi consacrez-vous votre temps libre maintenant que vous ne travaillez pas 7 heures par jour ?
4. Savez-vous s'il y a un historique de longévité dans votre famille ? Si non, ceci devrait-il être pris en considération lorsque vous projectez des voyages de longue durée ?

5. Maintentant que vous avez plus de temps libre, recevez-vous plus souvent ?
6. Êtes-vous impliqué dans un activité hebdomadaire particulière ?
7. Avez-vous élargi vos activités de loisirs maintentant que vous ne travaillez plus ?
8. Quand vous travailliez, aviez-vous un passe-temps et auriez-vous aimé y consacrer plus de temps ?
9. Prévoyez-vous expérimenter de nouveaux passe-temps tels que les collections, la construction d'objets, l'observation d'oiseaux, etc. ?
11. Considérez-vous le bénévolat comme une activitéêt de loisir satisfaisant ?
12. Estimez-vous être en mesure de satisfaire votre côté creatif and votre côté analytique maintenant que vous ne travaillez pas, etc?
13. Avez-vous des amis avec des intérêts ou des passe-temps semblables aux vôtres?
14. Préférez-vous les activités solitaires ou celles qui impliquent d'autres personnes ?
15. Avez-vous déjà évalué vos choix de loisirs ?
16. Connaissez-vous le programme Auberge des aînés (*Elderhostel*) ?
17. Avez-vous un horaire d'activités équilibré combinant un large éventail d'intérêts, de capacités et d'aptitudes ?
19. Est-ce que vos loisirs vous donnent becaucoup de satisfaction ?
Avez-vous déjà pensé à retourner à l'école pour vous divertir ?
20. Seriez-vous intéressé à louer une autocaravane pour voyager ?

21. Consultez-vous votre médicin avant d'entreprendre de longs voyages ?
22. Avez-vous pensé aux excursions conçues pour les aînés ?
23. Pensez-vous que le bénévolat est une activité gratifiante ?
24. Quand vous choisissez une activité, voudriez-vous faire, collectionner, construire ou apprendre quelque chose de nouveau ?

Rapports interperonnels

1. Pensez-vous que votre conjoint a eu de la difficulté à s'ajuster au fait que vous soyez retraité ?
2. Estimez-vous que vous évoluez en tant qu'individu maintenant que vous êtes retraité ?
3. Êtes-vous content de votre vie et de ce que vous avez accompli jusqu'à présent ?
4. Restez-vous en contanct avec d'anciens collègues de travail ? Si non, ces derniers vous manquent-ils ?
5. Comment la retraite a-t-elle affecté vos rapports avec vos voisins ?
6. Est-ce que vos rapports avec vos amis ont été affectés positivement ou négativement par votre retraite ?
7. La retraite a-t-elle changé vos rapports avec vos frères et sœurs ?
8. Comment la retraite a-t-elle affecté votre amour-propre ?
9. Avez-vous pris votre retraite avant votre conjoint ? Comment ceci a-t-il affecté vos rapports avec votre conjoint ?
10. Estimez-vous que vos rapports avec les autres ont perdu de leur spontanéité ?
11. Êtes-vous intéressé à déveiopper de nouveaux rapports avec les autres ? Quels type de rapports préféreriez-vous ?
12. À quelle fréquence aimeriez-vous voir vois petits-enfants ?
13. À quelle fréquence aimeriez-vous recevoir des membres de votre famille ?
14. À quelle fréquence voudriez-vous rendre visite à vos amis qui vivent à l'extérieur de la ville ?
15. Maintenant que vous êtes retraité voulez-vous utiliser cette occasion pour développer un rapport plus étroit avec vos petits-enfants ?

Santé

1. Buvez-vous environ 8 verres (8 onces) d'eau par jour ?
2. Faites-vous des promenades régulièrement ?
3. Quel genre d'exercice faites-vous ?
4. Est-ce que les exercices que vous faites comprennent une séance d'entraînement cardiovasculaire et musculaire ?
5. Connaissez-vous la consommation de gras idéale par jour selon la Fondation canadienne de cœur ?
6. Suivez-vous le guide alimentaire canadien en choisissant ce que vous mangez ?
7. Avez-vous de !: difficulté à vous endormir ?

8. Est-ce que vous fumez ? Essayez-vous d'arrêter ?
9. Êtes-vous exposé à la fumée secondaire ?
10. Consultez-vous un médecin régulièrement selon votre condition de santé et votre âge ?
11. Allez-vous chez le dentiste régulièrement ?
12. Connaissez-vous vos antécédents médicaux de famille en ce qui a trait aux problèmes congénitaux ?
13. Si vous essayiez d'économiser sur les coûts d'épicerie, qu'est-ce vous élimineriez et pourquoi ?
14. Êtes-vous en bonne condition physique ?
15. Êtes-vous malheureux ou dépressif à chaque semaine ?
16. Sautez-vous parfois des repas ? Si out, combien de fois par semaine ?
17. Prenez-vous des vitamines ?
18. Vous faites-vous vacciner contre la grippe en hiver ? Avez-vous lu de l'information sur le pour et le contre à ce sujet ?

The Median, Mean and Standard Deviation for the Pre-test for Company #1

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=24	3.0	2.9	.97
2. I understand what information I need to collect to prepare for retirement. N=24	3.0	2.5	.83
3. I know where to collect this information. N=24	2.0	2.1	.90
4. I know how to collect it. N=24	2.0	1.8	.76
5. The thought of retiring causes me some anxiety. N=24	2.0	2.2	1.18
6. It is the preparation for retirement that is causing me some concern. N=24	2.0	2.05	.92
7. I am prepared for retirement. N=24	3.0	2.7	.86
8. I feel in control in terms of collecting the information I need. (1 blank answer) N=24	2.0	2.3	.91
9. I can envision what it is like to be retired (2 blank answers) N=22	3.0	2.9	.88
10. Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (7 blank answers) N=17	2.0	2.2	1.18

The Median, Mean and Standard Deviation for the Post-test for Company #1

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=24	3.0	2.9	.80
2. I understand what information I need to collect to prepare for retirement. N=24	3.0	2.6	.83
3. I know where to collect this information. N=24	2.0	2.0	.78
4. I know how to collect it.N=24	2.0	1.95	.81
5. The thought of retiring causes me some anxiety. N=24	2.0	2.08	.93
1. It is the preparation for retirement that is causing me some concern. N=24	2.0	2.25	.85
2. I am prepared for retirement. N=24	3.0	2.5	.98
3. I feel in control in terms of collecting the information I need. (1 blank answer). N=24	2.0	2.25	.79
11.(9') I can envision what it is like to be retired (2 blank answers). N=22	3.0	2.72	.83
14. [ii]Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (7 blank answers). N=17	2.0	1.71	.77

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[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is #10 in the Pre-test.

The Median, Mean and Standard Deviation for the Additional Statements for
Company #1

Statements	Column		Standard Deviation
	Median	Mean	
9. The questions in the simulation were thought provoking. N=23. (1 blank answer)	3.0	3.13	.92
10. It was easier to deal with some issues because they were presented as part of a simulation. (1 blank answer). N=23.	2.0	2.39	1.16
12. In part 1, I learned more as a result of hearing the questions from the other people at my table.). 2 blank answers). N=22 .(	3.0	2.5	1.04
13. In part 2, the discussion with the full group provided me with additional information. (2 blank answers). N=22	2.0	1.95	.99
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (8 blank answers). N=16	3.0	2.6	1.15
15a The simulation game encouraged me to make changes to my way of thinking. (3 blank answers). N=21	2.0	2.5	.98

The Median, Mean And Standard Deviation For The Pre-Test For Company #2 Implementation Group

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=7	3.0	3.29	.49
2. I understand what information I need to collect to prepare for retirement. N=7	3.0	3.43	.53
3. I know where to collect this information. N=7	3.0	3.0	.58
4. I know how to collect it. N=7	3.0	2.7	.49
5. The thought of retiring causes me some anxiety. N=7	3.0	3.14	.69
1. It is the preparation for retirement that is causing me some concern. N=7	3.0	2.9	.69
2. I am prepared for retirement. N=7	3.0	2.57	1.27
3. I feel in control in terms of collecting the information I need. N=7	3.0	3.14	.90
4. I can envision what it is like to be retired. N=7	3.0	2.71	.76
5. Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? N=7	3.0	2.9	.69

The Median, Mean and Standard Deviation for the Post-test for Company #2
Implementation Group

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=7	3.0	3.14	.38
2. I understand what information I need to collect to prepare for retirement. N=7	3.0	3.14	.69
3. I know where to collect this information. N=7	3.0	2.5	.53
4. I know how to collect it. N=7	3.0	2.7	.49
5. The thought of retiring causes me some anxiety. N=7	3.0	3.0	.58
1. It is the preparation for retirement that is causing me some concern. N=7	2.0	2.57	1.13
2. I am prepared for retirement. N=7	2.0	2.29	.76
3. I feel in control in terms of collecting the information I need. N=7	2.0	2.9	1.07
11.(9*) I can envision what it is like to be retired (2 blank answers) N=7	3.0	3.0	.82
14. (10[ii])Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (3 blank answers) N=4	3.5	3.5	.58

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[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is # 10 in the Pre-test.

191

The Median, Mean and Standard Deviation for the Additional Statements for Company #2 Implementation Group

Statements	Column		Standard Deviation
	Median	Mean	
9. The questions in the simulation were thought provoking N=7	3.0	3.14	.69
10. It was easier to deal with some issues because they were presented as part of a simulation. N=7	3.0	3.29	.76
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. N=7	3.0	3.0	.90
13. In part 2, the discussion with the full group provided me with additional information. N=7	3.0	3.0	.63
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (2 blank answers) N=5	3.0	3.4	.55
15a The simulation game encouraged me to make changes to my way of thinking. N=7	4.0	3.57	.53

The Median, Mean and Standard Deviation for the Pre-test for Company #2
Group 1

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=11	3.0	3.0	.63
2. I understand what information I need to collect to prepare for retirement. N=11	3.0	2.45	1.04
3. I know where to collect this information. N=11	2.0	2.27	.79
4. I know how to collect it.. N=11	3.0	2.36	.81
5. The thought of retiring causes me some anxiety. N=11	2.0	2.18	.98
6. It is the preparation for retirement that is causing me some concern. (3 blank answers). N=8	3.0	2.88	.83
7. I am prepared for retirement. (3 blank answers). N=8	2.0	2.13	.83
8. I feel in control in terms of collecting the information I need. (3 blank answers). N=8	2.5	2.25	.89
9. I can envision what it is like to be retired (3 blank answers) N=8	2.0	2.25	1.04
10. Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (3 blank answers) N=8	2.0	2.13	1.13

The Median, Mean and Standard Deviation for the Post-test for Company #2
Group 1

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=11	3.0	2.9	.70
2. I understand what information I need to collect to prepare for retirement. N=11	3.0	2.81	.75
3. I know where to collect this information. N=11	3.0	2.64	.81
4. I know how to collect it. N=11	3.0	2.45	.69
5. The thought of retiring causes me some anxiety. N=11	2.0	2.27	.79
6. It is the preparation for retirement that is causing me some concern. N=11	3.0	2.82	.87
7. I am prepared for retirement. N=11	2.0	2.09	.83
8. I feel in control in terms of collecting the information I need. (1 blank answer) N=11	2.0	2.36	.67
11.(9[i]) I can envision what it is like to be retired (2 blank answers) N=11	3.0	3.09	.94
14. (10[ii])Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (8 blank answers). N=3	3.0	3.0	0

[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is #10 in the Pre-test.

The Median, Mean and Standard Deviation for the Additional Statements for Company #2 Group 1

Statements	Column		Standard Deviation
	Median	Mean	
9. The questions in the simulation were thought provoking. N=11	4.0	3.73	.65
10. It was easier to deal with some issues because they were presented as part of a simulation. N=11	4.0	3.45	.69
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. N=11	3.0	3.27	.65
13. In part 2, the discussion with the full group provided me with additional information. (2 blank answers) N=11	3.0	3.27	.79
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (2 blank answers). N=9	4.0	3.78	.44
15a The simulation game encouraged me to make changes to my way of thinking. N=11	3.0	3.0	.45
15b As a result of experiencing the simulation, I feel more in control of what I have to do to prepare for retirement. N=11	3.0	2.82	.75

The Median, Mean and Standard Deviation for the Pre-test for Company #2
Group 2

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement N=15.	3.0	3.13	.74
2. I understand what information I need to collect to prepare for retirement. N=15	3.0	2.93	.96
3. I know where to collect this information. N=15	2.0	2.4	.83
4. I know how to collect it. N=15	3.0	2.5	.64
5. The thought of retiring causes me some anxiety. (1 blank answer). N=14	2.0	2.21	1.05
6. It is the preparation for retirement that is causing me some concern. N=15	3.0	2.33	1.11
7. I am prepared for retirement. N=15	3.0	2.53	1.06
8. I feel in control in terms of collecting the information I need. (1 blank answer) N=14	2.0	2.5	.85
9. I can envision what it is like to be retired N=15	3.0	2.8	1.15
10. Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (1 blank answer). N=14	3.0	2.93	.99

The Median, Mean and Standard Deviation for the Post-test for Company #2
Group 2

Statements	Column		Standard Deviation
	Median	Mean	
1. I have an understanding of the challenges facing me in retirement. N=15	3.0	3.27	.59
2. I understand what information I need to collect to prepare for retirement. N=15	3.0	3.2	.77
3. I know where to collect this information. N=15	2.0	2.53	.83
4. I know how to collect it. N=15	3.0	2.6	.91
5. The thought of retiring causes me some anxiety. (1 blank answer). N=14	3.0	2.71	.91
6. It is the preparation for retirement that is causing me some concern. N=15	3.0	2.53	.92
7. I am prepared for retirement. N=15	2.0	2.47	1.06
8. I feel in control in terms of collecting the information I need. N=15	3.0	2.6	1.06
11.(9[i]) I can envision what it is like to be retired (1 blank answer). N=14	3.5	3.21	.97
14. (10[ii])Did you have a "to do" list for retirement before playing the game? If No, then can you create a "to do" list? (9 blank answers) N=6	2.0	2.0	1.10

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[i] Statement #11 is #9 in the Pre-test.
[ii] Statement #14 is #10 in the Pre-test.

197

The Median, Mean and Standard Deviation for the Additional Statements for
Company #2 Group 2

Statements	Column		Standard Deviation
	Median	Mean	
9. The questions in the simulation were thought provoking. N=15	4.0	3.4	.91
10. It was easier to deal with some issues because they were presented as part of a simulation. (2 blank answers). N=13	4.0	3.38	.77
12. In part 1, I learned more as a result of hearing the questions from the other people at my table. (1 blank answer). N=14	3.0	3.36	.63
13. In part 2, the discussion with the full group provided me with additional information. (3 blank answers). N=12	3.0	3.08	.67
14b. I did not have a "to do" list for retirement before playing the game, I can make a list now. (1 blank answer). N=14	3.0	3.14	.95
15a The simulation game encouraged me to make changes to my way of thinking. (1 blank answer). N=14	3.0	2.93	1.0
15b As a result of experiencing the simulation, I feel more in control of what I have to do to prepare for retirement. (2 blank answers). N=13	3.0	3.15	.99