Effects of Scoréd.vs. Unscored Programmed
Simulations On Satisfaction and Performance in
Management-Oriented Computer-Assisted Instruction

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A Thesis

in

The Department

of

Education

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

March 1985

C Susan M. Francis, 1985

ABSTRACT

Effects of Scored vs. Unscored Programmed Simulations on Satisfaction and Performance in Management-Oriented Computer-Assisted Instruction

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Are managers more satisfied when scores are presented to them in programmed simulations than when no scores are presented in simulation designed as CAI exercises? What effect, if any, does managers' grade level have on their satisfaction with such exercises? In this study 36 managers of low (17) and high (19) Hay grade levels completed scored and unscored versions of a programmed simulation of a staff performance appraisal. Results on a Likert-scale mechanism did not increase satisfaction; nor did it enhance performance on the multiple-choice questions constituting the programmed simulation exercise.

ACKNOWLEDGEMENT

Of the many people who helped me complete this tudy, I would like to thank in particular:

Dr. G. Boyd, Dr. D. Dicks, Dr. J. Baggaley, Tom Wilson and Elaine Bruce of Concordia University for their valuable encouragement and advice.

Ken Tongue, Lenore Edmond and Ken Burnett of Synerlogic, Inc., with special appreciation to Alain Champagne who produced and tested the unscored version of "Harvey Hornblower".

Bill Wilburn, of the Toronto-Dominion Bank for authorizing the use of Bank resources; David Fisher and Bob Sanders for persuading 48 managers to participate and organizing the schedule; Ozay Isikozlu, Donna Dros and Ken Pon of the Information Centre for their software troubleshooting; all the T-D managers who donated their time and attention toward the success of the study.

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1 INTRODUCTION

Context and Statement of the Problem

There is increasing use of simulations and games in Computer-Assisted Instruction (CAI) for management training. This is partly due to the greater availability of micro-computers with enough memory to accommodate instructional software including calculation, storage and display of scores. In addition, training developers may choose from commercial software or develop their own CAI exercises using course languages and systems.

One form of management training exercise is the programmed simulation, popularized by Erwin Rausch of Didactic Systems Inc. (Sykes, 1979). With the advent of the micro-computer it has become easy to score each question in the simulation exercise and to display scores to participants not only at the end, but also during the course of the exercise. Some designers of CAI programmed simulations have already taken advantage of this capacity. However, the practicing instructional technologist will take care in using such a technique

unless it can be shown to be of instructional value.

In this study, the author addressed the problem of determining such instructional value by comparing a visibly scored ("scored") with an invisibly-scored ("unscored") programmed simulation to discover whether fed-back scoring had a positive effect on satisfaction and performance. The "Harvey Hornblower" exercise, a computer programmed simulation, deals with the subject of "performance appraisal", a topic familiar in theory and practice to most managers in parge organizations.

A programmed simulation can be usefully classified as a definitive versus a probabilistic game model (Elgood, 1981). The unscored version of the exercise is not technically a game, and this distinction will be dealt with later. However, the value of Elgood's analysis lies in the identification of the characteristics of definitive models. In a definitive decision-result mechanism is direct, model. constant and rigid. It may be operated by submitting decisions to a set of rules, or a computer program... It may be handled in numbers or words, but it always gives the same output in response to the same input* 1981). Definitive game ~(Elgood, models include:

conventional model-based games, in-basket exercises, puzzles, mazes, conceptual games, enquiry studies, encounter games and programmed simulations. In particular, a programmed simulation is an exercise that begins with a situation or problem, offers learners a choice of decisions, then briefly discusses each decision taken, either revealing the correct answer or allowing the learner a second try (Elgood, 1981).

consideration of the nature of managerial subject matter (in this case, performance appraisal) and of the target learners (managers), the researcher questioned the appropriateness of using point "payoffs" with the intention of increasing satisfaction and performance. For this audience and this subject matter, seemed plausible that an unscored programmed simulation might be just as effective or even more effective in achieving these goals. The option of scoring raises several questions. Does a requirement to score points offend 'managers, particularly those with years of experience at the task, thus possibly decreasing their satisfaction and performance? Might a scoring mechanism have a negligible effect on their attitudes? Or, do points function as some designers intend, involving participants more fruitfully in the

learning process?

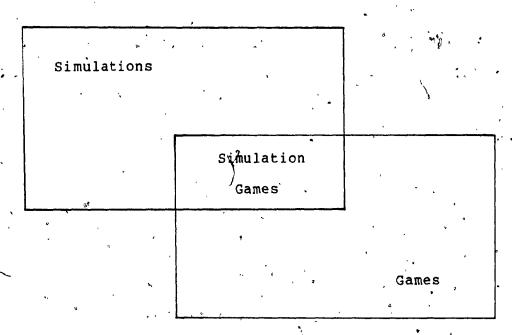
The foregoing questions have implications for instructional systems designer who, according tó Romiszowski's (1981) heuristics, has already defined the problem (level one analysis), selected instruction as the solution (level two), and is then faced with decisions regarding media and strategy (level three). Putting the issue of cost aside, the decisive criterion for the use of a particular teaching strategy should be it achieves the designer's objectives more effectively than any other method. Assuming that the designer has chosen CAI as the medium and is faced with deciding between a scored and an unscored programmed this criterion should apply. simulation strategy, Therefore, a visible scoring mechanism would be warranted only if it proved more effective in achieving the ranked goals of, for example, increasing learner enjoyment (1) and enhancing performance (2).

A practical concern for assessing the effectiveness of using scoring in such exercises engendered these research questions: What is the effect of scored versus unscored programmed simulations on the satisfaction of managers? Do readily-measured attributes of managers,

such as managerial grade level, make a difference in the effectiveness of either technique?

Literature Review

It is appropriate to begin by locating the exercises under study in the context of simulation/game literature. As with many other areas of educational technology, simulation/game terminology is still in the process of being standardized. In orderato make sense of this particular research problem in the context of available literature, it is useful to distinguish between games, simulations and simulation games, as represented below:



For the purpose of this study, a simulation is defined as/manything which simulates or models reality" (Shirts, 1975). The unscored version of the Harvey exercise models the reality Hornblower interactive process of performance appraisal. Thus it is a simulation. In addition to modeling reality, simulation/games incorporate some key characteristics of games. A game can be succinctly defined as *activity in which people agree to abide by a set of conditions in order to create a desired state or end" (Shirts, 1975). Games may or may not be contests, the essence of which is competition. The scored exercise simulates performance appraisal and exhibits necessary defining characteristics οf Therefore, it is a simulation/game. In addition, it may be thought of as a contest between the learner and himself (his previous score), or between the learner k and the computer program which drives the exercise.

A commonly-cited justification for using simulation/games is their ability to motivate learners (Cherryholmes, 1966; Tansey and Unwin, 1969; Seidner, 1976). Mitchell (1982) states a rationale for using

games in preventing or at least delaying boredom, citing as a prerequisite to successful learning "sufficient involvement with the subject matter to pay attention and respond. Burke (1982) notes: "If the objectives of a CAI lesson can be accomplished with a gamelike approach, the motivation of the students can sometimes benefit greatly...increasing students' affective involvement in the lesson, thereby possibly increasing learning and retention."

How is motivation effected in games? From a behaviorist point of view, one plays a game to win points, counters, grades, admiration, or other extrinsic rewards. Coleman's (1967) research within the American school system reflects the view that the student is already motivated to learn and that "winning is the most highly relevant goal" when playing an instructional game.

Cognitive and humanist theorists offer a different perspective. For example, Bruner (1960) stresses the importance of intrinsic motivation "resulting from the satisfying process of retention, retrieval and mastery of the subject matter". In their study on pay-offs and motivation, Frank and LeCavalier (1982) found that

social science students tend to prefer "intrinsic rewards related to the subject matter of the games" to "extrinsic rewards" such as grades and approval of professors.

Clearly, the ways in which affective involvement and performance are enhanced in simulations, games and simulation/games are still at issue and answers may emerge from further research.

This study addresses the general need cited in the simulation/game literature for research on the effect of games on "different target populations, sophistication, for different different levels of subject matter, so that some progress may be toward agreement on which differences figure in the practical application of this instructional technique" (Twelker, 1971). Fletcher (1968) calls for research that examines problems using two versions of the same game which differ in one important way only, using dependent variables such as "motivation, interest, learning and attitude change". Seidner (1976) discusses the motivational qualities of simulation/games. Yet few studies have investigated differences in the level of affective involvement or satisfaction as well

performance generated by simulations versus simulation/games.

In particular, this study addresses the advice that the type of reinforcement used in CAI simulations should be "geared to the students' needs and perceived by students as satisfying (Chambers and Sprecher, 1983). Research indicates that an appropriate use if simulation/games is to motivate reticent learners (Cowan, 1974; Mitchell, 1982). However, antiboredom measures such as the requirement to score points may be wasted on certain target learners, particularly those already interested in the subject matter. It was hypothesized that this is the case for managers engaged in management-oriented CAI, and even more so for subject matter such as performance appraisal.

Megarry (1978) warns of the danger that a game's competitive element may become excessive and distracting, thus subverting the direction of the motivation. In this study, managers competed against their previous scores or against the computer program. It was possible they could become so preoccupied with scoring points that they would lose sight of the

instructional goal. At the very least, the requirement to score points was expected to prevent them from exploring freely the consequences of deliberate wrong answers. This conflicts with the objective of discovery learning in simulation exercises, the value of which lies in allowing participants to see the consequences of different input values.

On important factor influencing motivation is knowledge of results, or "KR", which can function as an learning. Annett (1967) describes incentive to extrinsic KR, or augmented feedback, as "the addition of information regarding the standard of performance". might include time on target, statements about how well the learner is doing. A central notion in his analysis is that knowledge of scores is not essential, but the informative feedback intact. In other words, loop must always remain learners must know whether their answers are correct or not and why. Both programmed simulations used in this study incorporate informative feedback loops. However, the visibly scored game-like version adds a score for each question answered.

At this point, a note about the choice of

managerial grade level as an independent variable may appropriate. Several studies show significant effects of learner personality on attitudes to and performance on CAI exercises (Snow, 1977; Pratt, Uhl and Little, 1980). However, because of potential legal discrimination, personality of becoming less widely used in managerial hiring. The instructional designer working in a business environment turns to more acceptable and more readily measured learner attributes as indicators for design strategy. The Hay system of grading managers according to the scope of their duties is one prospective tool discovering such learner attributes. If it could be shown that managerial grade level had a significant bearing on perceived satisfaction with, and performance on CMI exercises, designers could make more informed decisions on instructional strategies such as scoring mechanisms.

Hypotheses

Based on the research problem outlined, three hypotheses were proposed:

- H₁- Managers will be more satisfied with unscored programmed simulations than with scored programmed simulations.
- Managers of a high grade level will display.

 less satisfaction with scored programmed

 simulations than managers of lower grade

 level.
- H₃- Managers' performance on multiple-choice questions will be higher on the scored programmed simulation than on the unscored programmed simulation.

The rationale for the hypotheses follows from the researcher's discussions with managers at two Canadian banks and from a priori assumptions about managers' perceptions of the seriousness of the performance appraisal process. In addition, the rationale partly derives from current knowledge about the motivating qualities of discovery, or experiential, learning. The main points of the rationale are

- The subject matter 'may be inherently interesting or motivating to the target audience because

performance appraisal is a task they usually conduct every six months. Managers generally consider this a serious, even an anxiety-inducing task. This is partly due to the switch in roles from resource person/helper to evaluator. It is plausible that managers would welcome any guidelines that would make this task easier for them to deal with.

- Managers might feel the point pay-off aspect of the programmed simulation trivializes the subject matter -- that it is an overly-light treatment of a serious management task. However, the rules set out in the scored version might cause them to perform better than managers in the unscored treatment who may deliberately enter wrong answers without fear of affecting their score.
- The higher the grade level managers have achieved, the more they might feel that the task is a serious one, and that playing for points is inappropriate to the gravity of the task and for their own status. (The Hay system of grading establishes not only a hierarchy of professional experience but also of perceived status within an

organization.)

S.

- Providing that the content is accurate, the instructional technique of programmed simulation may be inherently interesting and motivating, since it is experiential versus expositive, and because its interactive features demand that the learner pay attention and resond. Thus, even if a visible scoring mechanism does not annoy managers, they may still find it superfluous.
- It may be inappropriate to arbitrarily assign discrete points to a subject matter or task that consists largely of shades of judgement, as opposed to identifiably correct answers. Manager-participants could react negatively to any perceived inconsistency.

Operational Definition of Variables

Satisfaction is measured by two Likert-scale attitude questionnaires, one administered to the two scored groups and the other to the two unscored groups.

Questions were designed to measure: attitudes related

to the rationale behind the hypotheses (Questions 6, 7, 8, 9, 10, 12, 13, 19, 20); attitudes directly related to the hypotheses (Questions 1, 2, 3, 4, 5, 11, 14, 15, 16, 18); and additional information related to the study, such as years of experience and performance appraisal courses taken (Questions 21, 22, 23, 24). Actual questionnaires used can be found in Appendix 1 and are further described in the Apparatus section.

Hay system of professional staff grading which indicates ranges of ability and responsibility. For this study, high competence is indicated by a grade of three or four and low by a grade of one. (See Appendix 3 for a complete description of the grading method.)

Performance is measured by points achieved on multiple-choice questions in scored and unscored exercises. It was possible for participants to skip over Unit 2 of each of the 10 modules, provided they answered Unit 1 correctly. In addition, they could sometimes achieve double points on Unit 3, as described more fully in the Apparatus section. Taking these inequalities into account, scores for all Unit 2's were eliminated and one point was measured for a correct

answer to each of Unit 1 and 3.

2 METHOD

Subjects 1

The Manager of The Training Research and Development Section at the Toronto Dominion Bank, hosting the study, selected 24 managers with high and 24 with low Hay grades. Participants were selected on the basis of their availability and willingness to participate. The Manager assigned participants to one-and-three-quarter-hour time slots spaced over four consecutive days. Attrition claimed 12 participants, reducing the total sample to 36 managers, 19 high and 17 low.

Design

Two experimental variables were arranged in a 2 x 2 factoral design. The first experimental variable, type of programmed simulation, consisted of a visibly scored ("scored") and an invisibly scored ("unscored") version. The second variable, Hay grade category, consisted of high and low grade levels.

.Hay Grade Category

| | Low - A ₁ | High - A ₂ |
|--|-------------------------------|-------------------------------|
| Programmed Simulation B ₂ Unbscored - B ₁ | A ₁ B ₁ | A ₂ B ₁ |
| Type of Progra Scored - B ₂ | A ₁ B ₂ | A2B2 |

Apparatus and Experimental Materials

Two IBM personal computers with 256K RAM each and an accompanying Epson printer were set up in private working areas in a large, quiet room. Four floppy diskettes were used, two for each version of the exercise, in the event that scheduling required either two scored or two unscored exercises to be run simultaneously.

programmed simulation included a brief introduction, a menu of items of background information a fictitious employee, "Harvey Hornblower", and a series of multiple-choice questions prompting participants to conduct a performance appraisal for Harvey. All background information was available at any during the exercise by means of a "help" function. Each programmed simulation condition offered feedback after responses to multiple-choice questions. First, participants were told whether or not they had selected the best choice in Harvey's particular case. This was followed with a brief explanation of why their choices were correct or incorrect. The exercise then proceeded to the next unit or module. (See Appendix 4 for a sample worintout of the introduction and Module 1 of the exercise.)

The exercises differed only with respect to the mention of points. The scored version consisted of 10 modules with three decision units in each module. It was visibly scored so that a correct answer on Unit 1 awarded points to participants, allowed them to skip Unit 2 (an obstacle with low pay-off), and qualified them for double points for a correct answer to Unit 3. Alternatively, those who answered Unit 1 incorrectly

got no points, had to answer Unit 2, and could not qualify for double points on Unit 3. The unscored version was identical to the scored version except that the introduction made no mention of rules for scoring points.

The contents of the background information, the multiple-choice performance questions and the feedback were validated by the expert opinion of independent judges: án assistant-professor Management Science; the manager of a consulting firm who originally commissioned the exercise; and the Training Research and Development Manager of The Section at the hosting bank. The judges independently found that the exercise reflected current theory and practice in the area of performance appraisal, and that it had face validity.

As noted previously, the Likert-scale attitude questionnaire consisted of questions designed to measure the accuracy of the rationale behind the hypotheses, as well as to measure the participants' satisfaction with the treatment exercise. There were two versions of the questionnaire, one for the scored and one for the unscored treatments. Questions

administered to both treatment groups were identical, except for Questions 14-19 which were constructed in parallel fashion to determine attitudes toward being scored or not being scored. For example, Question 14 (unscored) was, "I would have preferred being scored on each question as I went through the exercise." Question 14 (scored) was, "I would rather have done the exercise without seeing my score on each question." questionnaires were validated by expert opinion and, the number of questions considering and scores acceptably reliable obtained, proved analysis. The internal post-experimental item consistency reliability index of the attitude test as given by Cronbach's alpha was equal to /.49, which was considered respectable in consideration of the subject to item ratio.

Procedure

The two groups of managers selected and scheduled for the study (24 high, 24 low grades) were randomly assigned to scored and unscored treatments. Attrition claimed 12 participants so that results were obtained for 19 high-level managers (10 scored, 9 unscored) and

17 low-level managers (9 scored, 8 unscored). They were scheduled to run two at a time for four consecutive days during business hours.

Managers were welcomed two at a time when possible and briefed on the purpose of the study and the procedure to be followed. The purpose of the study was explained as part of ongoing research on computerized management exercises. In accordance with a request from the Manager of The Training Research and Development Section, participants were told that the research was not generated by the Bank and that any information they gave would not become part of their records.

All managers were told they could enter a fictitious name instead of their own when prompted by the computer program. All were directed to choose the sixth option on the menu so that they would all see the complete background information on the employee they were to review (Harvey). They were told there would be between 20 minutes and an hour of CAI, depending on whether they chose to repeat the exercise, then a five-minute questionnaire and a brief personal interview.

After completing the assigned scored or unscored

exercise and the appropriate questionnaire, managers were asked Question 14 from the questionnaire, that is, would they rather have a scored or an unscored exercise. They were asked to explain their choice. The researcher recorded their comments, answered any questions, and thanked the managers for participating in the study.

Ö

3 RESULTS

Two-way analyses of variance were performed on the data collected from multiple-choice questions throughout the exercises, i.e., number of points scored. There were no significant differences between any of the groups on either of the treatment conditions (Table 1).

Table 1

Means and Standard Deviations of Number of Questions Correct for Groups Differing in Managerial Grade Level and Type of Programmed Simulation

| o √ # ₹ | M | SD | N |
|------------------|-------|------|-----|
| Managerial Level | • | 4 | |
| High | | 1 | • |
| Scored | 13.11 | 1.57 | 10 |
| Unscored | 12.94 | 1.43 | 9 |
| Low | , | | |
| Scored | 13.36 | 1.49 | ູ 7 |
| Unscored | 12.64 | 1.41 | 1 |

Although the cell sizes are somewhat low, the rough parity in standard deviation indicates no departure from homogeneity of variance, an essential condition for analysis of variance.

Regarding managers' satisfaction with programmed simulation treatment as indicated by choice to repeat or not, raw data revealed a small equal number of managers from scored and unscored groups actually repeated the exercise (3 scored, 3 unscored). Since so few managers chose to repeat the exercise no data were analyzed for this observation. In addition, there were no significant differences in attitude questionnaire results between scored and unscored groups for the question, "Given more time, would you repeat the exercise?" (Question 18, Table 2)

Ordinal data collected from the Likert-scale questionnaire were analyzed using the Mann-Whitney U test. Absolute frequencies of responses are recorded on merged scored and unscored versions of the questionnaire in Appendix 2. Means and standard deviations are tabulated in Table 2.

Table 2

Means and Standard Deviations of Questionnaire
Scores for Groups Differing in Managerial Grade Level
and Type of Programmed Simulation

| | | | Grade | Level | | Programmed Simulation | | | |
|-----------|---|------------|-------------|----------------|------|-----------------------|-----------|----------|-------------|
| | | Н: | L <u>eh</u> | Low | | Scor | <u>ed</u> | Unscored | |
| r | Questions | M | SD | H | SD | <u>H</u> | SD | H | SD |
| | Interesting exercise | 1.74 | ,45 | 2.00 | .70 | 1.94 | .66 | 1.79 | .54 |
| 2. | Disliked exercise | 4.26 | .45 | 4.05 | .65 | 4.11 | .70 | 4.21 | .42 |
| 3. | More useful for newer managers | 3.52 | 1.17 | 3.11 | 1.16 | 3.29 | 1.44 | 3.37 | . 90 |
| 4. | Motivated me to do well | 2.00 | .81 | 2.29 | .77 | 2.,06 | . 75 | 2.21 | .86 |
| 5. | Learned nothing new | 3.94 | .54 | 3.47 | .94 | 3.59 | 1.06 | 1 3.84 | . 76 |
| `6. | Wanted to enter wrong answer | 3.31 | 1.37 | 3.76 | 1.14 | 3.71 | 1.31 | 3.37 | 1.26 |
| 7. | Never tempted to enter wrong answer | 2.57 | 1.34 | 2.47 | 1.41 | 2.00* | 1.27 | 3.00* | 1.29 |
| 8. | One may learn from wrong answers | 3.00 | 1.29 | 2.41 | 1.22 | 2.82 | 1.38 | 2.63 | 1.21 |
| 9. | Like to know more about performance appraisal | 1.84 | .37 | 1.88 | .76 | 1.88 | .33 | 1.84 | .76 |
| 10. | Performance appraisal a serious task | 1.31 | .48 | 1.35 | .78 | 1.29 | ,47 | 1.37 | . 76 |
| 11. | Exercise made me want to sharpen performance apprais skills | 1.89 | .74 | 1.85 | .60 | 1.88 | .48 | 1.89 | .81 |
| 12. | Performance appraisal is difficult | 1.63 | .59 | 1.94 | .66 | 1.65 | .49 | 1.89 | 74 |
| 13. | Knew enough about performance apprais | 3.95 al | .52 | 3.64 | .70 | 4.00 | .50 | 3.63 | .68 |
| 14. | Preference for being scored | 3.42 | 1.01 | 3.41 | .71 | 3.47 | 1.00 | 3.37 | . 76 |
| 15. | Being scored challenging | 3.15 | 1.06 | 2.94 | .90 | 2.47* | .87 | 3.58* | .77 |
| 16. | Interested in points or in Harvey reactions | 2.63 's | 1.16 | 2.82 | . 95 | 3.00 | 1.12 | 2.47 | .96 |
| 17. | Scoring affects trying for right answers | 2.42 | 1.17 | 3.06 - (26) | 1.20 | 2.06* | .90 | 3.32 | 1.16 |

Table 2 (Cont'd)

| | • | Grade | | Level | | Ž, P | rogrammed | Simulation | |
|------|--|----------|--------|----------------|-------|--------------|----------------------------|--------------|------------|
| | • | <u>H</u> | 1gh | Ţ | .OW | <u>Sc</u> | ored | Unac | cored |
| | Questions | <u>H</u> | | v ' 4 <u>H</u> | SD | , <u>M</u> | <u>ν , SD</u> _α | ' 。 <u>H</u> | <u>`SD</u> |
| 18. | Would repeat given time | 1.58 | ,51 | 1.41 | .51 | 1.47 | | | .51 |
| 19A. | Gave intentional wrong answers | 1.79 | .41 | 1.76 | .56 | 1.94 | .24 | 1.63 | .60 |
| 19B. | Number of times gave wrong answers | .47 | 1.02 | .59 | 1.12 | .24* | .06 | ,. C.95* | " l·. 31 |
| ti. | Months of managerial experience | 76.73 | 106.78 | 32.88 | 33.94 | 81.94 | 111.95 | 32.84 | 32.27 |
| 21. | Months of conducting performance appraisals | 59.68* | 95.34 | 21.52* | 35.18 | 55.41 | 103.13 | 29.36 | 33.51 |
| 22A. | Taken course in performance appraisal | 1.26 | .45 | 1.52 | .51 | . 0 | .50 | 1.36 | .49 |
| | Recency of course in performance appraisal | 1.63 | 1.21 | .88 | 1.11 | 1.35 | 1.32 | . 1:21 | 1.13 |

 $^{^4}$ Significant differences found at p ${<\!\!\!\!<}$.05 as indicated by analysis using Mann-Whitney U tests.

There were 4 significant differences found for the main effect of type of programmed simulation and one for the main effect of Hay grade level, as noted in Table 3. All other data obtained from the questionnaire yielded no significant differences.

Table 3

Mann-Whitney U Values for Groups Differing in Managerial Grade Level and Type of Programmed Simulation

Grade Level

| (Q21 | - Months of conducting | Low performance appraisal) |
|-------------|------------------------|-------------------------------|
| . No. cases | 19 | 17 |
| Hean rank | 21.92 | 14.68 |
| U E Z | 96,5 | |

Programmed Simulation

| No. cases | (Q7 - Never tempted | wrong answer) | (Q15 - Being scor | ed challenging) 19 |
|------------------|---------------------|----------------|-------------------|---------------------|
| Mean rank | 14.29 | 22.26 | 12.71 | |
| U . | 90. | 0 | 63 | .0 |
| z -2.35* -3 | | | . 39* | |
| | | _ | | |
| | (Q17 - Trying for | right anapers) | (C198 - Frequenc | y vicong animeirs) |
| No. cases | 17 | 19 | 17 ' | 19 |
| Mean rank | 12.85 | 23.55 | 15.35 | 21.32 |
| U 65.5 -3.16* | | | | .0 .33* |
| • p < .05 | | | | |

4 DISCUSSION

The only significant result for the main effect of managerial grade level was that high level managers had more months of experience in conducting performance appraisals. This result, although significant, was to be expected and is not particularly illuminating of the hypotheses. Of greater interest are those results obtained for the main effect of type of programmed simulation (scored/unscored).

Likert questionnaire results confirmed the belief that all managers regard performance appraisal as a difficult and serious task ("Performance appraisal is difficult" -- 30.6 % strongly agreed; 63.9% agreed and "Performance appraisal is a serious task" -- 72.2% strongly agreed; 25.0% agreed). Managers with a higher grade level did not perceive this task to be more serious than did lower level managers. Furthermore, the overall perception of seriousness did not manifest itself, as expected, in dissatisfaction with the game-like scored version.

For the majority of questions designed to measure satisfaction with treatment, there were no significant differences (questions 1, 2, 3, 4, 5, 11, 14, 16, 18). The only exception to this trend was the finding that scored managers agreed significantly more often than unscored managers with the statement that scoring is "challenging" (question 17). This result alone is not considered to be strong enough to reject the null hypothesis regarding satisfaction for at least two reasons. First, while the term "challenging" is often viewed in a positive light, there are cases in which a challenging activity is not necessarily a satisfying one. In addition, scored managers had the advantage of experiencing the scoring while unscored actually managers had to imagine whether scoring would be challenging. Had the result been obtained by comparing managers' reactions to both a scored and an unscored exercise, it might warrant closer attention.

Based on the foregoing discussion, the null hypotheses (H_1 and H_2) were accepted.

As expected, scored managers were tempted significantly less often to enter wrong answers (question 7), reported a lower frequency of entering

wrong answers (question 19B), and reported a stronger attempt to get answers correct (question 17). As noted in the table of mean scores this did not cause their performance to be higher than for unscored managers. Therefore, the null hypothesis (H_3) was accepted.

Accepting the null hypothesis is tempered in this case by consideration of the possibility that a Type II error occurred or that the attitude questionnaire may not have been sensitive enough to measure differences in satisfaction. In the former instance, there may not have been enough distance between high and low level managers. Due to higher priorities in the business environment, few grade 4 and no grade 5 managers were available for the study. However, if it were necessary to use grades so widely separated in order to find differences, the Hay grading system would not be considered a very useful indicator for instructional designers regarding use of visible scoring.

Alternatively, it seems more plausible that this type of error did not occur because of the existence of other hidden variables known to exist in any experimental setting. Factors, such as personality, may indeed be more important than readily-measured learner

attributes, even in a business setting. In this connection it is worth noting some of the unanalysed · comments participants made during interviews immediately after the scored treatment. Some managers reported that they enjoyed being scored because they "competitive" or "achievement-oriented". were these same managers observed that presence of points caused them to focus more on "second-guessing" the computer program than on taking the best decision for a real performance appraisal of someone like Harvey. Scoring may be seen even to be a disincentive to learning, particularly when viewed in latter context. Viewed in this light it is particularly revealing that on the analysis of variance for the main effect of the scored versus the unscored simulation, no significant difference was recorded between the two versions (Table 1).

The results are consistent with the state of current knowledge about the benefits of experiential learning. There was general strong agreement among managers that "Harvey is an interesting exercise" (22.2% strongly agreed; 72.2% agreed). This may be an indication that other critical elements exist common to both treatments which contribute to satisfaction and

enhance performance. These could outweigh the apparently negligible effect of scoring. These factors might include relevance of subject matter, of the experience, interactivity, or those factors identified by Malone (1981) as being central to intrinsically motivating instruction: challenge, fantasy, and curiosity. It is possible too that informing learners of the reasons why answers are correct or incorrect operates to make scoring superfluous.

The null hypotheses are of particular interest to the instructional designer. Should similar studies show the same results, designers of management CAI may conclude that visible scoring does not in itself increase satisfaction or performance.

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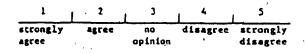
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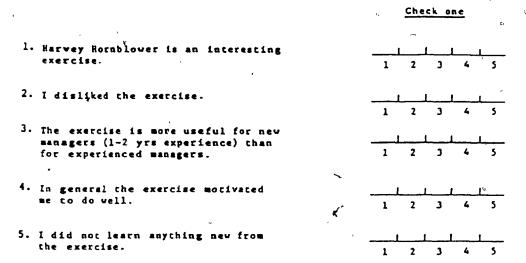
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APPENDIX 1

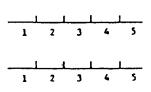
QUESTIONNAIRE (unscored version)



£



- At times I wanted to enter a wrong answer just to see how Harvey would react.
- 7. I was, never tempted to enter a wrong answer.
- When the right answer is obvious, a person can sometimes learn more by entering a wrong answer.



1 2 3 4 5
strongly agree no disagree strongly
agree opinion disagree

| | ٩ | | Check one | | | |
|--------------|---|----------|-----------|----------------|--|-------------|
| 9. Ferforman | ce appraisal is a subject | | 1 | | <u>. </u> | L |
| | lke to know more about. | 1 | 2 | 3 | 4 | 5 |
| | e appraisal is a serious | , | 1 | | 1 | L |
| task. | | 1 | 2 | 3 | 4, | 5 |
| | se made me more interested ling my performance | | ; | | . | |
| appraisal | | 1 | 2 | 3 | 4 | 5 |
| | performance appraisals | | 1 | , | | 1 |
| is difficu | lt. | 1 | 2 | 3 | 4 | 5 |
| | knew enough about e appraisal before the | 1 | 2 | | <u>. </u> | <u> </u> |
| | | / | | | | |
| | ve preferred being scored estion as I went through se. | 1 | 2 | - 3 | 1-4 | |
| | se would be more challenging pants had to score points | 1 | ı. 2 | 3 | 1 4 | <u> </u> |
| interfered | score points would have with my interest in Harvey's to my actions. | <u></u> | l | 1 3 | - | |
| | were scored I would have er to get each answer right. | <u> </u> | | | 1 | |

18. Given more time - would you repeat the Harvey Hornblower exercise?

yes no

19A. Did you sometimes enter wrong answers on purpose so you could see how Harvey would react?

yes no

19B. If yes, how many times?

once 1-5 6-10 times times

- 20. How many years of managerial experience do you have?
- 21. How many years have you been conducting performance appraisal reviews?
- 22A. Have you ever taken a course in how to conduct performance appraisals?

res no

22B. If yes, when was the course?

in the 1-3 yrs 4+ yrs last year ago ago

QUESTIONNAIRE (scored version)

1 2 3 4 5
strongly agree no disagree strongly agree. opinion disagree

Check one 1. Harvey Rornblower is an interesting 2. I disliked the exercise. 3. The exercise is more useful for new managers (1-2 yrs experience) than for experienced managers. 4. In general the exercise motivated me to do well. 5. I did not learn anything new from 6. At times I wanted to enter a wrong answer just to see how Harvey would react. 7, I was never tempted to enter a wrong answer. 8. When the right answer is obvious, a person can sometimes learn more by entering a wrong answer.

1 2 3 4 5
strongly agree no disagree strongly agree opinion disagree

Check one 9. Performance appraisal is a subject I would like to know more about. 10. Performance appraisal is a serious 11. The exercise made me more interested in sharpening my performance appraisal skills. 12. Conducting performance appraisals is difficult. 13. I already knew enough about performance appraisal before the exercise. 14. I would rather have done the exercise without seeing my score on each question. 15. Exercises like Harvey Hornblower are more challenging when participants have to score points for answers. 16. I was more interested in Harvey's responsed to my decisions than I was in scoring points. 17.I tried to get a high score.

18. Given more time - would you repeat the Harvey Hornblower exercise?

yes. no

19A. Did you sometimes enter wrong answers on purpose so you could see how Harvey would react?

res no

19B. If yes, how many times?

once 1-5 6-10 times times

- 20. How many years of managerial experience do you have?
- 21. How many years have you been conducting performance appraisal reviews?
- 22A. Have you ever taken a course in how to aconduct performance appraisals?

22B. If yes, when was the course?

in the 1-3 yrs 4+ yrs
lest year ago ago

APPENDIX 2

QUESTIONNAIRE (absolute frequencies of responses for scored and unscored versions)

C-quastions common to both versions

S-questions administered in scored treatment only

U-questions administered in unscored treatment only

| 1 1 | 2 | ı ; | 4 | 5 🗸 |
|----------|-------|---------|----------|------------|
| strongly | Agree | no | disagree | strongly |
| agree | | opinion | | disagree : |

Check one

Á

strongly agree no disagree strongly.
agree opinion disagree

Check one.

| С | 9. | ferformance appraisal is a subject | |
|---|----|------------------------------------|--|
| | · | I vould like to know more about. | |

1 Z 3 4 5
strongly agree no disagree strongly
agree opinion disagree

- 16. Having to score points would have interfered with my interest in Harvey's responses to my actions.
- 4, 14, 6, 12,0
- S I was more interested in Harvey's response to my decisions than I was in scoring points.
- U 17.If points were scored I would have tried harder to get each answer right.
- 5,14,6 8,3

- S I tried to get a high score.
- C 18. Given more time would you repeat the Harvey Hornblower exercise?
- 18 18 yes no
- C 19A. Did you sometimes enter wrong answers on purpose so you could see how Harvey would react?
- <u>6</u>, <u>29</u>

. C. 19B. If yes, how many times?

1 3 4 once 1-5 6-10

- C 20. How many years of managerial 19 13 experience do you have? 1 or 1-5 5 less
- C 21. How many years have you been 23 6 4 3 conducting performance appraisal reviews?
- C 22A. Have you ever taken a course in how to conduct performance yes no appraisals?
- C 22B. If yes, when was the course?

 in the 1-3 yrs. 4+ yrs. last yr. ago ago

Grade -

STAFF GRADING

THE DEFINITIONS OF

GRADE LEVELS

DEFINITIONS OF GRADE LEVELS

| SPECIALIZED KNOWLEDGE AND | EXPERIENCE | JUDGEMENT | Эправият | CREATIVE THOUGHT | MAN MANACEMENT |
|--|---|--|--|---|--|
| Knowledge | Skill | Complexity | Intengibility | | |
| Either extensive knowledge of a few withdrow or manage semi-stilled manage of clerical processes, with long processes, with long processes that a polical expension on their application of knowledge of a referent on the control of a course of study of academic standard equivation to their action. We wish some of study of the course of study or in a spopying it gained either aurents the course of study or in referent work. | Competence in a strength and strength of publication of problems. | Though much prepara- tory work may be re- quired before the practicable courses can element to be taken for account in asterning such course are few and consequential problems only ental a musor forcessen complexity. | The advantages and disadvan- ages of the alternative courses and their relative importance in relation to the aim can be est- ablished from knowledge and experience. The degree of un- certainty in determining the effects of each course is therefore very minor. | Creative Thought is exercised in soften, the solu- tion of which, though mainly comprising theuse of standard methods or techniques, re- quires a moderate degree of varietion or adaptation in applying them. | The solution of problems calls for an ability to carry convertion with, and to obtain the maximum controlling and administring a group of junor staff, or in conducting negotiation or technical matters where the difficulties to be resolved are of a manor character. |
| Eliter extensive knowledge of many with long practical experience in the application. Or Gorde I level moveful of a relevant subject moveful of a relevant subject with a relevant a species. Or wither and desper knowledge of a relevant a species. Or with a relevant a species. Or with a relevant a species. Or with little experience in the application as a result of a species. Our desperience is a species. Our highlight experience in a species of a relevant three, but with little experience in a species. | | The element to be taken into account in assessing arch courts are few but consequential problems, which have to be solved amuliancously, entail a considerable increase in complexity. | The advantages and disadvan- inges of the alternative courses cannot always be catabilished completely from knowledge and experience, though their relative importance in relation to the un should be clear. There is, therefore, some un- critanty in deternanting the full effects of each course, full effects of each course, though uncertainty is mainly imited to the less important elements in the problem. | Creative Thought is exercised in solving problems, the solvinuon of which, though manaly comprising the application of standard methods or technologies. requires substantial writinn or adparation in Applying them, or provides some opportunity for fresh approaches | The solution of problems callifor an ability to carry conviction with, and to obtain the maximum controlling and administring panior technical staff, or a conducting reputations or contacts on desired and you recently add you recently the difficulties to be recolved are of an important character |
| converter of a maple subject of the | Comprience in a few difficult techniques applied technic tenge of problems. | Each course is complex because many clements base for he discerned and weighted up before a choice can be made | Neither the advantages and distantiages of the alterna- tive course not districtly in the course not districtly in the sim can be catabilitied caurely from knowledge and experience. Thus the effects of each course cannot be determined with creating and as uncertainty of the choice. By adjustion if you have been solved in the past. | Creative Thought is exercised in solving problems where there is considerable opportunity for frea approaches or imaginative treatment in devising course, or for the development of new vechaques or methods, or ibs refashion ing of casting one; but where the scope is limited by a large volume of accopted practice or by the need to fit the solution closely mice the framework of a larger scheme. | The solution of problems caffind and with, and to sumulate technical and supervisory staff to experiment and supervisory staff to experiment and supervisory staff to experiment and potential of performance and potential of performance and potential or to obtain the maximum co-persists of successions or edonicismost consists on matters predomicismuly concerned with the bolder's own profession |
| Either deeper knowledge of a stranger blanch of a subject than at 51 and | Eliker competi- ence in a few difficult technques applied to a wide trage of problems. Or competence in many difficult techniques appli- ed to a limited range of problems | Each course comprises a number of separate (Grade 3 level problems; the advantages and distributed have been confid in the abulation to the composite of the co | Knowledge and experience is only of limited value in establishing the advantage and discourse southers and their relative importance in relation to the amplitude of the advantage of the alternative cannot be determined with certainly and the uncertainty applies to crucial elements, where parallel problems do not provide close precedents. | Creave Thought is exercised as at Grade 3, but where the lack of accepted practice or the newness of the problem increases the need for imaginative or original treatment. | The solution of problems calls for an ability to carry conve- tion with, and to stimulate a group of professional staff in developing their standards of perfermance and potential, or to obtain the maximum co- operation or effort in conducti- ing negotiations, or contacts where the problems of people in a number of different pro- fessions need to be reconciled in integrated. |
| Either authoritative knowledge of a morepal branch of a subject result. If from many years of specialization Or knowledge at the Grade 4 fevel in several branches of a subject. In the branches of a subject of the branches of a subject of the branches of a subject of the propermented by many years teapermented by many years teapermented by many years teapermented by many years teapermented of the principles of the branches of the best advantage. A proper of the branches o | Competence in many difficult techniques application of no wide range of problems . | Each course comprises a number of separate Crade 4 level problems which have 10 be reconciled in the same way at Grade 3 problems are reconciled at the Grade 4 level. | Uncertainty in determining and evaluating the advantages and disadvantages and disadvantages and exercise either by the novelty of the problem or by the novelty of the problem or by the necessity to take nito account long-term effects in circumstances that are likely to vary | Greative Thought is required in translating policy decisions into work programmes where problems are thrers and there is no accepted practice. | The solution of problems calls for an ability to inspire a varied group of professional stuff, to early conviction with people in different professions and to handle negotiations on matters of major importance to the organization |

Grade 3

Grade 2

Crade 4

Crade 5

Grade 1

Grade 2

THE DEFINITIONS OF

GRADE LEVELS

A PPENDIX A

| | 1 | 1.040 20 | 1 46 4 7 - | | | • |
|----------|------------------|---|--|---|---|--|
| Decaions | Facilities | The deployment or of facilities where the type to be used of different sergem. The use of facilities methods and the effect minor | The deployment or selection of a limited range of facilities where there is some latitude both on the types to be used and the assement of the relative importance of different assements. The use of facilities where variation as approved machods may be considerable, but the effects on the quality of service are retiricted. | The deployment or refection of a wide range of facilities on a short term basis where there is considerable failude both on the type to be used and the assessment of the relative importance of different assignment, where short with variations in approved metablish and the effects on the quality of service are considerable. | The deployment or selection of a limited range of facilities on a long-term basis where there is a considerable choice in the type to be used and long general guidance can be given on the relative importance of different augmental. The use of facilities where amort modification may have a long-term effect within a restricted after. | The deployment or selection of a wide and diverse range of facilities on a long-term basis where there is a wide choice on the type to be used and only general guidance can be given on the relative importance of different assignments. The use of facilities where considerable modification may have a long-term effect. |
| Dic | Public Relations | The refease to the public of information on an accontinuous and continuous where close precedent inflicated whether information may be disclosed and the form in which it should be given, though balance and emphasis cannot be subject to close guidance. | The release to the public of information on non-controversisting current activities where there is only broad procedent to indicate whether information may be disclosed and the form in which it should be given. | The relative emphasis to be given to different but non-controversial, aspects of the organization's current activities, to accordance with form. And/or the form of interim statement or action on mattern with a potentially serious effect on the organization's reputation. | The relative emphasis to be given to different appears of the organization's plans and according within a limited area in accordance with close policy directlyes both on content and form. Andlog the form of statements or action on matters with a potentially serious effect on the organization's reputation where close precedent or policy fusitudions exist. | The content and form of major, comprehentive publicity operations, in accordance with general policy directives affecting an important part of the organization of mailer with a potentially serious effect on the organization's reputation under general policy direction |
| | | * * • | • | | • | |
| DECUION | Stal | Deployment of a group of junior staff where loading or effort can be distributed from close precedent and profitted are closely defined. The allocation or assistment of weekly staff where decisions are based manyly on competence. In standard methods or techniques. The treatment of staff where the information, assistance, or training to be given on day to day matter as determined by precedent; this includes the individual's prospects or working conditions a however closely presented. | Deployment of a group engaged on a wide range of attandard extensions or effort can be determined from precedent but priorities are only defanded broadly. The allocation of assessment of based on competence for dutter which are mainly of its and and controller. The iteraturent of itself where the competence for dutter which are mainly of itself and colose precedent in determining the information, assistance or training to degree the controller. This includes advice on minor official at well prospects or working condutions is however closely prescribed. | Deployment of a group engaged on varied and non-tradade activities, where loading or effort and the relative importance of tasks cannot be entirely determined from precedent. The allocation or assument of monthly staff below the professional level where decisions are based on potential as well as competence. The treatment of staff on masters where the balance and emphasis in giving information, assumes or travings though indexted by proceeding many have a material effect on the individual's career and development; this includes advice on moderately important official and personal maisters. Some latitude is permitted in action affecting an individual's prospects or working conditions where precedent exists. | Deployment of a group where there is no close pre- cadent to determine is doud so reflor, or the available mangower which can reasonably be allocated, though hot of guidance is available on the relative importance of assignment. The assessment of professional ability and potential and the allocation of such stiff where decisions are purity based on the need to develop the individual's full potential. The treatment of staff on mattern where the balance and emphasia given the giving information, assistance or training cannot be effect on the individual's career and development maitern. Some lattitude is permitted in action affecting the working conditions of a group of staff | Deployment of a group where there is an elose pre- culation or guidance in determining the relativa- imposition of guidance in determining the relativa- imposition of different projects or the effort which they justify. The allocation and assessment of pro- fessional staff where the development of long term potential is a major consistension. All aspects of the treatishin, prospects and working conditions of a substantial and varied group of staff, where consider- able failtude is permitted and precedent can be created through the interpretation of policy on day to day matters. |
| Ì | | ncous cdent cdent cdent op oo | menu From deri | mumous let where procedent of the different different different different mate. | ·· · · · · · · · · · · · · · · · · · · | flects of its free on its free |
| • | Money | Purchases or commimens of a limited variety in accordance with precedent or from a closely controlled budget, espenditure on each item in very minor. | Purchases or communents of a wider variety in accord- acte with precedent or from a closely controlled budger; expenditure on each, item is munor. | Purchases or communeats of a sared character where in there is no close precedent or apportunent of the budget between different light cannot be closely controlled; expenditure on each liem is moderate. | Purhassa or commiments of a varied character where of a varied character where or apportunitation allows unitational faribility to cluding misor re-spor- tionments between different budgets, expenditure on each tem is considerable. | Purchase or commiments with long-term effects or myolyring substantial or dom of negotiation. Ire- apportonments between apportonments between budgets. apportune on each tiem is aubstantial |

Grade 3

Grade 4

Grade 3

APPENDIX 4

BAILEY & ROSE EDUCATION SERVICES
PRESENTS

THE HARVEY HORNBLOWER EXERCISE

A management case study in leadership and motivation which can be used as part of any course which deals with these subjects.

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Welcome to the Barvey Bornblower Exercise!

During this exercise, you'll be conducting a semi-annual appraisal/counselling interview with one of Your subordinates, Harvey Bornblower.

it's an acronym for Since we'il be working closely together over the next forty minutes or so, perhaps we should introduce ourselves. My name is Pat -- it's an acronym i Pedagogically-Applied Technology'.

Would you please tell me your first name, or the name your friends and colleagues know you by (maximum 12 letters, please).

//Susan

Use the backspace key (to correct. Type your first name and press 'RETURN'

It's nice to meet you, Susani

Just for the record, so I can keep you separate from all the other Susans who have gone through this seksion, would you mind giving me your last name, well.

//Francis

Use the backspace key (to correct Type your last name and press 'RETURN'

It's nice to meet you, Sugani

who have gone through this session, would you mind giving me your last name, well. Just for the record, so I can keep you separate from all the other Susans

//Francis

After digesting this information, you will be ready to meet Now, before you begin the counselling session, I'll give you a chance to review Harvey's personal background, work history, and excerpts from records and previous evaluations.

They cover every aspect of the counselling interview from setting objectives to follow-up. Our session is divided into ten modules.

You'll be awarded points Each unit, in turn, Within each module are three related decision units. from. contains three alternatives for you to select on the basis of your decisions.

Here are the rules for the exercise:

The objective of the exercise (aside from learning) is to score as many points as possible.

cases, choose the In each unit, you will be confronted with a scenario and three alternative cases, you In some In those alternative that is closest to the action you would take. Choose the one you think is best. the choices. won't agree completely with any of choices of action.

If you make the correct decision In other words, the correct Unit 3, where you qualify for DOUBLE points. In other words, the correct decision in Unit 1 of each module will enable you to hurdle Unit 2 (an obstacle, with low pay-off) and put you in a position to score a greatly-, you can increase your score by skipping Unit 2 and moving to In each module, you'll start with Unit 1: increased point gain. on Unit

FRAME 5

THE HARVEY HORNBLOWER EXERCISE SYNERLOGICAL SESSION MM-1: . Correct decisions in each of the three units will earn you the following points

Unit 1 -- 2 points Unit 2 -- 1 point Unit 3 -- 4 points (or 8 points, if you skip Unit 2). a de-briefing on t give you your score and, if you wish, After Module 10, I'll exercise.

Barvey Bornblower's records and personal background. You'll be able to see any to familiarize yourself with part of the background information at any point in the session by typing 'B' contains this option. I'll now give you the opportunity either to move the prompt (the line at the bottom of the screen) if you prefer, directly to the first module or, Good. Susan? All set,

Press the 'RETURN' key to continue.

O

background (which includes items I to 5) by selecting item 6. Or, see any particular aspect of Barvey's history by choosing items I through 5. Get Harvey's complete choosing item 7. directly to Module 1 by background You can go

1. Personal Data and Earnings Record

2. Personnel Record notes

). A memo to yourself, dated this week.

. A summary of Harvey's most recent appraisal

5. Harvey's reaction to the appraisal for the complete background (all of items 1 through 5)

J. the complete Dackglound (all of Items 1 th.
7. Go directly to Module 1, Unit 1.

Your choice //

Enter your selection, and press the 'RETURN' key.

BACKGROUND ON HARVEY HORNBLOWER

医多类性白色素 化拉克斯奇姓氏克拉拉拉斯斯氏 医多种性的 医自己的

Personal

Completed two years of university Pour years with your organization (no previous full-time work history). Married, with two children Age: 26

Earnings Record

| \$16,000 | |
|--|--|
| completed) | |
| (just | |
| First year Second year Third year Fourth year | |
| • | |

0000

FRAME

Personnel Record Notes

Barvey Bornblower was promoted and transferred to your department one year ago. Some excerpts from his records:

economic reasons, but plans I find him bright, He does need to mature somewhat; recent marriage should help "Harvey came to us directly from university; he decided to At this point he requires a periodic pat on the back, assurance, recognition to work towards finishing his degree in evening extension. join us rather than complete his degree program for Takes pride in doing a good job." First Supervisor: eager to learn. for effort.

He's difficult to change when he Often sticks to his guns beyond "Be's imaginative and a hard worker; normally exercises rigid in his approach to problems -- prefers his way can, however, be stubborn. manager. to error, rather than following directions of reasonable point; seldom will admit IB Barvey right. Second Supervisor: thinks he's judgement.

Second Supervisor (Continued) Personnel Record Notes -

'did not hold suf spôt in the near futurë where he will feel his skills will be better utillzed I hope to find him a suitable (along with sub-"In spite of these factors, Harvey continues to do an excellent job overall on to a different division he proposed new assignment growth' Be recently turned down a promoted ficient challenge or opportunity stantial raise) because he felt

In apite of these shortcomings, he gets back on track quickly. Harvey is very well liked, has a 'Barvey doesn't react too well to criticism from managers or peers; he often Minor problems will occasionally upset him. good personality, is confident. gets defensive.

Memo to Yourself (dated this week)

Yesterday, Barvey wasted six hours attacking a problem incorrectly -- discardin (or misinterpreting) my instructions.

He was working on a detailed and complex project outline. His proposed method was sound, but it violated recognized procedure and could not be completed within the established budget.

He will have to spend Harvey was familiar with both facts prior to starting. another day re-working the plan to meet our specs.

FRAME

THE BARVEY HORNBLOWER EXERCISE SYNERLOGICAL SESSION MM-1: Summary of Most Recent Appraisal (your report -- six months ago)

Strength

prompt in meeting deadlines, confident, normally uses good business judgement creative, Good administrator, handles paperwork well, writes good reports,

Could Improve

Barvey sometimes finds it difficult to accept suggestions. 'Has a tendency to improvise (if he doesn't agree) at times he doesn't listen well, or claims he doesn't. I feel he will become ess rigid and be able to broaden his outlook as he develops. Weeds to become more flexible and adaptable.

Self-Development

Continuing with university course; completed workshop in public speaking; attended two company-sponsored seminars. Indicates interest in further development.

'RETURN' key to continue. Press the

Potential

Very bright, learns fast, feel that Barvey has management potential. Excellent. Likes responsibility, takes initiative. gets along well with people. I feel tha recommend for raise at appropriate time.

Reaction to Appraisal

He responded well when I assured him his overall performance was good; he was very interested in areas where he We discussed his inconsistencies in following instructions; He listened to constructive suggestions but didn't seem overly. don't think he is convinced of the reality and degree of this shortcoming. Barvey can't view his performance objectively. is strong. Be enthusiastic.

RETURN . key to continue. Press the

SYNERLOGICAL SESSION MM-1:

information, you're ready to meet Harvey and conduct the appraisal/counselling Now that you're familiar with all the background That's it, Susani interview.

Unless you need to review some portion of the background, I suggest you select option 7 on the menu. Good luck! option 7 on the menu.

THE HARVEY BORNBLOWER EXERCISE SESSION MM-1: SYNERLOGICA

Get Harvey's complete particular aspect of Barvey's history by choosing items I through (which includes items I to 5) by selecting item 6. You can go directly to Module 1 by choosing item 7. background

Personal Data and Earnings Record

Personnel Record notes

A memo to yourself, dated this week.

A summary of Harvey's most recent appraisal

of Atems 1 through 5) The complete background

Go directly to Module 1

and press the

Enter your

FRAME 16 THE HARVEY HORNBLOWER EXERCISE, MODULE 1 SYNERLOGICAL SESSION MM-1:

Unit 1

Before you set your objectives and plan Harvey's appraisal/counselling intervie you should:

- Pick out only recent incidents or examples to help you evaluate Barvey's is a good case in goof -- this week (His latest current performance. point.)
- Do research, but expand your review to cover the entire period since Barvey' last appraisal interview. æ.
- C) Do nothing. If you're not familiar with Barvey's work, habits and perfor mance, you're not doing an effective managerial job.

Your decision // B

Type 'A', 'B' or 'C', and press the 'BETURN' key.

(64)

E. MODULE 1 FRAME 17

THE HARVEY HORNBLOWER EXERCISE, MODULE 1 SYNERLOGICAL SESSION MM-1:

idea to keep a running record, that is, notes on good and bad performance Do some homework do it for the entire evaluation period. this is the best choice.

You've earned 2 points, and you now qualify for DOUBLE points on Unit 31

Press the 'RETURN' key to continue, or 'B' to see the background information.

O

Unit 3

Your planning should cover the selection of an appropriate site in which to conduct the interview. Which would be best?

- Your office. Rank has its privileges and there's no need for you to discard your role for this one occasion. **A**
- It's always a good idea to meet one of your Harvey's office or work space. subordinates on his terms. B
- A neutral office, conference room, or off-premises site.

Your decision // C

Type 'A', 'B' or 'C', and press the 'RETURN' key.

THE HARVEY BORNBLOWER EXERCISE, MODULE 1

SYNERLOGICAL SESSION MM-1:

guard turn off phones, Sugan, a neutral meeting apot is your best bet for a relaxed inter-In any case, it's essential to provide privacy -against interruptions. view. Yes,

You've earned 8 points because you skipped Unit 21 Let's move on to the next module.

Press the 'RETURN' key to continue, or 'B' to see the background information,