SOME EFFECTS OF POSITIVE PERSONAL REINFORCEMENT UPON SOCIALIZING STUDENTS IN AN EXPERIENTIAL LEARNING COURSE

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ABSTRACT

Using the experiential learning method in management education requires a special effort to socialize the learner early in the course and a continued effort to reinforce those behaviors that are desirable for effective learning. Using a Socialization Index, students were categorized into (a) those who accept the pivotal and relevant norms needed in experiential learning and (b) those who did not accept these values and norms. Giving positive personal reinforcements to those students who did not accept these values and norms constituted a treatment, while the others did not receive a treatment. Results of the treatment are analyzed using the Regression Discontinuity model and Analysis of Covariance. The treatment had a statistically significant effect.

INTRODUCTION

The use of structured experiential exercises in the college classroom requires a pedagogical approach that is quite different from other teaching methods. Examples of structured experiential exercises include the use of games and simulations, role playing, self-assessment instruments, and group decision making exercises. Structured experiential exercises require student involvement as a source of learning. The objectives of experiential learning are twofold: students "learn how to learn" from experience and the improvement or adaptability of skills such as interpersonal relations, decision-making or communication [9].

Experiential learning is based on the premise that learning is facilitated when preceded by a concrete experience and that meaning is derived from the experience most effectively through "processing" [9]. Figure 1 describes experiential learning as a four-stage model:

FIGURE 1
FOUR STAGES OF EXPERIENTIAL LEARNING
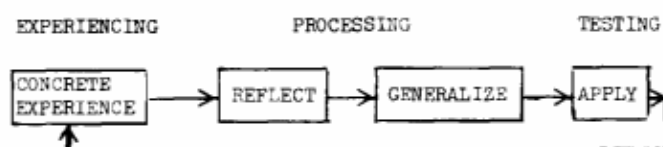
Structured experiential exercises provide the arena for "experiencing" in which students, as individuals or in groups, must make decisions and take action. Behavior and feelings are provoked and elicited. Structured "debriefing" questions in both small and large group discussions provide the vehicle for reflecting and generalizing about the experience. Subsequent exercises or life experiences serve as the method of applying and testing the learning.

Effective experiential learning depends on two factors:

the student's ability to integrate cognitive and affective learning, and the instructor's ability to "socialize" students into the experiential learning classroom. According to Hoover, experiential learning exists when "a personally responsible participant(s) cognitively, affectively and behaviorally processes knowledge, skills and/or attitudes in a learning situation characterized by a high level of active involvement" [6, p. 116]. Cognitive learning refers to the acquisition of knowledge through recall or recognition and the development of intellectual abilities and skills [1]. Learning in the effective domain includes objectives which describe changes in interest, values or attitudes and the "development of appreciations" or adequate adjustments [1, p. 7). In the experiential learning situation cognitive and affective learning are mutually reinforcing.

Socialization refers to "the process by which new members learn the value system, the norms and the required behavior patterns of the society, organization or group which a person is entering" [11, p. 19]. In the class-… room, socialization encompasses the process or method the instructor adopts to inform students of expectations. That is, students must be made aware of what is expected of them, the role of the instructor and hoped for outcomes. In addition, the instructor must deliberately demonstrate to students the mutually reinforcing relationship between cognitive and affective learning.

CONCEPTUAL MODEL

The basic response to socialization results in some degree of acceptance (or rejection) of the pivotal and relevant norms of a group or organization. Pivotal norms are defined as those which are central and necessary for productive membership in the group or organization. The pivotal norms of experiential learning include: 1) the locus of responsibility for learning must be shared between student and instructor; 2) affective as well as cognitive processes are involved in learning; 3) learning goals include transference of knowledge as well as development of skills and attitudes; and, it) the student must be an active participant in the learning process [2]. If the pivotal norms are to be accepted, the instructor must actively seek to enhance their value through appropriate socialization.

Relevant norms are those which are not absolutely necessary to embrace for group membership but are peripherally related to group goals and productivity. The relevant norms of experiential learning include values such as: being punctual; completing assignments according to a required format; preparing assignments neatly; willing to do optional work; and, accepting the expertise of the instructor. They are not absolutely necessary for the attainment of learning in the experiential method but can contribute towards learning.

Schein [11] developed a three-type classification based upon acceptance or rejection of pivotal and relevant

norms. A fourth type was added to this classification[1] and developed into a two-by-two socialization matrix (Figure 2), which serves as a conceptual model for this investigation.

Type 1: Rebellion   Rejection of both pivotal and relevant norms

Type 2: Creative Individualism   Acceptance of pivotal norms and rejection of relevant norms

Type 3: Conformity   Acceptance of both pivotal and relevant norms

Type 4. Playing the Game   Rejection of pivotal norms and acceptance of relevant norms

FIGURE 2
SOCIALIZATION MATRIX
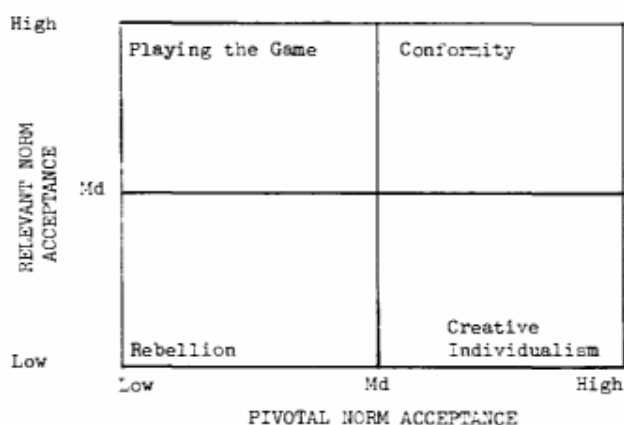
Getting students involved in their own learning and expecting them to utilize affective as well as cognitive processes in learning may be a difficult barrier to overcome, particularly for those who have been socialized over many years in more traditional learning methods. Frequently, the socialization process involves first undoing (unfreezing) previously learned values before new values can be accepted. The process of "unfreezing" is often unpleasant and nay require a strong effort to make socialization successful [11, p. 5]. Likewise, some observers have noted that experiential learning is robbed of its full potential because often it is not taken seriously since it involves "playing games" and "having fun" or that students lack the keen observational skills needed to benefit from experiential-type exercises [l0;5;3]. Green and labor conclude: "...these problems serve to weaken the reflective observation phase of learning, thereby diminishing students' ability to develop abstract concepts, to relate the course experiences to other concepts and to generalize to real-life situations" [5, p. 890].

The present investigation asks the question: What •can an instructor do to overcome some of these problems to increase the acceptance of the pivotal norms associated with experiential learning? Students in an undergraduate organizational behavior class who did not embrace the pivotal and relevant norms of the experiential learning method were identified and given a special reinforcing treatment. The investigation then assessed the effects of the treatment.

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[1] Type 4 was suggested by John Veiga, Univ. of Conn. -

METHOD

Testing

Seventy-four students in an undergraduate organizational behavior course were administered a Socialization Index to determine the degree of acceptance or rejection of pivotal and relevant norms associated with experiential learning. The Socialization Index consisted of 16 items, 8 assessing the degree of acceptance of pivotal norms and 8 assessing the degree of acceptance of relevant norms. Responses to the 16 items on the Socialization Index ranged on a five-point scale from 1, "strongly disagree" to 5, "strongly agree." The Socialization Index was administered at the beginning of the first class session for the "before treatment" assessment and again at the end of the fifth class session, of a lit-week semester, for the "after treatment" assessment. Based on their responses, each student was categorized into one of the four types in the Socialization Matrix.

Treatment

During weeks one through five, students who placed in the Rebellion quadrant of the Socialization Matrix were given five treatments of positive personal reinforcement (PPR). The PPR's were designed to reinforce the pivotal norms of experiential learning. At the end of each in-class exercise during weeks one through five, all students completed an Exercise Response Form (ERF) consisting of the following questions:

1. What behavior(s) did you observe in the members of your group? Other groups?

2. What did you learn about your own behavior?

3. What did you find interesting about this exercise? Uninteresting?

4. On a scale of 1 through 5 (where 1 is low and 5 is high), how would you rate yourself as an observer of behavior in this exercise?

The ERF's were used as a vehicle to administer handwritten PPR messages to students in the Rebellion quadrant. PPR messages were handwritten and recorded in the margins of the ERFs using the following format:

1. Student's first name

2. A positive personalized message aimed at reinforcing a desirable behavior reported by the student during the exercise

3. Instructor's signature

Some examples of PPR messages administered include: Your observations are very thorough; You seem to respond well to the challenges presented by the exercise; You seem to have a very positive attitude about this type of learning; Your participation in this exercise is very constructive. Generally two or three PPR messages were handwritten on each of the Exercise Response Forms submitted by students in the Rebellion quadrant. Students placing in the three remaining quadrants on the Socialization Matrix received no PPR message. Students were not informed that a classroom experiment was underway. The Socialization Index was described as a "vehicle" to assist the instructors in understanding student expectations relative to experiential learning. ERFs were required of all students and PPR messages were handwritten so that selective feedback would not be conspicuous.

At the end of the fifth week, PPR treatment was terminated. At this point the students were asked again to complete the Socialization Index.

RESULTS AND ANALYSIS

Pretest medians, means and standard deviations are shown in Table 1 for the pivotal and relevant norms as measured by the Socialization Index.

TABLE 1
PRETEST MEDIANS, MEANS MID STANDARD DEVIATIONS

	Median	Mean	SD
pivotal Norms	314.5	33.10	3.01
Relevant Norms	21.5	20.61	4.15

N = 74

FIGURE 3
PRETEST MEDIAN CUT-OFF POINTS AND NUMBER OF STUDENTS IN EACH QUADRANT
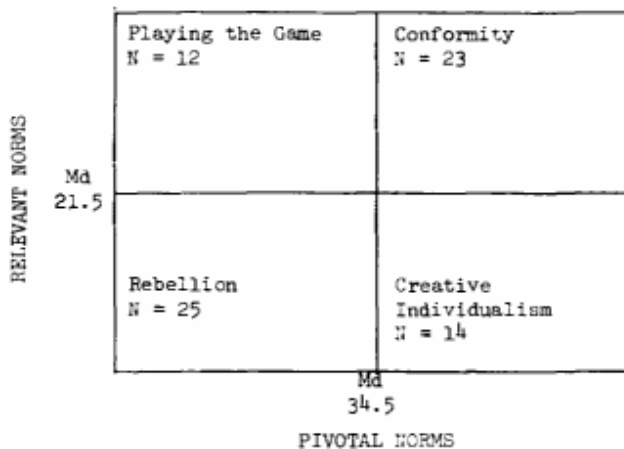
The median score for each of the norms served as a cut-off score to designate the quadrants forming the four types of student responses. Figure 3 shows the number of students in each of the quadrants based on the responses of the pretest Socialization Index.

For purposes of analysis, students in the Rebellion quadrant were designated as the treatment group. All other students were defined as the comparison group. Sixty-two of the ~ student responses were useable for analysis: N = 20 in the treatment group; N = ~2 in the comparison group. The means of the pretest and posttest scores for the treatment and comparison group are presented in Table 2.

TABLE 2
MEANS OF PIVOTAL AND RELEVANT NORM SCORES

Norm Variables	Treatment Group N = 20		Comparison Group N = 42	
	Pretest	Posttest	Pretest	Posttest
Pivotal	31.0	31.70	36.05	34.38
Relevant	17.60	19.30	21.74	22.02

Regression discontinuity analysis was used to test the difference between intercepts of the treatment and comparison groups' regression lines with the line representing the pretest cut-off scores *[7]*. The difference or discontinuity at the cutting point between the regression surfaces in the two groups can be taken as evidence of a treatment effect. Regression discontinuity analysis is appropriate when selection is not random but based on fallible scores used for assigning persons to treatment and comparison groups [14].

ANCOVA with the pretest as a single covariate is an appropriate method of analysis to measure the difference or discontinuity between the regression surfaces in the two groups [14]. Furthermore, ANCOVA is appropriate if the variables--in this case, pretest scores on the Socialization Index--that account for group assignment can be measured, then "these measures can be used as covariates in an ANCOVA to provide an unbiased estimate of the treatment effect [4, p. 202].

The pivotal and relevant posttest scores were analyzed separately using an analysis of covariance design with the appropriate pretest as a covariate in each analysis. The separate one-way analyses of covariance are presented in Table 3.

TABLE 3
ANALYSIS OF COVARIANCE OF POSTTEST PIVOTAL AND RELEVANT SCORES USING THE PRETEST PIVOTAL AND RELEVANT SCORES AS SINGLE COVARIATES

Source	PIVOTAL			RELEVANT		
	df	MS	F	df	MS	F
Between Groups	2	56.67	6.76*	2	116.07	13.93**
Within Groups	59	8.37		59	8.33	
Total	61	9.95		61	11.86	

* p <.01
** p <.01

Significant treatment effects were found on both the posttest pivotal and relevant norm scores after removing the variance due to the appropriate pretest score. The personal reinforcements had a positive effect on the treatment group.

While there was a significant difference between the groups on both norms, some interesting relationships emerge in observing the pretest and posttest scores for the individual groups in Table 2. An inspection of the pretest and posttest means in Table 2 for the treatment group only, notes an increase in both pivotal and relevant norm scores. The increase in the pivotal norm acceptance was hoped for and could be attributed to the

effects of Positive personal Reinforcements. Since pivotal norms only were reinforced, the increase in relevant norm acceptance by the treatment group, was not an anticipated outcome. The increase in relevant norm acceptance had the effect of moving students in the treatment group towards the Playing-the-Game quadrant in the Socialization Matrix (Figure 2) rather than towards the Creative Individualism quadrant as was desired.

At the sane time, a comparison between the means for the pretest and posttest pivotal norm scores for the comparison group shows a decrease. While this could be attributed to no treatment, evaluative information relative to the instructor feedback which was gathered from students, suggests another explanation. Two methods were devised to elicit this information: 1) a paper and pencil evaluation of the instructor feedback on the ERF's and, 2) interviews with students from each group.

As part of the course evaluation, all students, regardless of whether or not they had received feedback, were asked to respond to three questions about the instructor feedback on the ERFs. Three structured responses, "Yes," "No," or "Not Applicable," were possible to the following questions. 1) Were the instructors' comments helpful to you? Explain. 2) Did the instructors' comments encourage you to take a more active role in the exercises? Explain. 3) Did the instructors' comments prompt you to learn more about yourself through the exercises? Explain. The majority of students in the comparison group rightfully indicated that they had never received any instructor feedback by responding "Not Applicable" to the questions. When asked to explain their responses, a number of the students in the comparison group were clearly displeased about not having received any instructor feedback. A typical response was: "I took the time to complete the exercise response forms, I would expect the professor to take the time to respond."

It appears that while students in the comparison groups were not receiving a treatment, no treatment, in effect, became a treatment. Personal interviews with students randomly selected from the comparison group confirmed this finding. Interviews revealed that students in the comparison group had detected early in the course that some of their classmates were receiving personal feedback from the instructors while they were not. This selectivity in feedback confused some and clearly "annoyed" others. Although the instructors took precautions to make it appear as though ERFs and instructor feedback were the normal course of events for experiential learning classes, students quickly learned from one another in their conversations that feedback was given to some and not to others. This may be described as a "reactive arrangements" effect [3] resulting from participating in an experiment. Campbell and Stanley explain this effect as a factor jeopardizing external validity of experiments because of the "patent artificiality" of the experimental setting and the student's direct or indirect knowledge that he or she is participating in an experiment [3, p. 20].

Student assessment of feedback in the treatment group was generally positive. The majority found the instructor's comments "personal," "helpful," 'constructive," or 'encouraging." However, the increase in relevant norm acceptance for students in the treatment group is not as readily explained. It is possible that there is a direct relationship between pivotal and relevant norms. Increasing pivotal scores may also cause a positive change in student attitudes toward relevant norms.

CONCLUSIONS

The results of this investigation suggest that the instructor's comments--or lack thereof--have a measurable and potent effect on student attitudes. The temptation is for the instructor to respond more readily to students who appear enthusiastic, intelligent and possessing positive learning attitudes. However, selective or discriminatory feedback may have a negative effect on student perceptions and attitudes as was the case in this investigation. Students not only want instructor feedback, but can benefit from it and they want it regardless of their attitudes toward the course or performance in it. In addition, feedback must be realistic and appropriate for the situation. Comments should not be random or careless superlatives. Feedback must be thought out carefully--praise given where praise is warranted, support given when help is needed, and areas of improvement suggested.

The findings of this investigation reinforce the notion that instructors using experiential teaching techniques must take deliberate steps to create a reinforcing, nonjudgmental learning environment. Care should be exercised in avoiding actions that may elicit unanticipated negative interpretations or reactions by students Developing an effective climate begins at the first meeting with the first opportunity to "socialize" the learner. Efforts to socialization can be monitored with instruments such as the Socialization Index. Work is now underway to expand and improve this instrument. The research results from this study suggest that instructor feedback is significant. Personalized comments on student assignments may be one means of nurturing a supportive learning climate between instructor and student.

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