UNDERSTANDING GOAL SETTING: AN IN-CLASS EXPERIMENT _____

Jiing-Lih Farh Arthur G. Bedeian Louisiana State University

A cursory survey of fourteen Organizational Behavior (OB) textbooks on our shelves reveals that each contains a section on goal setting as a motivational theory or technique. This is not surprising given the extensive literature documenting its efficacy in motivating human performance (Locke, Shaw, Saari, & Latham, 1981). Judging from the texts surveyed, classroom pedagogy relating to goal setting is typically lecture-based, reviewing theoretical and empirical findings. Although this approach may be effective in helping students understand the rationale underlying goal setting, it does not provide them with a first-hand appreciation of its motivational power. The purpose of this note is to describe an alternative pedagogical method for classroom instruction on goal setting. The method involves an in-class experimental task in which student subjects witness the unfolding of key findings relating to goal-setting theory.

Materials for the experimental task were adapted from a creativity test developed by Locke (1966). Operating within three one-minute time frames, the experimental task involves three trials in which subjects list objects or things that can be described by a given adjective (e.g., "thin"). This task is especially suited for classroom use since: (a) accumulated research and teaching have shown that it is highly susceptible to goal influence, (b) it is relatively brief, taking some 30 minutes to complete, (c) it requires virtually no advanced preparation, and (d) students find it both interesting and

challenging.

Background

To begin, students should be randomly divided into three goal groups: *Hard, Easy,* and *Nonspecific*. Each group should be instructed and run separately to avoid communication between group members prior to performing the experimental task. Experience indicates that a minimum of eight students per group typically produces the expected results. If a class has less than 24 students, a two-group format, with one group being assigned a "hard" and the other an "easy" goal, is recommended. There is no upper limit for the number of students in a group. The following procedure is based on a three-group format.

Step 1. Ask students in Group One to remain in the classroom to begin the experiment. Students in Groups Two and Three should be asked to wait outside the classroom.

Step 2. Read the following instructions: "This exercise is designed to test your creativity. You will be asked to list objects or things that can be described by a given adjective. There will be three trials. You will be given a different adjective on each trial and told to list objects that can be described by the adjective for one minute. For example, if the adjective you are given is red you could list fruit, clothes, houses, cars, blood, and so forth. There are three rules:

- (1) Do not repeat objects in the same category. For example, since *apples, strawberries, cherries*, and *plums* are all fruits, only one should be listed.
- (2) Nonsensical responses are unacceptable. You should not list skyscraper if a given adjective is short.
- (3) You may use abstract words. For example, for the adjective *blue* you could list *mood*.

Step 3. Ask if there are any questions. If not, answer sheets for group members to use in listing their responses should be distributed. Continue with the following instructions: "Remember, you have one minute for each of three trials. I will tell you when to begin and when to stop. When I say stop, please cease writing immediately."

Step 4. Announce the group's goal. Students in Group One, the hard goal group, should be told: "Your goal for this exercise is to list 12 objects per trial." Students in Group Two, the easy goal group, should be told: "Your goal for this exercise is to list at least four objects per trial." Students in Group Three, the nonspecific goal group, should be told: "I would like you to try your best. Try to list as many objects as you can for each trial." Step 4 is the most critical part of the experiment. To insure that students in each group understand their assigned goal, we recommend that the goal be written on a chalkboard or newsprint and be repeated twice verbally. This is especially important for students in the hard goal group. It should be made completely clear that they are being asked to list TWELVE objects for EACH TRIAL.

Step 5. Immediately after announcing the group's goal, begin the exercise by writing the first adjective on a chalkboard or newsprint. When one minute expires, the second adjective should be displayed, and so on until all three trials have been completed. Sample adjectives include: hot, short, round, blue, shiny, soft, strong, sharp, and hard.

Step 6. After the task has been completed, ask one group member to collect the answer sheets, calculate the total number of responses generated by each group member for the three trials and, then, compute a group average.

Step 7. Repeat Steps 1-6 with Groups Two and Three. Upon completing each session, be sure to request that no aspect of the experiment be discussed outside the classroom.

Step 8. When all three groups have completed the experimental task

Discussion

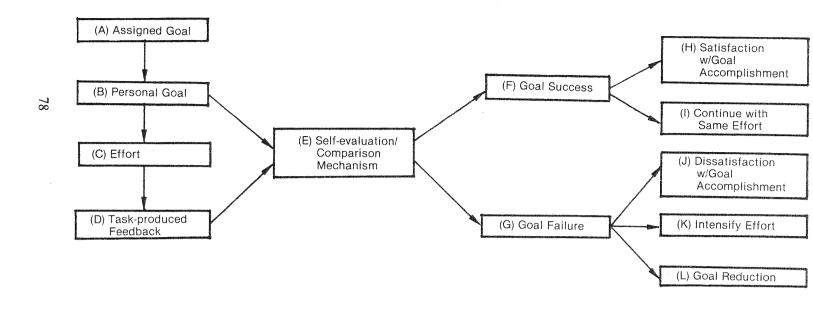
Based on our experience, the results are almost invariably consistent with findings derived from goal-setting research. That is, the students in the hard goal group outperform both the students in the nonspecific goal group and the students in the easy goal group.

In the ensuing discussion, students in the hard goal group should be asked if they reached their goal on the first trial. The typical response is "No!" These students may then be asked how they felt after not reaching their assigned goal. Students typically respond that they were upset with themselves for failing to reach the goal and wanted to try harder on the next trial. At this point, students in the easy goal group should be asked the same questions. They usually respond that they reached their assigned goal on the first trial and were content with their performance, feeling no pressure to try harder on subsequent trials. When the same questions are posed to the nonspecific goal group, its members usually respond that they had no strong feelings one way or the other because this was a novel task and they had no definite idea about how many objects or things they were capable of listing and just wanted to list as many as they could.

These responses highlight perfectly the dynamics of goal setting theory. Using the diagram in Figure 1 as a summary device, the following key points can be underscored.

- When individuals are assigned a goal by an authoritative figure such as instructor (Box A), they usually accept it as their personal goal (Box B). The goal will then serve as a standard to guide their efforts (Box C). The more difficult the goal, the greater their effort. As individuals continue to perform a task, they are provided with task-produced feedback about their progress toward the goal (Box D). Individuals will then engage in a self-evaluation/comparison (Box E) mechanism in which they compare their performance feedback against their personal goal (Bandura & Cervone, 1983). When they find themselves falling behind (Box G), they are likely to be dissatisfied with their goal accomplishment (Box J) and intensify their effort in their subsequent work (Box K). This explains why the hard goal group performed at the highest level.
- It is, of course, possible that at certain points individuals may perceive an assigned goal to be unrealistically difficult and decide to lower or give up their goal (Box L). If this does happen, the assigned goal will cease to motivate behavior. However, research has shown that once an assigned goal is accepted, goal reduction usually does not occur until after repeated failures (Campion & Lord, 1982). An individual's initial reaction to failure is to intensify effort rather than give-up (Podsakoff & Farh, in press). To reinforce this point, students in the hard goal group might be asked to indicate how many of them had given up their goal after the first trial.

FIGURE 1
A Summary of Goal-Setting Process



- The difficulty with easy goals lies in the fact that since they are so easy to reach, they simply do not inspire much effort. With minimal effort, individuals with an easy goal can reach the goal (Box F) and become satisfied with their goal accomplishment (Box H) and have little motivation to work harder on subsequent trials (Box I).
- The difficulty with a nonspecific goal is that it does not provide a clear standard to guide an individual's behavior. As a result, individuals can not effectively self-evaluate their progress toward a goal. To give people a nonspecific goal is to invite them to set their own goal. It is impossible to insure that individuals will self-set a hard goal.
- From the above discussion, it is clear that task feedback is a necessary condition for goal setting to work (Erez, 1977). Without clear feedback, individuals have no way of knowing their progress and, thus, goals can not effectively regulate behavior. When individuals perform tasks that do not provide sufficient feedback, additional feedback should be provided by a supervisor or other source.

References

- Bandura, A., & Cervone, D. (1983). Self-evaluative and self-efficacy mechanisms governing the motivational effects of goal systems. *Journal of Personality and Social Psychology*, 45, 1017-1028.
- Campion, M.A., & Lord, R.G. (1982). A control systems conceptualization of the goal-setting and changing process. Organizational Behavior and Human Performance, 30, 265-287.
- Erez, M. (1977). Feedback: A necessary condition for the goal setting-performance relation ship. *Journal of Applied Psychology*, 62, 624-627.

Locke, E.A. (1966). The relationship of intentions to level of performance. *Journal of Appliea*

- Locke, E.A., Shaw, K.N., Saari, L.M., & Latham, G.P. (1981). Goal setting and task formance: 1969-1980. Psychological Bulletin, 90, 125-152.
- Podsakoff, P.M., & Farh, J.L. (in press). Effects of feedback sign and credibility on goal setting and task performance. Organizational behavior and human decision making processes.