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Goal importance, self-focus and the goal setting process

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Abstract

In this study we examine the role played by perceived goal importance and self-focus in the goal-setting process. More specifically, this study tests the interactive hypotheses that (a) task performance is a function of goal level, self-focus, and perceived goal importance; (b) goal level is a function of perceptions of past performance, self-focus, and perceived goal importance; and (c) perceptions of past performance are a function of actual past performance, self-focus, and perceived goal importance. Hierarchical regression analysis, using a sample of 88 retail salespersons, revealed empirical support for the first two hypotheses. Specifically, the variables described by control theory account for an increment of 6 and 8% of the variance explained in task performance and self-set goal level, respectively. Finally, implications for theory, practice, and future research are discussed.

Researchers have shown considerable interest recently in integrating traditional approaches to goal setting with more comprehensive self-regulation theories. One line of research used Bandura's (1982) self-regulation model (Locke, Frederick, Buckner, & Bobko, 1984), whereas another used Powers's (1973) control theoretic model (Campion & Lord, 1982; Fisher, 1983; Lord, Kernan, & Hanges, 1983; Taylor, 1983; Taylor, Fisher, & Ilgen, 1984). The differences between these two approaches to self-regulation have been laid out by Carver and Scheier (1981, pp. 124–126), who show that relative to Bandura's theory, control theory (a) places more emphasis on behavior maintenance than on behavior change, and (b) places less emphasis on the need for self- or external reinforcement to activate and maintain the self-regulation process. The purpose of the present study is to extend the line of research on goal setting and control theory by examining certain individual differences that according to the theory should influence the relations between past performance, goal level, and future performance.

The control theory model of goal setting and task performance has been described by Campion and Lord (1982). Campion and Lord set forth a dynamic goal-setting model in which both self-set goals and environmental feedback are incorporated into a performance-monitoring and performance-determining motivational system. The heart of this system is the negative feedback loop, typically illustrated with simple cybernetic systems such as thermostats.

Campion and Lord's (1982) empirical study highlighted two of the differences between traditional goal-setting approaches and those associated with control theory. Specifically, Campion and Lord performed a longitudinal test of goal-setting processes that allowed for the examination of dynamic elements (e.g., goal change) under conditions of self-set goals with a sample of 188 students, who set goals with respect to performance on five tests during the course of one semester.

Whereas Campion and Lord's (1982) study was primarily concerned with the dynamic elements of self-set goals, the present research places emphasis on other aspects of the process suggested by control theory that Campion and Lord did not assess. One aspect of control theory that did not figure in Campion and Lord's study is the presence of multiple goals and the existence of a hierarchical system of control that specifies priorities among these goals. In Powers's (1978) empirical research, great pains were taken to ascertain the specific perceptions that were being controlled by subjects. His concept of “control quantity status” attempts to capture individual differences in how closely one set of goals is regulated relative to other sets of goals, that is, goal importance. In their study, Campion and Lord (1982) merely assumed that all subjects are closely regulating individual test performance. This omission leads to “unexpected” results, as 36% of the subjects who failed to achieve individual test goals actually raised their subsequent goals. Supplementary post hoc analyses revealed that this may have occurred because these subjects were not closely regulating individual test performance, but instead were controlling overall course performance. Campion and Lord also found that 44% of the subjects who failed to achieve their goals for the first test held their goals constant, thus suggesting that neither available control response (i.e., changing the goal to a lower level or counteracting the discrepancy by raising

subsequent goals) was initiated. Apparently, these subjects were not regulating individual test performance or overall course performance very closely.

The notion of goal importance has implications for goal-setting applications. Specifically, it implies that the positive effect that specific, difficult goals have on task performance would be increased even further by attending to the degree of importance attributed to performance goals relative to other work- or even nonwork- related goals. For individuals who are closely regulating performance goals, even feedback indicating a minor deviation between goals and performance may invoke behaviors aimed at reducing the discrepancy. For the individuals who are not closely regulating performance goals, even major deviations between goals and performance may not bring forth corrective effort. Therefore, the relation between performance goals and performance would be stronger for individuals who perceive performance goals as important, than for individuals not closely regulating such goals.

A second element of control theory not considered by Campion and Lord (1982) deals with individual differences in self-focus, a variable that has played a central theoretical role in most recent tests of control theory (Carver & Scheier, 1981). According to Carver and Scheier, an individual's attention can be directed in one of two directions: inward toward the self or outward toward the environment. When attention is directed inward, the individual is said to be engaging in self-focus, or self-attention. Stable and dispositional differences in self-focus are generally measured with a scale developed by Fenigstein, Scheier, and Buss (1975), which is discussed in greater detail in a later section.

Just as all goals are not important enough to be closely regulated, even important goals are not being regulated at all times. Carver and Scheier (1981) have stressed, for example, that the process described by the negative feedback loop operates only for individuals relatively high in self-focus. For individuals low in self-focus, the highly cognitive elements determining motivation (i.e., goals or standards, discrepancies between goals and feedback, etc.) simply will not be salient enough to influence discrepancy-reducing behavior. Performance outcomes for these individuals will reflect external environmental contingencies rather than internal personal goals. Indeed, there is substantial empirical evidence from laboratory studies documenting stronger goal-performance relations for high self-focused individuals relative to those low in self-focus (Carver, 1974, 1975; Scheier & Carver, 1980a, 1980b; Scheier, Fenigstein, & Buss, 1974). The increased salience of previous goal-feedback discrepancy episodes is also evidenced by the fact that high self-focused individuals demonstrate greater recall of past performance and goals (Cheeks, 1982; Pryor, Gibbons, Wicklund, Fazio, & Hood; Scheier, Buss, & Buss, 1978).

Although the major practical benefit of using these two individual difference variables is their potential to increase the goal difficulty-performance relation from a process perspective, they may also have implications for choice of goal level and perceptions of past performance (two key variables in most self-regulation theories). The effects of past performance on future goal or aspiration levels have been widely documented (Campbell, 1982; Cummings, Schwab, & Rosen, 1971; Frank, 1941; Fryer, 1964; Lopes, 1976; Wilstead & Hand, 1974). The possibility that the

magnitude of this relation can be increased by considering the salience (i.e., self-focus) and importance of these goals, as suggested by control theory, has never been assessed in either laboratory or field settings. In addition, a major determinant of past perceptions of past performance is actual past performance, but as shown by Mabe and West (1982), the relation between these two variables is not always strong. Again, both self-focus and goal importance may be moderator variables with respect to the actual-performance-perceived-performance relation. Control theory and the laboratory research testing control-theory predictions regarding the recall of past behavior (Cheeks, 1982; Pryor et al., 1977; Scheier et al., 1978) and proactive feedback-searching behavior (Scheier & Carver 1980a, 1980b) strongly suggest that accuracy of perceptions of past performance (i.e., the actual past performance-perceived past performance relation) will be higher for high self-focused individuals with goals perceived to be important relative to other subjects. Of the three hypotheses stated ahead, however, it should be recognized that these latter two are more speculative in nature. Although deductible from control theory, they do not share the supportive empirical base characteristic of the goal-performance hypothesis.

Summary and Hypotheses

The purpose of the present study is to provide an empirical test of the effects of goal importance and self-focus on the goal-setting process. Based on the theory and literature reviewed, three main hypotheses are advanced.

1. Future performance level is an interactive function of goal level, self-focus, and perceived goal importance, such that performance is highest where objectively difficult goals occur in conjunction with high self-focus and a high degree of perceived goal importance.

2. Goal level is an interactive function of perceptions of past performance, self-focus, and perceived goal performance, such that goal level will be highest where past performance levels are perceived to be high, self-focus is high, and the degree of perceived goal importance is high.

3. Perceptions of past performance will be more accurate (i.e., the actual past performance-perceived past performance relation will be greatest) for individuals characterized by high self-focus and a high degree of perceived goal importance.

Method

Subjects

Participants in this study were 143 salespersons employed by a major metropolitan department store located in the northeastern region of the United States. Of the participants, 31% were men. Subjects were selected so as to maximize their comparability on an objective sales volume that was standardized within selling departments. For this standardized score to be meaningful, it was deemed necessary to select only persons who within departments had equal opportunity to sell the same merchandise. For example, a shoe department structured so that one salesperson sold only

Brand A shoes while another sold only Brand B was not included for study. For similar reasons, only salespersons who worked comparable time periods—full-time weekdays—were selected. All of the salespersons were paid a set salary plus a one half of 1% commission. From this subset of departments, only subjects from the larger departments (i.e., departments with more than 8 salespersons) were studied. Thus, the 143 subjects originally selected for study came from relatively large departments in which all individuals had an equal opportunity to sell identical merchandise during the weekdays. It should be clear that this selection procedure was used to maximize the construct validity of the performance criterion rather than to obtain a sample representative of some meaningful target population.

Due to subject attrition during the 7-month duration of the study, and to missing data caused by factors other than attrition, the final usable sample size for data analysis was 88. Given the interactive nature of the hypotheses, a power analysis was conducted to detect an effect size for an interaction of .04 (i.e., an increment in explained variance of 4%) in a complete regression equation explaining 30% of the variance in the dependent variable at the .05 probability level. The power for 88 subjects was .70, slightly lower than the ideal of .80 recommended by Cohen (1969). Hence, a conservative bias (i.e., a decrease in the probability of rejecting the null hypothesis when that hypothesis is indeed false) has been introduced into the results.

An attrition analysis was performed to test whether there were any differences between subjects who provided complete data and those who did not. Five subjects with missing data provided grossly deviant figures (i.e., +5.0 *SD* from the mean), suggesting that they erroneously used weekly rather than daily sales figures. With these outliers removed, there were no differences on any measured variables between those who provided complete data and those who did not.

Procedure

There were three methods of data collection: through archival records, a questionnaire, and a policy-capturing exercise. Each of these three methods and the variables tapped by each are described here.

Archival Records

Actual past performance level

Actual past performance level for individuals was measured by accessing archival sources and recording total sales volume for the 3 months immediately preceding questionnaire administration. The three total monthly sales volume figures were then standardized within selling departments to remove level or dispersion differences across departments. The average of these three standardized scores became the final measure of actual past performance used for testing hypotheses. The average intertime period (i.e., stability) correlation among these three indices of performance was .63 ($p < .01$), and the internal consistency, that is, the standardized item alpha estimate of reliability for this measure, was .83.

Future performance level

The same archival sources were used to measure future performance levels. Total sales volume was recorded for the 3 months immediately after questionnaire administration. The three total monthly sales volume figures were again standardized within departments, and the mean of the three standardized scores became the measure of the individual's future performance level used for testing hypotheses. The average intertime period correlation among these three indices of performance was .62, and alpha reliability for this measure was .83.

Questionnaire

Perceptions of past performance

Subjects were asked to estimate, to the best of their ability, their average sales volume per day for each of the 3 previous months. The subjects should have had a rough idea of this figure inasmuch as they were required (in order to calculate their commission) to record their sales volume on a daily basis. This estimate was then multiplied by the number of days the subject worked that month (available from archival records), and this value became the estimate of total sales volume for the month in question. These total monthly sales volume figures were again standardized within selling departments to remove any between-department variation in level and dispersion, and the mean for the three standardized scores became the measure of perceptions of past performance used in hypothesis testing. The average interitem correlation among these indices was .46, yielding an alpha of .72.

Goal level

Subjects were asked to set goals for daily sales volume for the 3 months subsequent to questionnaire administration. These daily goals were then multiplied by the number of available work days for those months to arrive at a monthly sales volume goal. Again, these figures were standardized within departments, and the mean of these standardized scores became the measure of goal level used in hypothesis testing. The average interitem correlation among the three indices was .87, yielding an alpha of .95.

Self-focus

The questionnaire also included a 17-item measure of self-focus developed by Fenigstein, Scheier, and Buss (1975). This measure, called the Self-Consciousness Scale, attempts to tap dispositional differences in the degree to which individuals' primary focus of attention is the self, rather than the environment. The scale contains such items as “I reflect about myself a lot,” “I'm constantly examining my own motives,” “I'm generally attentive to my inner feelings,” “I'm usually aware of my appearance,” and “I'm not all that concerned about the way I present myself.” Although a detailed review of the literature is beyond the scope of this article, note that there has been substantial research demonstrating the construct validity of self-focus (Carver & Scheier, 1978; Davis & Brock, 1975; Diener, 1979; Diener, Lusk, DeFour, & Flax, 1980; Froming, Lopyan, & Walker, 1981; Froming & Walker, 1980; Geller & Shaver, 1976; Hass, 1979; Hull, 1980; Hull, Levenson, Young, & Sher, 1983; Hull & Levy, 1979; Scheier, Fenigstein & Buss, 1974) and the

Self-Consciousness Scale, in particular (Carver & Glass, 1976; Turner, Scheier, Carver, & Ickes, 1978; Fenigstein et al., 1975). Evidence on the reliability and factor structure of the measure has been provided by Fenigstein et al. (1975). Evidence of convergent validity has been provided by Turner et al. (1978), who found that the scale was significantly correlated ($r \geq .40$) with the Guilford-Zimmerman Thoughtfulness Scale and the Pavio Imagery Inventory. Carver and Glass (1976) also found that the scale correlated significantly with self-monitoring (Snyder, 1974). This evidence suggests that persons high in self-focus are generally reflective, tend to create mental images when dealing with personal problems, and are highly attentive to the image of themselves portrayed to others. In lay terms, an individual on the high end of this measure would tend to be described as self-absorbed, narcissistic, or self-obsessed.

Evidence regarding the discriminant validity is also available. Turner et al. (1978) found that the scale was not significantly ($r \leq .20$) correlated with measures of social desirability (Crowne & Marlow, 1964), self-esteem (Morse & Gergen, 1970), and emotionality (Buss & Plomin, 1975). Carver and Glass (1976) showed that the scale was uncorrelated ($r \leq .20$) with measures of IQ (Otis, 1954), need for achievement (Edwards, 1957), test anxiety (Mandler & Sarason, 1952), and activity level or impulsivity (Buss & Plomin, 1975).

Finally, there is some evidence to suggest that the scale is composed of two dimensions, and distinctions are sometimes made between private and public self-consciousness. Fenigstein et al. (1975), for example, showed that some of the items loaded on a separate factor. This factor structure has not always been replicated, however, and in numerous studies the two “subscales” correlate more highly with each other ($r \geq .50$) than does the average interitem correlation within subscales. Indeed, in the present study, the two subscales correlated .67 with one another and a principle components factor analysis failed to indicate the suggested two-factor structure. Given this evidence, the 17 items composing this scale were treated as unidimensional. The internal consistency estimate of reliability for this measure was .78.

Policy-Capturing Exercise

Perceptions of goal importance

Based on previous theory (Powers, 1973, Vroom, 1964) and empirical research (Quinn & Staines, 1971), six facets of work that an individual may view as important were examined in the present study: (a) base pay, (b) job security, (c) the nature of the work itself, (d) co-worker relations, (e) job performance, and (f) supervisory practices. The importance an individual ascribes to performance relative to these six salient work-related perceptions was the main concern in the present study. Empirical support substantiating the importance of the individual's perceptions of these six primary job facets is provided by Quinn and Staines's (1971) survey research, which indicates that approximately 60%–75% of the general U.S. population rate these aspects of their work as being “very important” to them. This is appreciably higher than the corresponding percentages for such work facets as “good hours,” “geographical location,” “pleasant physical surroundings,” and “convenience to and from work.”

The degree of control exercised over these work facets (an index of centrality or importance) is measured in a manner conceptually similar to Powers's (1978) “tracking method.” In that study, subjects sat in front of a television monitor and attempted to track randomly moving points of colored light with a cursor. To determine which points were being regulated, the correlation between cursor movements and changes in position for the lights (occurring at random) was computed, and the point with the largest cursor-change-light-change correlation (usually over .90) was considered the controlled quantity.

To simulate such a procedure in this more complex setting, a policy-capturing exercise was used (Naylor & Wherry, 1965). This process involves regressing judgments, decisions, or ratings made by subjects on the cue values representing the information available to the individual making the judgments, decisions, or ratings. In the present study the measure of controlled quantity status presented subjects with the following instructions:

In the course of one's work life, his or her work situation often changes in one way or another. In some instances the individual has little control over such changes, while in other instances the individual has complete control over such changes. In the following section we would like to know how you would react to various types of changes in your work situation, if you had control over such changes. Below are descriptions of many possible changes in one's work situation. Read the description and indicate how hard you would try to bring about such a change or how hard you would try to avoid such a change.

For example, one scenario described a situation in which

Your present job was to change such that (a) the work itself was slightly more interesting and (b) your base pay increased slightly, but (c) your sales performance decreased substantially due to a lack of equipment or product information.

Another scenario described a situation in which

Your present job was to change such that (a) your sales performance increased slightly due to the availability of better equipment or product information but (b) your job security decreased slightly and (c) your co-workers were less friendly.

Subjects responded to 32 such scenarios.

The scenarios were constructed so that (a) each of the six facets was varied in both directions (i.e., changed for the better and worse), (b) each of the six facets varied in intensity of change (i.e., slight vs. substantial changes, weighted accordingly), and (c) facets that occurred in conjunction were randomly chosen (i.e., pay was not always paired with the nature of the work itself and performance as shown in the first example). There were no substantial correlations (i.e., $r \geq .20$) among cues (e.g., increases in base pay did not tend to occur with increases in performance); thus, there was no confounding of cues.

The scale used to record responses was a 5-point scale anchored by *I would try very hard to bring about such a change* (+2), *I would try to bring about such a change* (+1), *I would try neither to bring about nor avoid such a change* (0), *I would try to avoid such a change* (−1), and *I would try very hard to avoid such a change* (−2).

When these changes are then regressed on subjects' ratings of how much effort they would extend to bring about or avoid such changes, the beta weights for each facet (i.e., pay, performance, security, etc.) give an indication of the degree to which the facet is being actively regulated. Thus, a near-zero beta weight would indicate that the work facet manipulated in the scenario is not being closely regulated by the subject. On the other hand, a beta weight approaching 1.0 would indicate that this facet manipulated in the scenario is being very closely regulated. Thus, the beta weight associated with the job performance facet represents perceived importance of performance goals, relative to goals associated with other aspects of work.

Several methods were used to assess the meaningfulness and reliability of this measurement method. First, two scenarios were included as manipulation checks in which all of the cues were manipulated either in a positive direction or a negative direction. In the first instance, a response of −1 or −2 would be completely illogical, whereas in the second, a response of +1 or +2 would be completely illogical. Analysis of the responses for these two items indicated that these inocuous responses were made by 3% and 0% of the subjects, respectively. This provides some gross indication that the subjects in question understood the instructions and intent of the items.

Another means of assessing the meaningfulness of this measurement procedure was to calculate the multiple correlation squared (i.e., R^2) between the cues and the ratings for each subject. This serves as a check on the internal consistency of subjects' responses in that inconsistent responses (e.g., closely controlling a perception on one set of scenarios, whereas at the same time ignoring that same perception on a similar set) with respect to many or all the cues would result in an R^2 of near .19, which is the expected value of this R^2 given the number of predictors and observations (Cohen & Cohen, 1975). The mean R^2 across the 88 regressions (1 per subject) was .64. Thus, 64% of the variance in the effort ratings can be explained by the cues. Although this is not as high as the R^2 found in many policy-capturing studies, it is well above the expected value, suggesting some degree of internal consistency reliability in the ratings.

Another test of the reliability of these ratings was indexed by the stability of these ratings over time. According to Powers (1973) “controlled quantities” and, hence, goal importance should be relatively constant over short time periods. To assess this, 11 subjects were randomly selected to perform the policy capturing exercise a second time, approximately 1 month after the original survey administration. The median correlation among these responses across the 11 subjects, an index of test-retest reliability, was .72. This suggests some degree of stability in the ratings over time.

Data Analysis

The major hypotheses in this study are tested via hierarchical regression analysis (Cohen & Cohen, 1975). This method, when used to examine interaction effects, is frequently referred to as moderated regression (Saunders, 1956; Stone & Hollenbeck, 1984; Zedeck, 1971). In the first hierarchical step, the three independent variables are simultaneously entered as predictors in a regression in which the dependent variable serves as the criterion. In the second hierarchical step, the three 2-way cross products representing the double interactions are entered. Finally, in the third hierarchical step, the single 3-way cross-product term representing the triple interaction is entered.

Results

Descriptive Statistics

The means, standard deviations, and intercorrelations among all of the measured variables are shown in Table 1. Note that although actual performance, perceived performance, and goal level ($.21 \leq r \leq .59$) are significantly correlated, these variables did not correlate with the proposed moderators of self-focus or goal importance ($-17 \leq r$ .17).

Table 1
Means, Standard Deviations, and Intercorrelations Among All of the Variables

Variable	*M*	*SD*	1	2	3	4
1. Actual past performance	0.10	0.92	—			
2. Perception of past performance	2.01	2.20	.30**	—		
3. Goal level	2.39	2.29	.39**	.27*	—	
4. Goal importance	0.34	0.19	.08	.14	.17	—
5. Self-focus	58.67	8.60	.00	−.17	−.11	−.12
6. Actual future performance	−0.02	0.90	.59**	.21*	.44**	.09

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

Tests of Hypotheses

Hypothesis 1

The results relevant to Hypothesis 1 are shown in Table 2. Inspection of this table reveals support for Hypothesis 1. There is a statistically significant main effect for goal level ($R^2 = .16$, $p < .05$), and the three-way Goal Level × Goal Importance × Self-Focus interaction is also statistically significant ($\Delta R^2 = .06$, $p < .05$). The nature of this interaction is revealed in Figure 1, in which the relation between goal level and future performance is plotted for values of ± 1.0 *SD* units on self-focus and goal importance. As is evident in this figure, the nature of the interaction is in line with the hypothesis that there is an overall tendency for high goals to be associated with high performance. This relation is particularly strong for individuals high in self-focus and goal importance. When adjusted for shrinkage (Cohen & Cohen, 1975), the main and interactive effects combine to explain 17% of the variance in an objective measure of sales performance.

Table 2
Results of Regressing Actual Future Performance on Variables

Hierarchical step	Variable	R^2	p	ΔR^2	p of Δ
1	Goal level (GL)	.16	$p < .05$	.16	$p < .05$
	Goal importance (GI)	.16	$p < .05$	.00	*ns*
	Self-focus (SF)	.16	$p < .05$	.00	*ns*
2	GL × PC	.16	$p < .05$	.00	*ns*
	GL × SF	.16	$p < .05$	.00	*ns*
	PC × SF	.18	$p < .05$	.02	*ns*
3	GL × PC × SF	.24	$p < .05$	.06	$p < .05$

Note. $R^2 = .24$. $\Delta R^2 = .17$.

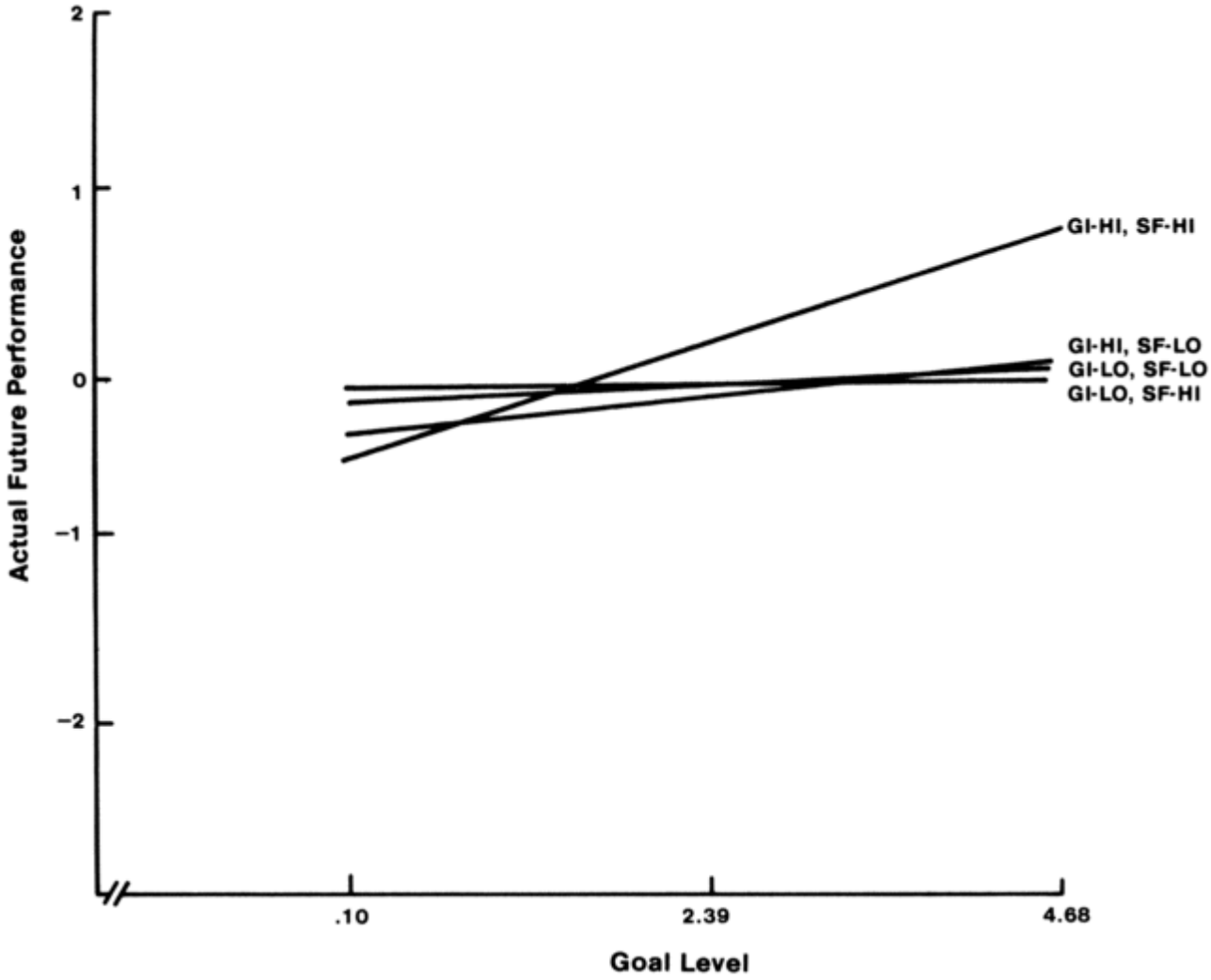

Figure 1. Triple interaction of performance control, self-focus, and goal level on future performance. (GI = goal importance; SF = self-focus; Y = predicted criterion volume; HI = high; LO = low. For GI-HI, SF-HI, Y = .34x − .62; for GI-HI, SF-LO, Y = .13x − .42; for GI-LO, SF-HI, Y = .03x − .03; for GI-LO, SF-LO, Y = .05x − .08.)

Hypothesis 2

The results pertinent to Hypothesis 2 are shown in Table 3. This table reveals that there was also support for Hypothesis 2. There were statistically significant main effects for both perception of past performance ($R^2 = .11$, $p < .05$) and goal importance ($R^2 = .04$, $p < .05$). Of more importance, however, were the two statistically significant Perceptions of Past Performance × Self-Focus and Perception of Past Performance × Self-Focus × Goal Importance interactions.

Table 3
Results of Regressing Goal Level on Variables

Hierarchical step	Variable	R^2	p	ΔR^2	p of Δ
1	Perceptions of past performance (PPP)	.11	$p < .05$	.11	$p < .05$
	Goal importance (GI)	.15	$p < .05$	.04	$p < .05$
	Self-focus (SF)	.15	$p < .05$	.00	*ns*
2	PPP × GI	.15	$p < .05$	.00	*ns*
	PPP × SF	.26	$p < .05$	.11	$p < .05$
	GI × SF	.29	$p < .05$	.03	*ns*
3	PPP × GI × SF	.37	$p < .05$	.08	$p < .05$

Note. $R^2 = .37$. $\Delta R^2 = .31$.

The nature of the three-way interaction was also in line with the hypothesis (and similar to that depicted in Figure 1), in that the perceived past performance-goal level relation is strongest for individuals high in self-focus and high in perceived goal importance ($\Delta R^2 = .08$, $p < .05$). The two-way interaction between perceived past performance and self-focus is also evident, in that the perceptions of past-performance-goal-level relation, averaging across levels of performance control, is substantially stronger for high as opposed to low self-focus subjects. This interaction accounted for 11% of the criterion variance. All of the variables described by the model, when adjusted for shrinkage, combine to account for 31% of the variance in goal level.

Hypothesis 3

With perceptions of past performance as the criterion, only a main effect for actual past performance ($R^2 = .08$, $p < .05$) is found. In contrast to Hypothesis 3, there are no significant interaction effects. In general, perceptions are in line with actual performance in that perceived performance increases as actual performance increases.

Discussion

The purpose of the present study was to examine the role of goal importance and self-focus on the goal-setting process. Building on past theoretical (Powers, 1973) and empirical work (Campion & Lord, 1982; Carver & Scheier, 1981), we generated and tested in a sample of salespersons three hypotheses in which standardized, objective measure of sales volume served as the measure of task performance.

The first and most important hypothesis dealt with the immediate determinants of task performance. In line with the vast majority of empirical studies in this area (Locke et al., 1981), there was a significant goal-level main effect explaining 16% of the variance in performance. The contribution made by this study, however, is the significant interaction between goal level, self-focus, and goal importance. As predicted, the goal-level effect was significantly more pronounced for individuals characterized by high self-focus and high perceived goal importance.

The determinants of these goal levels were the primary focus of Hypothesis 2. Again, in line with a larger volume of past research, the strongest predictor of goal level was perceived past performance. The positive main effect for this variable accounted for 11% of the variance in goal level. The contribution here, however, is evidenced in the interactions of perceived past performance with self-focus and goal importance variables. For example, there was a two-way interaction between perceived past performance and self-focus ($\Delta R^2 = .11$). This interaction indicated that the effects of perceived past performance on goals was much stronger for high self-focused salespersons relative to their low self-focused counterparts. When this difference was considered in light of differences in perceived goal importance, a three-way interaction accounting for an increment of 8% of the criterion variance was also evident. In accord with control theory predictions, the highest goal levels were set by salespersons characterized jointly as having perceptions of high past performance levels, high self-focus, and high goal importance. Thus, self-focus and goal importance would appear to be two variables that need to be added to the list of goal-level determinants previously described by Campbell (1982).

Consideration of these findings, along with consideration of the results of previous research applying control systems conceptualizations to goal setting (Campion & Lord, 1982), produces a clearer picture of the goal-setting process. Specifically, these studies suggest that the negative feedback loop (Miller, Galanter, & Pribram, 1960), the central element in control theory, may be a useful description of how the goal-setting process works. Individuals interacting with their environment operate in order to keep certain perceptions in line with referent conditions or standards associated with these perceptions. When a discrepancy between these perceptions and these standards occurs, the system is engaged and the individual operates to reduce this discrepancy. Work by Campion and Lord (1982) has highlighted the dynamic nature of this model and has emphasized that discrepancies can be eliminated not only behaviorally (e.g., by acting on the environment) but cognitively (not acting on the environment but merely changing the reference condition). Thus, certain situations where the negative feedback loop does not appear to predict behavior (e.g., where an individual consistently performs below goal levels) can be explained by noting that these individuals are using cognitive means of discrepancy reduction. This study builds on the earlier work by highlighting two important conditions that must be considered if one is to predict behavior using the negative feedback loop. First, not all goals are closely regulated, hence the need to consider the perceived goals performance variable. Second, there are individual differences in the extent to which people engage in this process. The predictions emanating from the negative feedback loop hold especially well for individuals who are likely to be sensitized to the cognitive elements of this process, hence the need to consider the variable of self-focus. This is not to say that past performance leads to goal levels and goal levels lead to performance only where self-focus and goal importance are high. To make this second, stronger conclusion, the evidence would have to support only the triple interaction. As Table 2 and Table 3 clearly show, however, there are main effects for both past performance on goal levels and goal levels on performance. Self-focus and goal importance serve mainly to augment the strength of these relations.

There are several other limitations of this study that suggest caution when interpreting these results. One major limitation deals with the external validity of these results. First, this study only dealt with one organization, in one industry, in one geographical location. Also, the method of subject selection within this organization was driven more by the desire to have a meaningful, objective measure of performance rather than to obtain a sample representative of some target population. Therefore, no claim is made that these subjects are representative of the organization as a whole. Further, the significant attrition that will inevitably result in longitudinal research at this level in the retail industry could have affected this already unrepresentative sample in unknown ways. Yet, in studies where the primary interest is in testing theory, representativeness of the sample is of relatively little concern (Berkowitz & Donnerstein, 1982; Mook, 1983). The external validity of these findings can only be established by future research in other settings, for as Cook and Campbell (1979) stated, “external validity is enhanced more by many heterogeneous small experiments, than by one or two large experiments” (p. 80).

Footnotes

[1] It should be pointed out here that the choice of these particular six perceptual quantities does not mean to imply that these are the only perceptual quantities that one may be controlling. That is, the individual may also be controlling for fatigue, amount of leisure time provided by the job, and so forth, but the purpose here is to empirically examine the process described by control theory, as opposed to generating a catalog of controlled quantities. The six perceptual quantities chosen here have frequently been investigated by researchers in organizational behavior, and there is empirical evidence to suggest that several of them (i.e., pay, co-workers, supervisor, and work itself) are empirically distinct dimensions (Drasgow & Miller, 1982). What should be noted, however, is that should any particularly relevant controlled quantity be omitted, the importance of any cue that is positively correlated with this omitted variable will be an overestimate of the actual importance of the measured variable.

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