EMPLOYEE REACTIONS TO PERFORMANCE STANDARDS: A REVIEW AND RESEARCH PROPOSITIONS

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Although the use of evaluative performance standards is common in most organizations, research in our field has focused almost exclusively on selection standards (and predictor cut-off scores), rather than standards for subsequent performance. This review considers aspects of the performance standard-setting process that influence incumbents' job reactions, specifically in terms of motivated performance and job satisfaction. We draw upon the following literatures to specify future research needs and directions: goal setting, feedback and framing, performance expectations, job satisfaction, and utility analysis. The result is an outline of research propositions concerning the acceptance of performance standards, the content of performance standards, the communication of standards, and the difficulty levels of those standards.

The notion of "standard" (e.g., as in "selection standard" or "performance standard") is ubiquitous in its use within organizations. Apart from obvious examples of sales quotas and production standards, other examples include standards for bank tellers to balance their cash drawers, standards for retention in military services, standards for teachers' content knowledge, and standards for making partner in a law firm. Research on standard setting has focused almost exclusively on selection standards and cut-off scores (cf. Cascio, Alexander, & Barrett, 1988). On the other hand, the textbook approach to human resources management makes it clear that a focus on performance is necessary before any informed decisions can be made about selection, training, or performance appraisal systems. Yet, there is little (if any) research directly related

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Figure 1: Relationships Examined in the Current Review (Note: P1 through P12 refer to our research propositions.)

to how organizations set performance standards, whether the purposes of the standard setting are met, or whether inappropriate standards can lead to dysfunctional outcomes (Murphy & Cleveland, 1991).

The intent of this review is to motivate research in a crucial, but neglected area: how job incumbents react to organizational performance standards, specifically in terms of motivated performance and job satisfaction. Organizations have been primarily concerned with the evaluative purpose of performance standards. However, there has been little concern with the effect of standards on those to whom the standards apply. Thus, standards should be set with an awareness of how employees may react to them. We are not suggesting that performance standards replace other management tools such as individual goal setting and feedback, but standards might be used in addition to these practices to foster job satisfaction and motivation, or at least be set in a manner that avoids causing dissatisfaction and low motivation.

Figure 1 summarizes the set of issues examined in this paper. We suggest that different aspects of the setting of performance standards, such as the difficulty and communication of standards, will influence whether or not these performance standards are accepted by employees. We note that an individual’s acceptance of external standards can happen in many ways: a congruence of individual and organizational values, an exchange of work for reward, or perceived affiliation with the organization (cf. Kelman, 1958, or O’Reilly & Chatman, 1986, for similar processes related to organizational commitment). Once accepted, these standards (together with individual differences) can evoke many types of reactions. In order to keep this review of manageable length, we focus on motivation and job satisfaction outcomes because our literature review most frequently held implications for these two job reactions. [Note: Later in this review, we suggest a variety of research propositions. The symbols next to each aspect in Figure 1 (e.g., “P1,” “P2”) represent propositions reflective of those particular aspects of the model.]

To investigate reactions to performance standards, we consider the literatures on goal setting, feedback, performance expectations, and job satisfaction. We also take an abbreviated look at utility analysis in order to demonstrate how appropriate difficulty levels of standards might be generated. The end result is an outline of future research directions and specific propositions. These research directions are related to the acceptance, content, communication, and difficulty of performance standards.

What is a Performance Standard?

Dictionaries present many definitions of the word “standard.” For example, the Webster’s definition most directly related to the setting of performance criteria is:

3: something established by authority, custom, or general consent as a model or example: CRITERION (Webster’s Seventh New Collegiate Dictionary, 1965, p. 853)

Based on this definition, and common organizational usage, there are several features which define standards. First, standards often have an evaluative component, as noted by the definitional use of the term “criterion.” Second, standards are criteria which are established externally, and imposed on an individual’s work task. Finally, as established entities, standards are usually considered to remain somewhat stable over time and individuals.

Performance standards are distinguishable from goals. This distinction is important because we draw upon the goal-setting literature to illustrate how external performance standards may eventually motivate performance, although standards do not necessarily have the motivating potential ascribed to goals. Locke and Latham (1990, p. 7) distinguish between these concepts by describing goals as the “aim or end of an action” and standards as “a rule to measure or evaluate things.” Thus, goals do not imply the organizationally evaluative component attached
to standards. Further, goals are usually determined on an individual
basis: namely, in reference to individual ability and subsequent individu-
al performance. On the other hand, standards are usually considered
as constant across individuals and determined by organizational criteria.
In sum, goals and standards are distinct, yet complementary, entities. As
we explain later, an external performance standard may or may not be
adopted by individuals as a goal.

A Review of Related Literatures

Before beginning our reviews, we need to recognize that there has
been extensive work on standard setting in education—usually in the
arenas of pupil diagnosis, certification, or program evaluation (see Pa-
lakos, Wise, Arabian, Heon, & Delaplane, 1989, or Shepard, 1980, for
reviews). The educational literature clearly points to the subjective na-
ture of standards and the judgments underlying them (Cronbach, 1949;
Glass, 1978; Messick, 1989). Indeed, this subjectivity reconfirms our
assumption that research is needed to systematize knowledge about the
setting of performance standards. Further, the educational literature
focuses on selection standards. Methods for deriving such standards usu-
ally assume that one knows what "minimally competent performance"
means (Angoff, 1971) or what mastery levels of performance are (Zieky
& Livingston, 1977). Thus, this literature is not helpful in telling us how
to set performance standards, let alone inform us how employees might
react to them.

Each of the following five reviews is selective and highlights those
areas that have direct implications for standard setting. There are also
many other related literatures, such as performance appraisal, social-
ization, and procedural justice which, while not specifically listed, are
addressed and interwoven within the five reviews.

Goal Setting

The goal-setting literature is relevant to the extent that performance
standards have motivating potential. The basic premise underlying goal-
setting theory is that an individual's personal goals are an immediate
regulator of his or her actions (Locke & Latham, 1990). Over the past 25
years, an abundance of laboratory and field research has been conducted
that tests and develops the conditions, mediating mechanisms, and limits
of goal-setting theory (see Locke & Latham, 1990, for a recent review).

There are two general findings in the goal-setting literature that have
been extensively studied and consistently supported (Locke & Latham,
1990). First, those who work toward difficult, specific goals perform
better than those who work toward easy, vague, or no goals. Second, per-
formance tends to increase monotonically with goal difficulty. Goal set-
ting has been proposed to have positive effects on performance through
the following motivational mechanisms: behavioral direction (e.g., Or-
gan, 1977; Rothkopf & Billington, 1975), effort (e.g., Bandura & Cer-
vone, 1983, 1986; Bryan & Locke, 1967a, 1967b; Campion & Lord,
1982), persistence (e.g., Bavelas & Lee, 1978), and task-specific strate-
gies (Earley & Perry, 1987; Terborg, 1976).

In order for external standards to have a positive influence on mo-
tivation through the goal-setting process, externally defined standards
must be translated by the individual into personal goals that are specific
and difficult. Indeed, Bandura and Wood (1989) found that performance
standards influenced subjects' self-set goals on a complex decision-mak-
ing task, such that subjects working under a difficult standard set higher
goals for themselves than did those working under an easy standard. This
situation is similar to one in which subjects are assigned goals, which then
are either translated into personal goals or rejected. However, external
performance standards do differ from assigned goals on the dimensions
described in the introduction. This distinction raises the question, When
will an individual come to interpret a performance standard as if it were
a personal goal?

The literature most relevant to the issue of the translation of perfor-
mance standards into personal goals is that on commitment to assigned
goals (see Hollenbeck & Klein, 1987, or Locke & Latham, 1990, for re-
views). Relevant conditions which foster commitment are presented in
Figure 2. Many of these conditions have been empirically examined and
supported (e.g., rewards: Latham, Mitchell, & Dossett, 1978; Pritchard
& Curtis, 1973; and conflict: Erez, Earley, & Hulin, 1985; Latham, Erez,
& Locke, 1988) while others have not received much empirical attention
(e.g., ego involvement and goal intensity).

An important question is: If some of the conditions in Figure 2 are
present when a standard is set (e.g., the standard is set by a respected
authority figure, or it is tied to rewards and/or punishment), will indi-
viduals adopt the standard as their own maximal performance goal to
the extent that they will not be motivated to go beyond that particular
level of performance? Thus, if an organization decides to use stand-
ards as a way of increasing performance (rather than insuring a min-
imal level of performance), then care must be taken that performance
standards are sufficiently difficult and specific and that conditions exist
which will lead to commitment. On the other hand, if the organization
sets standards without considering their possible translation into individu-
al performance goals, individuals may adopt minimal-level standards as
their personal goals, and consequently both motivation and subsequent
1. Goals are assigned by authority figures who:
   - are seen as legitimate
   - are physically present
   - are supportive
   - are trustworthy
   - exert reasonable pressure

2. Assigned goals which...
   - imply rewards and punishments
   - convey positive self-efficacy information
   - foster a sense of achievement
   - are challenging
   - have high instrumentality and valence
   - have a high expectancy for success
   - do not conflict with other goals
   - are participatively set
   - are made for ego involving tasks
   - are intense

*Figure 2: Factors Increasing Commitment to Assigned Goals*

performance may be lower than had more difficult personal goals been set.

Related to the goal-setting literature is the management by objectives (MBO) literature, which concerns the application of goal-setting theory on an organization-wide basis. The positive effects of MBO can be mainly attributed to goal-setting theory (cf. Tosi, Rizzo, & Carroll, 1990). Top management's participation and commitment to the MBO program have been found to be crucial determinants of the program's success in increasing motivation and performance (Carroll & Tosi, 1973; Rodgers & Hunter, 1991). This implies that participation in standard-setting procedures by both top management and those to whom the standards apply should increase the motivating potential of the resulting standards.

In sum, to the extent that external standards shape individual goals, the goal literature is relevant. Our review suggests the importance of difficulty, specificity, commitment, and participation, among other things, in understanding employees' reactions to performance standards.

**Feedback**

Evaluations of performance (relative to the set standards) are often fed back to the individual worker and relevant decision makers. In general, providing people with feedback about their performance will have a positive effect on their future performance (Guzzo, Jette, & Katzell, 1985; Ilgen, Fisher, & Taylor, 1979; Kopelman, 1986). Indeed, goal-setting theory specifically posits that performance feedback is necessary for goals to be effective (Erez, 1977; Locke, Shaw, Saari, & Latham, 1981).

The issue of who sets performance standards may be important in determining reactions to feedback. Allowing participation by those to whom the standards apply may be beneficial for several reasons. First, employees will be more likely to perceive standards as fair (Taylor, Fisher, & Ilgen, 1984). Second, employees may be more committed to reaching performance standards and more likely to accept them (Erez & Kanfer, 1983). Third, negative reactions to the system may be less likely (Dornbusch & Scott, 1975).

Regarding the *content* of feedback, there is empirical research that has examined the attributes of feedback and their effects on employee reactions and behavior (Guzzo et al., 1985; Ilgen et al., 1979). However, little empirical work has directly examined how performance standards enter into the feedback process.

Presumably, external standards affect how newcomers and job incumbents interpret their work tasks. Indeed, the literature on organizational entry (Wanous, 1992; Wanous & Colella, 1989) emphasizes the importance of providing organizational newcomers with specific, honest, and clear-cut information. Whether this information (including performance standards) becomes accepted depends on a large part on the socialization process (Van Maanen & Schein, 1979) and the degree to which standards are valued (Taylor et al., 1984). Thus, three important factors to consider when setting standards are (a) the clarity of the standard, (b) how adequately information about the standard is disseminated (analogous to “specificity” in goal setting), and (c) how important the standard is likely to be to employees.

Research has also demonstrated that specific, descriptive feedback, compared to evaluative outcome feedback, results in more accurate evaluations of expectancy for success (Taylor et al., 1984), leads to perceptions of source credibility and system fairness (Dornbusch & Scott, 1975; Jacobs, Jacobs, Feldman, & Cavior, 1973), and increases performance by allowing for accurate attributions about past performance (Carver & Scheier, 1981). Standards that are clear, descriptive, and specific, and consequently allow for feedback along these dimensions, should produce more desirable responses.

Assuming external performance standards have been accepted, individuals will compare their feedback to these standards. Indeed, models of feedback based on control theory indicate two conditions under which comparisons may occur more frequently: (a) when employees are unsure about their ability to meet standards (Taylor et al., 1984; Weiss,
Ilgen, & Sharbaugh, 1982), and (b) when standards are valued (Ashford & Cummings, 1983; Taylor et al., 1984). Therefore, in order to increase the frequency with which employees compare feedback to performance standards, the accepted standards should be perceived as both difficult and rewarding. Once a comparison is made, Taylor et al. (1984) suggest that individuals may react either cognitively (e.g., adjust expectancies), behaviorally (e.g., alter effort), or affectively (e.g., shift levels of satisfaction).

Once again, it is important to note that an attribute of external standards likely to influence feedback reactions is the level of difficulty of the performance standard. Congruent with our prior section on goal-setting theory, increases in motivation will likely result when feedback indicates that people have performed somewhat below standard, thus once again supporting the notion that standards should be realistically difficult (Campion & Lord, 1982; Taylor et al., 1984). If external standards are too easily attained, and no reward is provided for exceeding standards, then people may actually lower their internal standards and motivation (Janz, 1982; Taylor et al., 1984). On the other hand, if standards remain too difficult, subjects may lower their expectancy of success to the point where they just give up (Carver & Scheier, 1981) or lower their own standards (Campion & Lord, 1982), thus rejecting the external standard. Since a primary influence on affective reactions to feedback is the sign of feedback (Ilgen et al., 1979; Taylor et al., 1984), unrealistically difficult standards, to the extent that they result in negative feedback, will lead to negative affect. Extremely high standards may also cause individuals to perceive the underlying system as unfair and not credible (Dornbusch & Scott, 1975).

Finally, the framing of performance information is also important. Decision-making research has demonstrated that individuals process information differently depending upon whether the information is framed in terms of positive or negative outcomes (e.g., performance standards defined as “success rates” or “failure rates”). For example, according to Kahneman and Tversky’s (1979) “prospect theory,” judges are risk-seeking when confronted with information in terms of potential loss, but risk-averse when faced with information in terms of potential gain. Thus, even if there is agreement about the absolute level of a standard, it may be that individuals receiving performance feedback in relation to existing standards will react differently depending upon how the feedback is framed.

In sum, the feedback and goal-setting literatures converge on several issues. That is, in understanding employee reactions to standards (and the acceptance of those standards), the constructs of “difficulty,” “specificity,” “clarity,” and “participation” are important. In addition, the feedback review also suggested the need to understand how performance standards are interpreted by employees and how that interpretation is affected by the content of the feedback.

**Performance Expectations**

There is a diverse body of empirical research (see Eden, 1990, for a review) which demonstrates the impact of management’s performance expectations on worker motivation and productivity. Eden has recently consolidated this work, along with work on expectation effects in other settings (e.g., Rosenthal, 1985), to develop a theory of how self-fulfilling prophecies (SFPs) operate in work settings. The basic premise is that managers hold performance expectations about their employees, communicate and behave according to those expectations, and thus create SFPs whereby employees conform to their managers’ performance expectations. Eden distinguishes among (a) the “Pygmalion” effect, where managers increase productivity by holding and acting on positive expectations, (b) the “Galatea” effect, where employees’ own positive performance expectations lead to high performance, and (c) the “Golem” effect where managers’ and employees’ own negative expectations lead to poor performance.

We suggest that explicit performance standards are one mechanism through which organizations may communicate performance expectations to their employees. In fact, the SFP literature provides several suggestions on how to set performance standards in order to both promote the Pygmalion effect and avoid the Golem effect.

First, the difficulty of performance expectations plays a major role in creating SFP effects. Eden (1990) clearly argues that difficult performance expectations lead to greater effort than easy expectations. Berlew and Hall (1966) provided a dramatic example of this when they found that the difficulty of supervisory expectations predicted performance and success 4 and 5 years later. Furthermore, Eden (1990) supports the contention that expectations should be realistically difficult, where the realistic level is based on ability. This is consistent with the goal-setting and feedback literatures.

A second factor important in promoting the Pygmalion effect is to allow employees to achieve success (Eden, 1990). One way of accomplishing this, while retaining difficult expectations, is through the notion of “small wins” (cf. Weick, 1984). That is, projects are broken down into small stages, such that small accomplishments are made in the quest for completing larger scale projects. Eden (1990) also points to the importance of focusing on improvements in performance, especially for poor performers. This suggests that performance standards that are focused
on "small parts" of the job and/or performance improvements may be more motivating than those that focus only on overall, end-product performance levels.

A third relevant factor in the SFP literature concerns when expectations are conveyed. Research on SFP in the classroom (Raudenbush, 1984) has pointed out that expectancy effects are strongest when there has been little previous interaction between students and teachers. Analogously, Berlew and Hall (1966) suggest that the probability that management's "expectations or standards will be internalized is probably higher when the individual has just joined the organization" (p. 210). Thus, standards may be more likely to impact on newcomers' reactions than on incumbents' reactions.

Finally, high expectations may be conveyed by simply allowing employee participation in the setting of those standards (Eden, 1990). Apart from the standard itself, participation in setting standards may signal to employees that the manager has confidence in their abilities (Locke & Schweiger, 1979).

**Job Satisfaction**

As noted in the introduction, it is expected that performance standards will influence job satisfaction as well as motivation. Several models exist which attempt to explain job satisfaction (see Hulin, 1991, for a recent review). We highlight only those areas most relevant to the setting of performance standards.

Research has demonstrated that there can be a strong relationship between successful task performance and job satisfaction (see Locke & Latham, 1990, for a review). This would imply that, in order to facilitate satisfaction, standards should be set at a difficulty level that makes success probable. On the other hand, it has already been mentioned that meeting (or exceeding) difficult and challenging standards will lead to a sense of achievement not found when meeting easy standards (Locke & Latham, 1990). Thus, performance standard difficulty should be set at a level that, when met, will be intrinsically rewarding. This is in keeping with the conclusions of the prior reviews.

The perceived rationale for a given standard can also influence satisfaction (Phillips & Freedman, 1988). Perhaps participation in the standard-setting process is one mechanism through which employees can come to understand the rationale behind given performance standards. Furthermore, participation or voice in this decision should lead to greater perceptions that one's interests are being considered (see Shapiro, 1993, for a review of this issue from the procedural justice perspective). As noted in the review of goal commitment, both a clear
tionale for, and participation in, the setting of performance standards have already been identified as important factors.

Finally, it has been demonstrated that individuals consider their past performance when judging their current performance (Simon, 1988; Vance & Colella, 1990) and that satisfaction may be enhanced when feedback is presented in terms of changes (i.e., improvements) in performance. The implication is that standards that are defined in terms of performance improvements may facilitate satisfaction. Besides being consistent with the SFP literature, this focus on improvements over prior performance may also serve to foster other factors identified in Figure 2. For example, a focus on the change from prior to current performance may enhance the specificity of feedback, foster a sense of achievement (assuming change is positive), allow individuals to adjust their expectations, and increase the accuracy of feedback by tying it to past performance.

In sum, the satisfaction literature identified several factors important in assessing employee reactions to performance standards. These factors converged with those identified in the other literatures we reviewed on goal setting, feedback, and performance expectations.

**Utility Analysis and Performance Effectiveness**

The above reviews repeatedly suggested that performance standards should be as difficult as possible, while being achievable. If employee reactions to standards are to be functional, then finding the appropriate level of difficulty is essential. We suggest that the difficulty levels of performance standards can be informed by utility analysis research because this research often involves the subjective estimation of the worth of particular work performance levels.

For example, several researchers (Burke & Frederick, 1984; Karren & Bobko, 1983; Mathieu & Tannenbaum, 1985; Weekly, Frank, O'Connor, & Peters, 1985) have reported negative estimates of worth, despite demand characteristics that probably encouraged positive values. The point here is that negative and positive effectiveness ratings imply the possibility of a "zero-point" in the utility curve. Such a point would be a natural estimate for a "minimum" performance standard when standards are used as evaluative devices. Pritchard, Jones, Roth, Stuebing, and Ekeberg (1988) have extended the notion of negative performance utility estimates by explicitly mapping the entire range of performance effectiveness. Their contingency curves often look like step functions (see Figure 3, to be discussed later). As we suggest later, it may be that the points at which the steps change slope are good candidates for different difficulty levels of performance standards.
TABLE 1
Dimensions of Performance Standard Setting Uncovered by Each Literature Review

<table>
<thead>
<tr>
<th>Implications for:</th>
<th>Goal Setting</th>
<th>Feedback</th>
<th>Self-Fulfilling Prophecies</th>
<th>Job Satisfaction</th>
<th>Utility Analysis</th>
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<td>Outcomes &amp; rewards</td>
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<td>Sense of achievement</td>
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<td>Valence of standards</td>
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<td>Expectancy for success</td>
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<td>Conflict with other standards</td>
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<td>Framing of standards</td>
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<td>Mgmt performance expectations</td>
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<td>Difficulty of standards</td>
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**Summary of Reviews**

Overall, the degree of convergence of these literatures was substantial and indicated several triangulated clusters of domains for future research. Table 1 summarizes the dimensions of performance standard setting that were uncovered by each literature we reviewed. These dimensions provide theoretical justification for the important aspects of setting performance standards presented in Figure 1. The next section of the paper ties these dimensions together and sets forth specific research propositions.

**Identification of Propositions for Future Research**

Based on our review of related literatures, we identified four domains where both basic and applied research on performance standards are clearly needed. Specific research propositions are also stated when possible. The four domains are: (a) the acceptance of external performance standards, (b) the definitional content of performance standards, (c) the communication of performance standards, and (d) the difficulty of performance standards.

**Acceptance of External Standards**

The goal-setting, feedback, and performance expectation literatures all point to the importance of the translation of external performance standards into internally accepted performance standards. This translation seems fundamental to the efficacy of setting performance standards, yet there is no direct literature which verifies the linkage. Thus, we suggest:

*Global Proposition:* Individual reactions to standards depend on the degree to which external performance standards are accepted by those to whom the standards apply.

Our review uncovered several conditions under which acceptance is most likely to occur. First, consistent with the commitment literature, Murphy and Cleveland (1991) suggested:

*Proposition 1:* The degree to which external performance standards are accepted depends on the degree to which the employee identifies with, and is committed to, the goals of the organization.

Thus, one objective in setting standards is to develop standards that are likely to build upon an individual's organizational commitment (and/or reason for joining the organization). This issue has been discussed in detail in the goal-setting literature, and the factors thought to influence external goal commitment were presented in Figure 2. Thus, we posit:

*Proposition 2:* Standards that are communicated and constructed using the characteristics in Figure 2 are more likely to be accepted than those that are not. For example, standards that are tied to rewards, foster a sense of achievement, do not conflict with other standards, and are participatively set will result in greater likelihood of acceptance by individual workers.

It should also be noted that there are a variety of factors related to goal difficulty that influence goal commitment, such as the degree of challenge or expectancies for success. These issues are discussed in the following sections.

Finally, the work on performance expectations (Eden, 1990) and organizational socialization (Berlew & Hall, 1986) suggested that organizational newcomers would be more likely to be affected by standards than would incumbents. As one reviewer pointed out, the process of organizational entry may also be psychologically similar to the processes involved when undergoing a major organizational transition (e.g., restructuring). That is, in both entry and transition stages, individuals have to engage in "sense-making," by seeking normative information about performance and behavior. Thus, we suggest:

*Proposition 3:* Organizational newcomers, and individuals in organizations undergoing major transitions, will be more likely to accept externally set performance standards than will employees with longer tenure or employees in status quo situations.
Proposition 3 raises the question of how to set new standards or change existing standards for employees with longer tenure. Stephens and Peters (1992) conceptually addressed this question by examining the impact of career stage on acceptance of standards. They concluded that as one progresses through career stages, more and more participation in the standard-setting process should be encouraged. This should facilitate perceptions of fairness and signal management’s confidence or high expectations to those employees with enough organizational experience to assess these matters. On the other hand, newcomers may not be prepared for the autonomy associated with participation in setting their own standards (cf. Katz, 1978). Thus, we further address Propositions 2 and 3 by suggesting:

**Proposition 3a:** The effects of participation on the acceptance of standards will be greater for incumbents than for newcomers.

### Definitional Content

When referring to the definitional content of performance standards, we mean the specific performance dimensions that define standards and the terms in which those standards are described and communicated.

Both the feedback and goal-setting literatures note that specific feedback and goals lead to better motivational effects than vague feedback and goals. Furthermore, standards should address specific behaviors, rather than traits or outcomes, to the extent that behavioral direction and task-specific strategies are invoked. Thus, we suggest:

**Proposition 4:** Performance standards that are defined in specific, behavioral terms will lead to greater motivation, and consequently greater performance, than those that are vaguely defined or stated in terms of outcomes or traits.

However, there are situations where defining standards in terms of outcomes may also be beneficial. And, from an organization’s perspective, standards in terms of outcomes are likely to be viewed as most useful (as evidenced by the popularity of MBO programs). From an employee’s perspective, standards defined in terms of outcomes may facilitate performance, despite the reduced potential for diagnostic feedback. Indeed, Eden (1990) notes that in order to maintain high expectations (and thus increase performance through SFP), individuals must be encouraged to attribute successes to internal factors, and failures to external sources. Because the additional use of outcome standards would allow for such flexibility, we suggest:

**Proposition 4a:** Standards stated in terms of outcomes may be used to increase motivation, if managers facilitate positive attributions for performance toward the standard.

Another noteworthy dimension is the framing of standards. According to Kahneman and Tversky’s (1979) prospect theory, individuals receiving negatively framed information will be more risk-seeking than those receiving positively framed information. Assuming that risk-seeking becomes operationalized as a behavioral or effort change, this suggests that standards defined with negative frames (e.g., misses 2–4 days of work per month) will lead to changes in behavior more readily than those framed in positive terms (e.g., attends work 16–18 days per month).

On the other hand, a reading of the feedback literature (e.g., Taylor et al., 1984) suggests that individuals will be less likely to accept negative feedback than positive feedback, and will only respond with increased motivation to negative feedback if their expectancies for success on future performance are relatively high. This suggests that negatively framed standards, leading to negatively framed feedback, may have less positive effects (feedback being discounted or ignored) than positively framed standards. Therefore, a reading of these two literatures suggests conflicting directional hypotheses. However, recent research, incorporating multiple occasions of feedback, has begun to look at this issue. An initial finding (Jourden, 1992) is that both performance and satisfaction increase over time in a positively framed feedback group, yet drop in a negatively framed feedback condition. Presumed mechanisms include both increases in persistence and self-efficacy when feedback is positively framed. Another explanation is that risk-seeking in this scenario does not translate into behavioral change, but results in an explicit decision to ignore the standard. Thus, we tentatively suggest:

**Proposition 5:** In situations where there are multiple occasions of feedback, positively framed performance standards are preferred over negatively framed standards, from both motivational and affective perspectives.

Finally, the valence (or value) of standards is crucial to their motivational potential. As specified in Figure 2, researchers have posited that external goal valence (associated rewards, sense of achievement, opportunities for self-improvement) is a factor that determines whether individuals become committed to assigned goals. Expectancy theory (Vroom, 1964) also states that the valence of performance outcomes is a major influence on motivation. The job satisfaction literature reiterated
the importance of attaching valued outcomes to the potential achievement of performance standards. This literature, along with other theories such as equity theory (Adams, 1965), suggests that outcomes associated with standards should be perceived as fair reward for employee inputs. Therefore, we posit:

Proposition 6: Increased motivation and job satisfaction will result if performance standards (a) relate to outcomes valued by employees and (b) result in rewards which are perceived as fair, given the inputs necessary to successful performance.

Communicating Performance Standards

There is scant research on how performance standards get communicated to employees. When discussing the acceptance of performance standards above, several aspects of the communication process were hypothesized to be important, such as the importance of assignment by an authority figure (see Figure 2). Provided that standards are accepted, there is even less literature which speaks to how the communication process affects subsequent reactions. The first line of research in this area should be descriptive in its attempt to identify the channels which organizations use to communicate performance standards.

The question of when to communicate standards has been addressed in the socialization literature. Feldman's (1976) stage model of socialization suggests that norms and standards are most likely to be communicated to newcomers during the second stage of socialization: accommodation. This stage is the point at which the newcomer's role begins to be clarified. As discussed in Proposition 3, Berlew and Hall (1966) suggested that the early entry period is when standards are most likely to be internalized. The SFP literature (cf. Eden, 1990) further suggests that the Pygmalion effect is most likely to occur in employees with short tenure. Thus, we suggest:

Proposition 7: Performance standards reflecting high performance expectations are most likely to facilitate the performance of organizational newcomers. Conversely, performance standards reflecting low performance expectations are most likely to be detrimental to the performance of organizational newcomers.

There is also the question of who communicates performance standards and what impact different sources have on reactions to those sources. Proposition 2, based on Figure 2, suggests that standards publicly communicated by respected authorities are more likely to be accepted. However, it is questionable whether this formal approach to standard setting will lead to better motivation and satisfaction. Standards communicated on a more informal basis (and perhaps more frequently) may have more motivating potential. Furthermore, research going as far back as the Hawthorne studies has demonstrated the power of peer group norms in affecting reactions to standards (cf. Moorhead & Griffin, 1992). Indeed, Murphy and Cleveland (1991) point out the importance of direct communication, observing the application of standards to others, identification with reference groups, and direct experience as means by which standards get communicated. Again, these processes deserve study in the context of performance standards.

Finally, our review of the job satisfaction literature indicated that providing a rationale for external standards may facilitate satisfaction. Further, Folger, Konovsky, and Cropanzano (1992) highlight the importance of establishing standards in advance, publishing and widely distributing them, and explaining them. These procedures fall under the adequate notice element of due process. Therefore we posit:

Proposition 8: Communicating performance standards along with a rationale will result in greater satisfaction than use of equally appropriate, but unjustified, performance standards.

Setting the Difficulty of Standards

For the purposes of this review, it is the employee's perception of difficulty that is crucial. It should be noted that recent goal-setting research has demonstrated that the manner in which goal difficulty is defined impacts on how well this variable predicts performance (Lee & Bobko, 1992; Wright, 1990). Both of these studies found that when goal difficulty was defined as the assigned level (usually determined by normative data), predictive validities were higher than when difficulty was measured as subjects' self-referenced perception of difficulty. However, Lee and Bobko (1992) additionally found that when perceptions of difficulty were framed in terms of an external source (i.e., how difficult is this goal for the average person), predictive validities were as high as when difficulty was externally defined. By definition, the difficulty of standards is externally set. But, we suggest that in order to assess reactions to a standard, one must also consider an individual's perception of the difficulty of that standard and, in turn, how externally defined levels of standard difficulty get translated into perceptions of difficulty. The goal-setting research (Lee & Bobko, 1992; Locke & Latham, 1990; Wright, 1990) points out the importance of these definitional issues and a more in-depth discussion of different measures of difficulty is beyond the scope of this paper. Again, our propositions are generally phrased with perceptions of difficulty in mind.
From a motivational standpoint, the research reviewed earlier suggests that the adoption of minimum performance standards will be less effective than more difficult standards. Even the research on the effects of positive feedback (a likely outcome if standards are easy) suggests that if standards are too easily attained and no reward is provided for meeting standards, people may actually become less motivated (Janz, 1982; Taylor et al., 1984).

The feedback, goal-setting, and SFP literatures also noted that if their respective interventions are to be effective, then individuals must maintain high levels of expectancy for success, self-efficacy, and a sense of accomplishment. This is particularly true when valence for the standard is not extremely high (Hollenbeck & Klein, 1987). Research on job satisfaction makes the same prediction about the optimal level of standard difficulty as the motivation literature: Namely, standards should be achievable but difficult enough to provide a sense of accomplishment. Thus, we suggest:

**Proposition 9:** Individuals working under standards that they consider to be achievable and difficult will be more motivated and more satisfied than will individuals working under easy standards.

While Proposition 9 may be somewhat straightforward, it is important because it implies that organizations that set and emphasize only minimum performance standards may actually be demotivating their employees (Janz, 1982; Taylor et al., 1984). We suggest that:

**Proposition 9a:** To the extent that only minimum performance standards are emphasized by organizations, (a) these minimum standards will be accepted, (b) they will serve as relatively easy individual goals, and (c) intrinsic motivation to perform at greater levels will be reduced.

These propositions point out the importance of doing research that examines the conditions under which standards will be seen as difficult, yet achievable and motivating. So-called “optimal level theories of motivation” (cf. Arkes & Garske, 1982; Dember & Earl, 1957) posit an “inverted-U” relationship between task difficulty and its motivating potential. The optimal level of arousal is determined by locating the maximum value of the inverted-U function.

Research on determining optimal difficulty levels should also focus on individual difference variables which influence how one perceives the difficulty of standards. On such obvious variable would be ability. Another related variable may be self-efficacy. Self-efficacy refers to a person’s own assessment of how well he or she can perform in a prospective situation (Bandura, 1986). Research on goal setting has demonstrated that higher levels of self-efficacy are associated with higher goals and, in turn, increased task performance (Locke, Frederick, Lee, & Bobko, 1984). This suggests that individuals with high self-efficacy will be more likely to accept difficult standards, and then translate those standards into difficult goals. On the other hand, individuals with low self-efficacy would be more likely to accept and use easy, or minimum, performance standards as personal goals. Thus, we suggest:

**Proposition 9b:** Employees with low self-efficacy will be most likely to accept and work towards easy performance standards. Employees with greater self-efficacy will be more likely to accept and work towards difficult performance standards.

One implication of Proposition 9b is that organizations can increase employees’ acceptance of difficult standards, and consequently motivation, by increasing employees’ self-efficacy on tasks addressed by performance standards. This suggestion is consistent with the work on self-fulfilling prophecies (Eden, 1990) reviewed earlier.

It should also be clear that there may be many levels of standards. In defining standards, some textbooks equate performance standards with “minimum standards” of performance (cf. Carroll & Schneier, 1982, p. 131). This definition of standards is unnecessarily restrictive and we suggest using a performance *continuum*, where standards can be used to define points along that continuum. For example, Bobko and Wise (1987) provided the following continuum of performance standards:

1. A “minimum standard”—below which a person was demoted or fired.
2. A “training warning standard”—below which some action was required for remediation (e.g., retraining).
3. An “acceptable standard”—requiring no action on the part of the organization.
4. An “excellence standard”—above which a positive reward was provided.

Of course, while the same set of standards would apply to all employees, any one employee would be working toward one particular standard on the scale. Such a continuum is in keeping with the “small wins” strategy for motivating employees (Eden, 1990; Weick, 1984) noted earlier. Thus, we suggest that:

**Proposition 10:** Organizations that adopt a continuum of performance standards (such as listed above), rather than a single common standard across all individuals in a particular job, will increase individual motivation.
We note at this point that individually oriented theories (e.g., goal-setting) are being used to make propositions about “across-the-board,” external performance standards. We believe this is appropriate. We have seen too many organizations that have adopted minimum performance standards only. On average, an increase in the difficulty of such external standards will probably raise the level of accepted standards to a point much closer to the individually maximal level.

To avoid having to define absolute measures of performance (and for motivational reasons noted below), some researchers have suggested that standards and goals should be cast in a framework of change (Austin & Bobko, 1985; Eden, 1990; Glass, 1978). That is, one can usually see whether production (or any other performance behavior) has gone up, remained the same, or gone down. Psychometrically, this focus on change has the advantage of having a true zero-point (i.e., zero change). Motivationally, a focus on change places standards for behavior closer to the optimal, “pacer” level of intentional behavior. Thus, we posit the following:

**Proposition 11:** Stating standards in terms of individual changes in performance will enhance individual motivation and increase subsequent individual performance, relative to the adoption of minimal, absolute standards of performance.

Also, as noted in our review of the job satisfaction literature, it has been suggested that satisfaction may be enhanced when feedback is presented in terms of changes (i.e., improvements) in performance. Thus, we offer:

**Proposition 11a:** A focus on the evaluation of changes in performance will enhance individual satisfaction with the job, relative to the adoption of inflexible standards of performance. This improvement will be related to the mediating mechanisms of increased specificity and accuracy of feedback, a clearer sense of achievement, and an increased capacity for individuals to adjust their expectations.

Although we have noted that it may be conceptually appropriate to refocus performance standards on “change,” this is not without psychometric and practical consequences. One complicating factor is that change scores are usually much less reliable than the original component scores. Also, it is not clear how much change should be required. Presumably, there is relatively less room for positive change if a person is already a high performer, suggesting that the absolute level of performance or performance over time should also be considered when determining standards based on performance changes. Finally, absolute behavior cannot be completely ignored in some situations. However, we believe that a focus on standards in the form of change has not been sufficiently exploited by organizational researchers.

It is also possible that individual variables may influence how employees react to performance standards stated in terms of performance change. One such variable concerns the identification of two distinct orientations which individuals have when conceptualizing their own ability (Dweck & Elliott, 1983; Elliott & Dweck, 1988; Nicholls, 1984). One conceptualization depicts ability as an “incremental skill” which can be developed through learning experiences. Such individuals adopt learning goals and are more likely to view failure and negative feedback as constructive criticism (Dweck & Elliott, 1983; Elliott & Dweck, 1988; Nicholls, 1984). The other type of individual views ability as a “fixed entity” and views performance as diagnostic of one’s fixed ability. Individuals with this orientation set goals to demonstrate their capabilities and are more likely to have negative reactions to failure experiences (Elliott & Dweck, 1988; Nicholls, 1984). The implications for the process and content of setting performance standards seem straightforward. We suggest that “incremental skill” individuals are, on average, more likely to accept difficult external standards and the continuum of standards discussed earlier, given their focus on self-improvement. Thus, we propose:

**Proposition 11b:** Individuals with an “incremental skill” orientation will be more likely to accept, and react positively to, performance standards stated in terms of change than individuals with a “fixed entity” ability orientation.

**Identifying Performance Levels from Utility Analysis.** As noted earlier, Pritchard et al. (1988) generated “contingency curves,” where the x-axis is an increasing scale of criterion performance and the y-axis is a measure of the estimated effectiveness of that performance to the organization, ranging from −100 to +100. These values are presumed to be on a ratio scale, such that a zero-point of effectiveness can be identified. Also, Sadacca, Campbell, DiFazio, Schultz, and White (1990) developed similarly shaped functions within the context of the U. S. Army’s classification system. In both studies, functions were typically S-shaped. Figure 3 displays such a generic function.

Note that the non-linearity of the utility/effectiveness function can be exploited. For example, point “c” on the task output dimension (horizontal axis) would be a likely candidate for a “standard of performance excellence.” From an organizational point of view, increasing performance beyond this high level shows little marginal gain in organizational effectiveness. An individual’s motivation might best be directed to other components of the job once performance reaches level “c” on this component (cf. Pritchard et al., 1988, p. 343).
Regarding employee reactions, when discussing standards in terms of performance change, we noted the concern about assessing change over time when an employee's performance is already high (i.e., how much difficulty is enough?). The work on utility analysis can help address this problem. That is, perhaps point "c" signifies the difficulty level where standards should stop being measured in terms of change, and instead should be presented in terms of maintaining a consistent, high level of performance.

Note also that there are two candidates for "minimum performance" standards in Figure 3; namely, points "a" and "b." If the effectiveness scale is truly ratio in nature, then point "b" should be set as the minimum standard, since performance below this standard yields negative returns to the organization. However, the psychological literature demonstrates that the construction of truly ratio scales is not easy. Therefore, point "a" identifies another candidate for the minimum performance standard—below this point all performance is equally poor, while above this point motivated effort may lead to gains in organizational effectiveness. Of course, other factors should be taken into account when setting minimum standards. For example, if replacement costs are high, the optimal minimal standard may be lower than point "a."

In sum, the use of utility analysis links individual performance standards to organizational effectiveness, and we suggest that:

Proposition 12: From the perspective of increased organizational effectiveness, the use of multiple performance standards defined by natural breaks in utility/effectiveness functions (i.e., points at which the curve changes slope) will help optimize the motivating potential of performance standards, as well as subsequent employee performance and satisfaction.

Summary and Conclusion

We have drawn upon several related literatures in order to focus attention on a relatively unresearched set of issues: namely, how employees react to performance standards. We have suggested that performance standards can, and should, be systematically studied in their capacity to evoke both motivation and satisfaction. Indeed, any discussion of how, when, or where standards are set must consider how individuals will react to those standards.

The first set of propositions we generated were related to the acceptance of performance standards. As noted earlier, this seems so fundamental—in the sense that organizational performance standards are probably meant to be adopted by individuals—yet there is little research that indicates if (and/or under what conditions) such acceptance occurs. Our review and propositions point out several lines of future research on this fundamental issue.

For standards to be effective (in increasing both motivation and satisfaction), we have provided research propositions regarding content, communication, and the need to find optimal levels of difficulty. Many of these propositions were derived in a straightforward manner from other literatures. What makes them particularly interesting is the fact that so many organizations have "standards," yet there is so little research directly related to how employees react to standards.

We have also suggested that a common use of standard setting in organizations, namely, minimum performance standards, can actually be quite dysfunctional in terms of motivating performance. We have suggested that individuals may lower their expectations in the face of an organization's use of minimum standards, and believe that field research in this area is sorely needed. We then suggested that the use of a performance standard continuum has more motivating potential than the use of minimum performance standards. Furthermore, we suggested that operationalizing standards and feedback in the form of change may increase motivation and provide more satisfaction.

It was further noted that, as with the acceptance of standards, there was precious little research on how performance standards get communicated to employees. This issue should not be overlooked, as the potential for dysfunctional reactions to performance standards is high. For example, one of the current authors worked with an organization that had...
set standards for performance (e.g., 80% customer satisfaction). When a mid-level manager transmitted this standard to subordinates, it was presented as a standard of 85%—presumably to "guarantee" that the original standard was met. By the time this standard was communicated several layers down the organization, it became unrealistically difficult and employee satisfaction dropped precipitously.

There are, of course, yet other domains which would require a review as extensive as the ones above. For example, we only touched on the actual mechanics of how to set standards (cf. Brown, 1987, for a recent practical discussion on this topic). Also, as stated in the introduction, the educational literature notes that standards are essentially value judgments and that different statistical methods can produce different levels of standards (Wise, Peterson, Hoffman, Campbell, & Arabian, 1991). As value judgments, definitions of what constitutes a standard are therefore susceptible to multiple organizational constituencies and value structures (cf. Connolly, Conlon, & Deutsch, 1980; Keeley, 1983; Zammuto, 1984). One other area, which surely brings to mind other ideas, is the impact of individual variables on reactions to performance standards. Propositions 1, 3, 3a, 7, 9b, and 11b addressed several such variables. However, there are many other possibilities for future research.

It is also possible to expand the relationships presented in Figure 1. As one reviewer noted, many other reactions to standards are possible. While, this paper focused on motivation and job satisfaction, other reactions such as specific behavioral reactions (e.g., cheating, citizenship behaviors) or cognitive reactions (reframing standards, discounting) are also useful avenues for future research. Furthermore, feedback loops are likely to be present between reactions to standards and the acceptance of future standards. This issue was implicitly addressed by Propositions 11 and 11a (which dealt with defining standards in terms of performance change) and Proposition 1 (which suggests that acceptance of standards depends on the job reaction of commitment).

In sum, we have conceptually addressed the relationship between performance standards and employee reactions to those standards, specifically motivation and job satisfaction. We have provided both specific propositions and broader domains to serve as the impetus for future research. The setting of performance standards is ubiquitous in organizational life, but has been relatively neglected in industrial/organizational psychology research. We urge the field to explore the research avenues described above.

REFERENCES


