Robbing Peter to pay Paul: Feedback environments and enacted priorities in response to competing task demands

Susan J. Ashford,*,1, Gregory Northcraftb,1,2

aUniversity of Michigan, 701 Tappan, Ann Arbor, MI 48109-1234, USA
bDepartment of Business Administration, University of Illinois, 1206 South Sixth Street, Champaign, IL 61820, USA

Abstract

In this article, we present a model of how the feedback that surrounds performers as they do their work affects their attention and effort allocation in multiple goal situations. Differences in the frequency, specificity, and source of feedback for the multiple goals that performers hold are posited to affect attention and effort allocations. By differentially allocating their efforts in response to the feedback environment, performers often enact priorities that may or may not match the assigned priorities of the organization. These attention and effort allocations are posited to affect relative performance on the goals performers hold (or are assigned). Practical implications for performance management in organizations are addressed.

© 2003 Elsevier Inc. All rights reserved.

Keywords: Feedback environments; Enacted priorities; Performance; Task demands

1. Introduction

We live in a work world of multiple and competing demands. This perspective was first formalized by the research of Mintzberg (1973). He found that managers’ workdays are very fragmented. They work on many different tasks during each day, many of which have little apparent connection to each other. Mintzberg’s conclusions have been periodically reconfirmed (e.g., MacDonald, 1983; Oshagbemi, 1995).
The pace of life and work are increasing and growing ever more complex (Brown & Eisenhardt, 1998). Organizations are rushing to compete in global markets, use complicated, fast-changing technology, and do it all with structures that are flatter, leaner, less bounded, and often, networked and long distance (e.g., Jacob, 1995). In response, managers and supervisors are adding more tasks to their direct reports’ workloads. They also often demand performance on multiple dimensions for any single task, reflecting the heightened environmental complexity. For example, over the past decade or so, with increasing competition based on product reliability, quality goals are typically assigned as well as quantity goals (e.g., Terborg & Miller, 1978). With the growing emphasis on competing via new products, demands to be innovative or creative (e.g., Shalley, 1991) also are often added to the mix. Adding to the complexity is the reality that with flatter, less-bounded organizational structures, peers can make demands on each other as well. Thus, the multiple tasks a manager pursues might well include both those set by his or her manager and those negotiated with his or her peers. Finally, with cultural norms about families changing, many managers may also hold strong family obligations that compete with work goals for their time and attention (Hammonds, 1997; Gibb-Clark, 1999).

Unfortunately, as Locke and Latham (1990) noted, we do not know as much as we need to know about how people manage and allocate their resources among multiple, competing demands. For example, most of the excellent research on goal setting has been conducted as single-goal studies. So we have long known, for example, that more frequently provided knowledge of results will enhance performance on a task (e.g., Greenspoon & Foreman, 1956). However, we have very little theory and even fewer studies as to the ways in which managers and employees respond to the need to manage multiple tasks, or multiple dimensions of a single task—this despite the reality that managers and employees are forced to juggle competing demands every day (Locke & Latham, 1990). This article begins to address this gap by developing a theoretical perspective on how performers allocate their resources among multiple competing task demands.

Previous studies have noted that in response to competing demands, individuals allocate (among other things) their cognitive capacity or attention (they think about the goals differentially), their time (they spend more time on one goal than the other), and their effort (they spend the same amount of time on each, but they work more intensely at one goal than the other). Larson and Callahan (1990) argue that it is more likely that individuals will differentially allocate their time than their effort. They argue that performers “groove in” to an overall level of effort to expend across all job activities and strive to maintain that level over time. This suggests that performers mainly need to allocate their time to tasks in competing demands situations. Many authors use the terms time and effort interchangeably, as if to indicate that individuals are allocating more scarce resources to one task or task element over another—whatever form those scarce resources might take. Following from Larson and Callahan (1990), our discussions will focus on performers’ allocations of time across multiple, competing demands—although our arguments reflect more generally on performers’ allocation decisions about any resources that influence progress on or fulfillment of task demands.
2. Stated priorities

In this article, we distinguish between two types of priorities performers might use to allocate scarce resources among competing task demands. The contents of an organization’s intentional signaling efforts represent the organization’s *stated priorities*. These stated priorities stand in contrast to employees’ *enacted priorities*; enacted priorities are the *actual* distribution of employees’ resources across multiple, competing task demands. These enacted priorities may be consistent or inconsistent with the organization’s stated priorities.

Organizations use a variety of tactics to intentionally signal to employees what their priorities should be for allocating scarce resources among multiple task demands—the organization’s stated priorities. For example, many employees are provided job descriptions (Grant, 1988) and/or mission statements (Nelton, 1994) that delineate the scope and ordering of the individual’s or organization’s interests. Similarly, organizations use monetary incentives (e.g., Bennett, 1991; Wiley, 1993) to signal organizational priorities. For example, an organization that offers monetary incentives for group- or team-level performance is signaling that cooperative behavior is a priority among its workforce (e.g., O’Dell, 1989). Finally, organizations also may use goal-setting programs such as MBO (e.g., Kondrasuk, 1981) of explicit feedback systems to intentionally manage employees’ allocation decisions.

The goal-setting literature has provided the best look inside how organizations can proactively manage employees’ resources allocations across multiple task demands via stated priorities. Employees’ goals can come from many different places. Basic theory of bureaucracy suggests that in work organizations, members buy into the rights of others higher in the hierarchy to set goals for their behaviors (Weber, 1947). Thus, the boss prescribes some goals for an individual. Simon’s (1945) notion of the zone of indifference suggests that this power to set goals is not absolute, but rather the goals must fall within the zone of requests deemed appropriate by the performer and the organization at large. In some of today’s flatter, less-bounded hierarchies, peers too may set goals for each other. Individuals also bring personal goals into the work setting. These goals may be task goals (e.g., I want to do well on this task), extra task goals (e.g., I want to make a good impression on higher-ups in this organization), and non-work-related goals (e.g., I want to grab a few minutes at work to plan and Xerox my daughter’s scout meeting agenda). Multiple goals may reflect a nested hierarchy of needs and interests (Brett, Northcraft, & Pinkley, 1999; Carver & Scheier, 1981). In these hierarchies, a person’s higher order goal of being a good person, for example, might drive nested subgoals such as helping others, following through on what the boss requests and getting the requested report out on time.

For our purposes, it is relevant how any single goal ends up as part of an individual’s set of multiple goals only because the origin of a goal may affect the allocation of resources to that goal and away from others. While we do not address the origins of goal sets in this article, we do take as axiomatic that individuals entertain multiple goals in their minds at work. These multiple goals may differ in their specificity (with some being fully formed explicit goals and others being the merest intention), difficulty, importance, and domain (e.g., work/family).
The literature on multiple goals has noted three types of multiple-goal situations. People can have two goals for the same task (e.g., quantity and quality goals, Terborg & Miller, 1978). They can hold goals for two different tasks (e.g., proofreading and alphabetizing, Larson & Callahan, 1990). Locke, Smith, Erez, Chah, and Schaffer (1994) also point out that even along one performance dimension there can be multiple goals due to differences in goal level (e.g., when a performer sets one level as a goal for him or herself and the supervisor assigns a quite different goal level). The real-world performer likely encounters a mix of both multiple tasks and goals for multiple dimensions of the same task in his or her workday.

What is the impact of trying to manage the demands of multiple goals? One consequence of trying to satisfy multiple goals can be high performance across all goal domains (Ivancevich, 1974, 1976, 1977; Nemroff & Cosentino, 1979). For example, Ivancevich (1974) found that individuals could pursue goals successfully in four different domains over a 6-month period. Success at this is likely to occur when goals are causally interrelated—not competitive but complimentary (Locke & Latham, 1990). However, many researchers suggest that when time, energy, and cognitive capacity are limited, any resources allocated to one task will necessarily take away resources from another task (Ogden, Levine, & Eisner, 1979; Wickens & Kessel, 1980). Erez, Gopher, and Arzi (1990) and Schmidt, Kleinbeck, and Brockmann (1984), for example, found that individuals have to prioritize when they have multiple goals.

Locke et al. (1994) suggest that such prioritization is not always possible, however. When two goals are equally important and conflicting, goal conflict, pressure, and performance decrements will ensue. Their data demonstrated that goal conflict was associated with reduced performance. Kleinbeck, Schmidt, and Quast (1989) made the same argument, proposing that goals cannot be achieved simultaneously if both tasks need access to the same functional units of information processing (e.g., it is difficult to visually track something and to respond quickly to auditory signals simultaneously). It is difficult to think of goals in organizations, however, that are in such direct conflict that prioritization and commensurate resource allocation are impossible. It is true that goals can be viewed of as equal in priority and that such a view can be stressful for the performer. However, most organizational goals are attempted over some period, allowing for the possibility of effort allocation. Indeed, because resources may be allocated in ways suboptimal for performance, the allocation of resources across goals is likely to be a key mediator of effective performance in multiple-goal settings.

What determines individuals’ allocations of scarce resources across multiple goals? The emerging literature on multiple goals makes several suggestions. Some of these suggestions have been empirically tested, but many have not. Klein (1989) for example suggests that allocation is driven by subjective expected utility. In this perspective, time allocation is a multiplicative function of the perceived attractiveness of goal attainment and the perceive probability of obtaining the goal. Kernan and Lord’s (1990) data supported this position. They found that the higher the valence of a goal (manipulated through financial incentives) and the higher the perceived efficacy, the more time individuals allocated to that goal. They propose that expectancy valence notions may be particularly applicable to multiple-goal as
opposed to single-goal situations because in such situations people are actively making choices about their behavior rather than expressing routine levels of motivation or performance (Kernan & Lord, 1990).

Motivation researchers more generally have echoed this viewpoint. For example, Landy and Becker (1987) and Mitchell (1974) also found that the objective priority given to the goals had independent effects on effort allocation. Similarly, the differential weight placed on goals in a performer’s goal set influenced their subsequent performance on those goals, reflecting, perhaps, differential allocation of attention toward goals given a heavy weight and away from those given a lesser weight.

Other authors have found that the variables that predict performance in single-goal situations also predict performance in multiple goal situations. For example, goal difficulty not only produces higher performance on a single goal, but influences attention and effort allocation across goals. Proportionately more attention is allocated to the more difficult goals (Erez et al., 1990; Kleinbeck, 1986). In addition, Schmidt et al. (1984) found that goal performance improved with difficult and specific goals. That performance was achieved at the cost of performance on concurrent tasks, however, indicating, again, that individuals have limited resources to allocate to tasks. Schmidt et al.’s finding echoes Terborg and Miller’s (1978) earlier results also showing the influential effects of goal specificity on effort allocation. They found that just naming a new goal for a task (e.g., naming “quality” as a goal) affected attention allocation.

3. Enacted priorities

All goals (or other forms of stated task priorities) are pursued within a context that contains signals, cues, and information about that pursuit. Hanser and Muchinsky (1978) labeled that context the feedback environment. The feedback environment is the environment of information about performance that surrounds the individual performer (Hanser & Muchinsky, 1978). The feedback environment can be characterized in terms of the availability of feedback for performers (e.g., a lot versus a little feedback is available), as well as the quality and sources of the available feedback (Herold & Parsons, 1985a). The feedback environment may provide individuals with cues about how well they are performing, including statements made directly to them about their task performance, and events occurring in the environment that might be interpreted by the performer as feedback (Ashford & Cummings, 1983; Greller & Herold, 1975).

In this article, we contrast the effects of an organization’s stated priorities with the perhaps unintended and certainly underexplored influence of the feedback environment (Hanser & Muchinsky, 1978) on performers’ actual allocations of resources among multiple task demands—i.e., individuals’ enacted priorities. Organizations of course may use feedback as a signaling device to intentionally manage employees’ allocation decisions—specifically, to reinforce the organization’s stated priorities. However, the concern we will explore here is what happens when the feedback environment enacts priorities that depart significantly from the organization’s stated priorities.
An example of this contrast between stated and enacted priorities is provided by the “teaching paradox.” The teaching paradox refers to the dilemma facing junior faculty members of allocating their scarce attention, time, and effort across teaching, service, and research. In this circumstance, many junior faculty members appear to allocate a dysfunctional amount of their resources on teaching activities—despite often having been explicitly told that this should not be their highest priority activity. Why do such apparently irrational (with respect to the organization’s publicly avowed priorities) allocations of attention, time, and effort occur? We think the answers in part may lie in understanding the role of the feedback environment.

In this article, our emphasis will be on externally mediated feedback—such as feedback delivered to a performer by a supervisor or that conveyed through the actions of a peer. This emphasis reflects a concern for how organizations communicate priorities (intentionally or otherwise) to their workforce. We will also consider the role that performers can play in enacting priorities by self-management of their feedback environment.

The goal-setting literature (cf., Locke & Latham, 1990) argues, and has shown, that characteristics of the feedback environment influence goal-directed performance. Feedback allows individuals both to set reasonable goals, and then to monitor progress toward attainment of those goals over time, so that necessary adjustments in effort, direction, and strategy can be made (Locke & Latham, 1990). Thus, feedback that is differentially available across multiple goals would be expected to influence relative goal performance.

Larson and Callahan (1990) provided some preliminary evidence for the role that feedback might play in individuals’ allocations of resources among multiple goals or task demands. They found that when given two tasks, individuals allocated more attention to the task that was monitored (i.e., another person watched them perform the task) and for which feedback was provided.

4. Effects of the feedback environment: a basic model

The basic argument of this article is that while organizations often issue job descriptions and mission statements, establish incentive programs, assign goals, and even provide feedback for tasks to signal organizational priorities, individual performers also may infer priorities that conflict with the organization’s stated priorities when the feedback environment is not managed to mirror the organization’s stated priorities. In what follows, we propose that in addition to an organization’s conscious and prospective attempts to manage employees’ resource allocations across multiple goals, the allocation of employee resources also will depend in large part on characteristics of the immediate feedback environment.

The logic described in this article extends beyond the simple absence/presence of feedback. We identify characteristics of the feedback environment that should influence attention allocation among multiple goals, including feedback frequency, specificity, source, and sign. The theoretical foundation of our hypotheses is that characteristics of the feedback environment that enhance effort when there is only one goal also will serve to distribute effort among goals when multiple goals are competing for a performer’s attention.
As noted in Fig. 1, we propose a three-stage process by which the feedback environment influences the allocation of employee resources across multiple goals. Each stage addresses a particular question, and each stage trades on a particular mediating variable.

Stage 1: Monitoring. Resources cannot be allocated to a goal until and unless the performer is monitoring progress toward the completion of that goal. The key mediating variable of interest here is attention. Variables that influence the amount of attention an individual pays to a particular goal will make it more likely that goal will be allocated resources. For example, salience of a goal should influence the amount of attention paid to monitoring progress toward that goal’s completion. The more salient a goal, the more likely needed resources will be allocated to that goal. This suggests a first research proposition:

**RP1:** The relative amount of time and effort allocated to a goal will be a function of the amount of attention paid to that goal.

Stage 2: Evaluation. Once an employee is attending to a goal, the next issue is whether current progress toward completion of that goal dictates the expenditure of additional resources (time and effort). This evaluation function is very much the province of control theory (Carver & Scheier, 1981) and self-regulation (Carver & Scheier, 1991). The centerpiece of these theories is discrepancy detection. According to these theories, individuals monitor progress toward completion of their goals. Action is taken (in our sense, resources are allocated) only when a discrepancy is observed between anticipated (expected) and

<table>
<thead>
<tr>
<th>Stage</th>
<th>Critical Variable</th>
<th>Contributors</th>
<th>Individual Difference</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 Monitoring</td>
<td>Attention</td>
<td>Feedback frequency</td>
<td>Self-esteem</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback sign</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback source</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>(instrumentality)</td>
<td></td>
</tr>
<tr>
<td>2 Evaluation</td>
<td>Urgency</td>
<td>Goal existence</td>
<td>Self-monitoring</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Goal specificity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback specificity</td>
<td></td>
</tr>
<tr>
<td>3 Action</td>
<td>Self-efficacy</td>
<td>Feedback specificity</td>
<td>Need for achievement</td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback diagnosticity</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>Feedback sign</td>
<td></td>
</tr>
</tbody>
</table>

Fig. 1. A three-stage model of priority enactment.
realized progress toward completion of the goal. The key mediating variable here is *urgency*. The detection of a discrepancy between anticipated and realized progress toward goal completion creates an urgency to act, to re-establish "equilibrium." In this case, equilibrium represents a perception of stasis and well being—that all progress toward goal completion is on track and on schedule. Given a finite amount of attention, time, and energy, felt sense of *relative* urgency might be what drives allocations among multiple goals. This suggests a second research question:

**RP2:** Among goals of equal prospective (stated) priority, urgency felt toward a particular goal will be a function of the magnitude of the discrepancy detected between anticipated and realized progress toward completion of that goal.

When multiple goals are not of equal prospective priority, urgency felt toward any particular goal should be a joint function between prospective priority and size of detected discrepancy. The precise form of this joint function (equal weighting for prospective priority and detected discrepancy versus more weight accorded to one or the other) remains an empirical question for future research.

Similarly, past research has not definitively addressed the precise form of the relationship between magnitude of detected discrepancy and felt sense of urgency. Certainly, larger detected discrepancies might be thought to create a stronger felt sense of urgency—i.e., the further behind one is on progress toward a particular goal, the more one feels the need to allocate resources to remedy the detected discrepancy. However, this apparently self-evident conclusion must be qualified.

Research on prospect theory (e.g., Kahneman & Tversky, 1979) and goal gradients (e.g., Brown, 1948) suggests that effort increases as *proximity* to realization of a goal or completion of a task *increases*—i.e., effort increases as detected discrepancies between anticipated and realized progress get *smaller*. This apparently reflects something of a "completion" effect—that when just a little more effort will achieve a goal (or get progress toward that goal completely back on track), that same amount of obtained progress is worth more than an identical (or even greater) amount of progress that only improves but does not achieve equilibrium. (This effect is shown graphically in Fig. 2.)

This research suggests that in fact there may be two distinct motivations at work in the evaluation stage: urgency to improve equilibrium (which suggests *larger* discrepancies will create a stronger sense of urgency) versus urgency to complete improving equilibrium (which suggests that *smaller* discrepancies will create a stronger sense of urgency). Like primacy and recently effects in memory (e.g., Norman, 1976), this suggests that magnitude of detected discrepancy may be *curvilinearly* related to felt sense of urgency, with both relatively small and relatively large detected discrepancies commanding the greatest sense of urgency.

Stage 3: Action. This refers to the actual allocation of resources (such as time and effort) among multiple tasks or goals. Whether an employee actually allocates resources to a particular goal should depend not just on whether that goal or task urgently needs resources, but also on the performer’s perception that the allocation of those resources will
in fact reduce the detected discrepancy. The critical mediating variable here is self-efficacy (e.g., Bandura, 1982)—the belief (whether correct or not!) that additional expenditures of resources will effectively reduce a detected discrepancy between anticipated and realized levels of progress toward goal completion. Certainly, in the absence of any belief that progress can be made toward goal completion, resources should not be committed to a goal or task, even if evaluation reveals an urgent discrepancy for a high priority task. This discussion leads to a third research propositions:

**RP3:** Among tasks of equal urgency, individuals are most likely to allocate resources to those tasks for which the individual has the highest relative levels of self-efficacy.

How these allocations are made when multiple goals are not all equally urgent also remains an important empirical question for future research. Again, the joint function between self-efficacy and urgency may be equally weighted or may favor one factor (self-efficacy or urgency) over the other.

Summarizing these three factors, allocation of resources among multiple goals or tasks should reflect not only the resource priority prospectively stated by the organization (as intentionally signaled by goal setting, a job description, or an incentive system), but also the resource priority enacted by the performer. These enacted priorities are reflected by the evaluated urgency of a detected discrepancy (how soon it needs to be met), and the performer’s belief that resource allocations can in fact remedy detected discrepancies. Much like the relationship in expectancy theory among expectancy, instrumentality, and valence (e.g., Vroom, 1964), our three factors—monitoring, evaluation, and self-efficacy are hypothesized to have a multiplicative relationship with each other. If any of these factors is zero (i.e., if the goal is not attended to, or if the performer feels no urgency about the goal, or if the performer feels no self-efficacy about actions taken toward the goal), the enacted priority of that goal or task for resources will also be zero.
Applying this framework to “the teaching paradox” example, it becomes possible for a performer to acknowledge the stated priority of a task like research but nevertheless enact a completely different priority such as teaching. For example, junior faculty members could be so focused on teaching (attention) that they do not realize how much time and effort they are spending on teaching relative to how much time they are spending on research. Or the feedback they receive for both tasks—the continuous and immediate nature of student reactions and demands, versus annual research performance reviews or the occasional deadline-less letter from an editor—could lead them to feel that discrepancies between anticipated and realized progress are (at least in the short run) more urgent for teaching. Or they could feel that in terms of “bang for the buck,” they are likely to accomplish more discrepancy reduction by devoting time and effort to their teaching than to their research—even while acknowledging that research is considered a higher priority by the organization!

5. Influences on attention, urgency, and self-efficacy

The picture we have painted so far is that while organizations may state priorities for tasks and goals, performers may enact completely different priorities for allocating resources (attention, time, and effort) toward those tasks and goals. In this section, we explore characteristics of the feedback environment that may influence the manner in which attention, urgency, and self-efficacy determine enacted priorities.

5.1. Monitoring and attention

Three characteristics of the feedback environment that can influence the differential attention paid to tasks and goals are the frequency of feedback provided, the status of the feedback provider, and the sign of the feedback.

Feedback frequency will influence performers’ allocation of attention among multiple task demands because frequent feedback increases the salience of a particular task for an individual. Just as receipt of feedback will cue a performer to think about a goal or task (Vroom, 1964), more frequent feedback about one of many tasks should cue a performer to think more about the task for which feedback is frequent. The enhanced salience of the frequent-feedback task should lead the performer to attend to that task more (i.e., allocate more attention to attainment of that task).

Performers also may infer that feedback frequency signals the importance that others attach to a particular task (Larson & Callahan, 1990). As Larson and Callahan (1990) note, simple monitoring of performance by a supervisor and the provision of feedback on that performance can be perceived as a cue (Salancik & Pfeffer, 1977) as to the importance that others attach to the performance related to that activity. Thus, the more feedback performers receive on a task, the more they may see that task as important in the eyes of others within their context—whether correctly or not! Given that perceived importance, they might be expected to allocate more attention to that task at the expense of others. Larson and
Callahan’s data support this argument. These arguments suggest a main effect of feedback frequency and two mediating processes. These are reflected in the following research propositions:

RP4: When individuals are pursuing multiple task demands, the more frequent the feedback available for a particular task, the more attention individuals will allocate to that task.

RP4b: The effects of feedback frequency on the allocation of performers’ attention among multiple tasks will be positively mediated by the perceived importance of various tasks to performers.

Effort allocation may also depend on the source of the feedback. Recall that performance monitoring and feedback provision led performers to believe that the monitored goal was more important. It also may matter who is doing the monitoring and providing the feedback. If feedback for a particular goal or task is received from a performer’s boss, then the performer may infer that the task is important to the boss—otherwise, why would the boss bother with monitoring and feedback?

Realizing that your boss is providing you feedback on some tasks and not others is likely to influence your allocation of attention among tasks because that feedback may be perceived as signaling—again, whether correctly or not—that there may be enhanced rewards associated with the performance of the more important tasks (or punishments avoided). The critical characteristic of the source, then, is the feedback source’s instrumentality in controlling rewards (and punishments) valued by the performer. This suggests the following research proposition:

RP5: The higher the reward instrumentality of a feedback source, the more attention will be paid to goals or tasks for which that source provides feedback.

RP5a: The effects of feedback source on attention will be mediated by changes in the perceived instrumentality assigned to tasks and goals.

Thus, if feedback providers control important rewards for the performer, their feedback might be particularly expected to increase attention toward goals or tasks for which they provide feedback. This occurs because through their feedback, they are suspected to be signaling their true priorities (which may or may not reflect priorities assigned by the organization).

Finally, attention paid to particular tasks may also be influenced by the sign (positive or negative) of feedback received. While negative feedback identifies a gap in performance that needs attending to, it more importantly may decrease a performer’s interest or emotional investment in a task, and thereby make it less likely that further steps (specifically, evaluation, and action) will be taken. Negative feedback also may directly reduce efficacy expectations (e.g., Seligman, 1975) causing loss of hope. Alternatively mediated by efficacy, positive feedback may serve as a reinforcer drawing people toward the task or goal for which it is
offered. These effects will depend on the impact of feedback on the efficacy expectations that drive, in part, attention allocation. This discussion suggests a final research proposition concerning monitoring and attention:

RP6: The more negative the feedback received, the less attention a performer will allocate to a particular task.

RP6a: The more positive the feedback received, the more attention will be allocated to a particular task.

RP6b: The effects of feedback sign on attention allocation will be mediated by efficacy expectations relative to that task/goal.

It is important to note that the effects for feedback sign discussed here are intended to be controlling for what that feedback has to say about how far an individual is from a desired performance level or goal (see the discussion below on goal discrepancy detection). Thus, feedback can tell a performer how far away the goal is, whether the performer is in the process of moving closer or farther away from the goal, and whether the goal is likely to be achieved or not. As suggested above, receiving negative feedback may make a performer less interested in attending to a task (while positive feedback may make the performer more interested) controlling for the discrepancy between the performer’s goal and current level of achievement. As noted below, however, that discrepancy between goal and achievement can have its own effects on the performer.

5.2. Evaluation and urgency

According to control theory and self-regulation theory, critical to an individual’s felt sense of urgency is the ability of that individual to detect a discrepancy between anticipated and realized progress toward attainment of a goal on a task. To this point in this article, we have use task and goal relatively interchangeably in discussing to what individuals will allocate their attention, time, and effort. However, they are not at all equivalent, and this lack of equivalence is particularly apparent in the context of evaluation of urgency.

To detect a discrepancy between anticipated and realized goal attainment, three things must be true:

1. There must be a goal. When a performer is assigned a task but is assigned no goal for the task, it is not possible for that individual to detect a discrepancy between anticipated and realized progress, because there is no standard for anticipated progress against which to measure realized progress. This leads to a first research proposition about evaluation and urgency:

RP7: Performers will feel more urgency about tasks for which they have been assigned goals than for tasks for which they have not been assigned goals.
2. The goal must be specific enough for a performer to be able to detect from feedback whether there is a discrepancy between anticipated and realized performance. Thus, more specific goals should make it easier to detect a discrepancy. A very general goal (such as “do-your-best”) may not provide a concrete enough standard against which to detect discrepancies. This suggests a second research proposition about evaluation and urgency:

**RP8:** Among tasks for which performers are performing equally well, the urgency felt will be a function of the specificity of the goal.

3. Finally, the ability to detect a discrepancy (and, thereby, the ability to feel urgency about addressing that discrepancy) similarly must be a function of the specificity of the feedback. Very general feedback (e.g., “You’re not doing very well”) will not provide enough information for a performer to tell exactly how much of a discrepancy there is between anticipated and realized progress toward goal attainment. This suggests a third research proposition about evaluation and urgency:

**RP9:** Among tasks for which performers are performing equally well and have equally specific goals, the urgency felt will be a function of the specificity of the feedback provided.

All other things being equal, felt urgency about a goal should be a direct function of the ability of performers to detect a discrepancy between anticipated and realized progress toward goal completion. More specific goals (whether they are self-generated or assigned) and more specific feedback both should make it more likely that a discrepancy will be detected, and thus urgency felt. Returning to our “teaching paradox” again, the clarity of an obvious reference point (the upper endpoint on a teaching evaluation scale) and the specificity of feedback provided in the form of end-of-term teaching evaluation scores both stand in stark contrast to the inability of most annual faculty review committees to provide either specific guidelines for what is needed or expected in the research arena, or specific feedback about whether progress toward what is expected or needed has been achieved. This may drive junior faculty to feel more urgency about tasks of lower assigned priority simply because their shortcomings on those tasks (discrepancies between expected and realized performance levels) are more obvious.

### 5.3. Action and self-efficacy

Feedback providers typically are encouraged to provide specific feedback to performers because specific feedback is more useful (e.g., Prue & Fairbank, 1980). The more diagnostic the feedback that a performer receives—that is, the more easily a performer can use information contained in the feedback to correct performance discrepancies—the more likely that feedback will translate into enhanced self-efficacy for a task. Furthermore, feedback specificity is almost certainly a prerequisite to diagnosticity. Typically, feedback is unlikely to
be diagnostic—actionable in terms of correcting performance discrepancies—unless it is specific. This suggests two research propositions about action and self-efficacy:

RP10: Among tasks of equal urgency, the likelihood of action being taken on a task will be a direct function of the specificity of the feedback received.

RP10a: The effects of feedback specificity on action will be mediated by the diagnosticity of the feedback received.

RP10b: The effects of feedback diagnosticity on action will be mediated by the self-efficacy of the performer.

As noted earlier, sign of the provided feedback (positive or negative) also should play a role in performers’ self-efficacy. Positive feedback signals to performers the behaviors they should repeat (e.g., Vroom, 1964) and reinforces those correct behaviors (e.g., Bandura, 1969). Positive feedback also signals to the performer that progress is being made and, in the case of feedback from agents, that others view success as likely. This signal value of positive feedback and corrective value of negative feedback indicate two final research propositions concerning action and self-efficacy:

RP11: Among tasks of equal urgency, the more positive the feedback received, the more likely action will be taken on a particular task.

RP11a: The effects of feedback sign on action will be mediated by self-efficacy of the performer.

6. Moderating effects of individual differences

The effects of the feedback environment on individuals’ enacted priorities among multiple goals are not universal. That is, not all individuals will be equally responsive to their feedback environment. Rather, individuals differentially attend to and respond to the feedback environment depending on their psychological makeup. Several characteristics of individuals that may influence their sensitivity to effects of the feedback environment: feedback propensity, goal orientation, self-esteem, and self-monitoring. This list is not meant to be exhaustive, but rather to illustrate the role that individual differences may play in the enactment of task priorities. Each individual difference variable is identified within the stage in priority enactment where that variable seems most likely to have its effects.

6.1. Stage 1: Monitoring

Two variables act similarly to influence a performer’s attention to the feedback available for different goals. These variables are external feedback propensity (Herold & Parsons, 1985b) and
goal orientation (VandeWalle & Cummings, 1997). These variables reflect individual differences in interest in external feedback. Herold and Parsons (1985b) proposed external propensity as an individual difference in preference for and trust in external (as opposed to internal) feedback. External propensity is correlated positively with favorable affective responses to feedback from the organization and supervisors (Herold & Parsons, 1985b) and with performers’ active attempts to seek feedback (Fedor, Rensvold, & Adams, 1992). More recently, VandeWalle and Cummings (1997) proposed and found that individuals with a learning goal orientation would both value feedback more highly and seek it out with greater frequency. A learning goal orientation is a trait-like tendency to seek improvement in one’s performance. VandeWalle and Cummings contrast this with a performance goal orientation in which performers seek to prove to themselves and others that they can do the performance in question. This latter orientation led to a more protective stance with respect to feedback from others.

Both those with an external propensity and a learning goal orientation have a heightened interest in external feedback. This greater interest should lead to greater attention being paid to the feedback available for various goals. From paying more attention, these individuals are drawn to attend more to goals for which the feedback is frequent and specific. This logic suggests the following proposition:

**RP12:** External propensity and learning goal orientation will moderate the effects of feedback frequency and feedback source on attention among multiple tasks. Specifically, the task attention of those high in external propensity and learning goal orientation will be more influenced by frequent feedback and high-instrumentality feedback sources than will the task attention of individuals low in these qualities.

**Self-esteem** may also prove a particularly important individual difference variable in understanding the effects of individuals monitoring for feedback. Individuals low in self-esteem have been described as having high plasticity in their behaviors—they adapt their behaviors to the expectations of others around them (Brockner, 1988). They are highly responsive. Because the monitoring variables—particularly, feedback source—have to do with the perceived (rather than assigned) priorities for tasks, low self-esteem individuals may be particularly likely to react to what they consider the organization’s “real” priorities, specifically as influenced by frequency and source of feedback. This suggests the following research proposition:

**RP13:** Self-esteem will moderate the effects of feedback frequency and feedback source on attention among multiple tasks. Specifically, the task attention of low-self-esteem individuals will be more influenced by frequent feedback and high-instrumentality feedback sources than the task attention of high-self-esteem individuals.

6.2. Stage 2: Evaluation

**Self-monitoring** (Snyder, 1974) refers to the extent to which an individual collects and evaluates context specific information about what is required and has the ability to use this
information to adapt his or her behavior accordingly. Ashford and Taylor (1990) note that when compared to low self-monitors, high self-monitoring individuals consciously appraise environments more regularly and are more aware of external cues suggesting that behavioral adaptation is needed. High self-monitors also have a heightened ability to enact the behaviors suggested as required by the cues attended to (Snyder, 1979). This logic suggests that high self-monitors, like those with an external propensity and learning goal orientation, will attend to feedback differences across goals. In addition, their greater ability to respond will also lead them to differentially allocate their efforts. In essence high self-monitors will “follow the feedback” by allocating their efforts to those goals for which they receive more frequent and specific feedback. They do not do so not only because they are more likely to notice feedback differences but also because they are more able to respond behaviorally to those differences. One behavioral response may be allocating their efforts to the goals for which the feedback suggests that more effort is needed. This discussion suggests the following research proposition:

**RP14:** Self-monitoring will moderate the effects of feedback environment characteristics on task urgency. Specifically, the effects of goal existence, goal specificity, and feedback specificity on felt task urgency will be more pronounced for high self-monitors than for low self-monitors.

6.3. Stage 3: Action

Individuals high in need for achievement (McClelland, 1961) may be particularly responsive to the effects of the feedback environment. In single-goal goal-setting studies, need for achievement has been shown to moderate the relationship between goal specificity and feedback and goal performance; individuals high in need for achievement were more responsive to goal specificity and feedback (Steers, 1975). This leads to the following hypothesis:

**RP15:** Need for achievement will moderate the effects of feedback environment variables on individuals’ self-efficacy. Specifically, the task urgency of individuals high in need for achievement will be more influenced by feedback specificity, feedback diagnosticity, and feedback sign than the self-efficacy of individuals low in need for achievement.

7. Implications for performance appraisal system design

In this article, we have contrasted an organization’s intentional, prospective attempts to influence employee’s allocations of scarce resources among competing tasks—what we have referred to as the organization’s stated priorities—with the feedback environment’s effects on that same allocation. We have argued that the performer’s attention and responsiveness to the feedback environment creates an enacted prioritization of goals that may or may not match the intentions and interests of the organization. In the final analysis,
organizations both assign priorities and manage the feedback environment. If they do not do both, they run the risk that employees will enact resource allocation priorities that directly conflict with the organization’s stated priorities and intended interests. What are the implications of this perspective for the design of feedback delivery (and performance appraisal) systems in organizations?

The past literature on performance appraisal system design (e.g., Bretz, Milkovich, & Walter, 1992; Roberts, 1998; Wexley & Klimoski, 1984) has emphasized questions of how and whether feedback can be collected, organized, and delivered to enhance employee performance. Typical considerations have been such problems as validity and instrumentation (e.g., Feldman, 1986); validity and rater error (e.g., Woehr & Huffcutt, 1994); and acceptance of feedback by performers (e.g., Greenberg, 1987). Again, the focus of this prior work has been on the relationship between the validity and delivery of information for a particular task and an individual’s understanding of and performance on that task (e.g., Northcraft, Neale, & Huber, 1988). An implicit assumption has been that if we know what to do (in terms of feedback) to enhance performance a particular task, we can enhance performance on all tasks by doing what we know to be effective for all tasks. Even Taylor, Fisher, and Ilgen’s (1984) analysis of performance appraisal from a control theory perspective modeled the self-regulation of an employee’s efforts within rather than across tasks. Left largely unaddressed is the aggregation issue: How does providing for feedback delivery on many individual tasks create an overall feedback environment that drives employees’ allocations of resources among competing tasks?

A reconsideration of several aspects of “the teaching paradox” provides an illustrative case in point. In many universities, formal evaluation of teaching occurs at the end of each semester, and professors typically receive feedback soon thereafter. At some schools, professors also may receive feedback midterm, or even more frequently via direct (daily?) feedback from students. In contrast is the schedule by which professors directly receive feedback about their research. Formally, many schools provide professors feedback on research progress annually—much less frequently than those same professors receive feedback on their teaching. Of course, research is almost by definition a less time-bound activity than teaching, and thereby less apportioned into neat time blocks at the end of which feedback can be received. Nevertheless, this means that teaching feedback is received more frequently than research feedback.

Added to this are differences in the specificity of feedback received about teaching and research. Teaching feedback is often received numerically—a very specific form of feedback—for example, a mean score on course evaluations. At some schools (the University of Illinois, for example), there are often obvious referents (for example, a score of 4.0 on a 5-point evaluation scale) that can anchor perceptions of performance discrepancy, creating a sense of urgency to work on teaching. Distributional information (e.g., summary statistics of other instructors’ performance) also is routinely distributed, creating very salient high anchors (the performance levels of a unit’s best teachers), again providing opportunities for discrepancy discovery. In contrast, feedback about progress on research is understandably as vague as the definition and measurement of intellectual “contributions.”
This discussion of the teaching dilemma as a case-in-point is not intended as a comment on the relative priorities of teaching and research at research universities. Rather, it is intended as a comment on the discrepancy between the goals an organization claims to want its employees to pursue (excellence in both teaching and research) and the goals those employees are led to pursue by the feedback environment their organization creates. Tasks have rhythms that suggest times when feedback might be most obviously provided; some tasks also have constraints—for example, how difficult it is to create specific feedback. While these rhythms and constraints determine the natural shape of an organization’s feedback environment, that natural shape may be quite dysfunctional for the organization, in terms of the task priorities it leads employees to enact.

If an organization wants to insure that the feedback it provides not only enhances task performance but also is commensurate with an organization’s stated priorities, the organization has two choices:

1. **Make the feedback environment equal across competing tasks.** Quite simply, that means that to the extent that it can, organizations should try to make sure that (for example) they provide feedback on high priority tasks just as often as they provide feedback on lower priority tasks, or that they provide feedback that is just as specific for high priority tasks as they provide for lower priority tasks.

2. **Make the feedback environment congruent with the organization’s stated priorities.** This would mean regulating (for example) the frequency and specificity of feedback so that high priority tasks receive more frequent and more specific feedback than do lower priority tasks.

In the first case, the feedback environment would not differentiate among tasks or goals, so the organization’s stated priorities would be the “tie-breaker” that drives performers’ allocation decisions. In the second case, by making the provision of feedback (in terms of, for example, frequency and specificity) commensurate with the organization’s stated priorities, the feedback environment actually reinforces the organization’s stated priorities. In both cases, the feedback environment is being managed specifically to not send signals that explicitly conflict with the organization’s stated priorities. From the organization’s point of view, the second scenario seems to leave less to chance than the first (by reinforcing the organization’s stated priorities) and, therefore, may be the recommended one. (Of course, there may be limits as to how frequently feedback can be intentionally provided with salutary effects. If feedback is provided too frequently, recipients may “tune it out” and the feedback thereby would lose its ability to reinforce the organization’s priorities.)

These suggestions all fly in the face of seemingly instinctive tendencies to provide feedback when it is available, in whatever form (or from whatever source) is convenient. The instinctiveness of these tendencies may reflect the previously mentioned biased emphasis on the use of feedback to regulate (and enhance) effort and accomplishment within rather than across competing tasks.
Applying this prescription to the “teaching paradox” example suggests that universities that assign higher priority to research than teaching should endeavor to provide feedback on research that is at least as frequent and specific as is current feedback on teaching. In the context of this discussion, it is curious to note that the specificity of feedback faculty receive on teaching is most likely not any natural function of the task. In fact, “effectiveness” in teaching is probably no easier to define or measure than “contribution” in research—universities have simply imposed a concrete measurement system on teaching to make evaluation of its effectiveness more manageable. Universities’ failure (or even unwillingness) to impose an equally concrete metric in evaluating research contributions may reflect a reluctance to thereby demean a higher priority task—and may also thereby relegate that task to a lower level of enacted priority.

8. Research directions

This article has offered a model of resource allocation across tasks and goals based on the power of the feedback environment. As an initial theoretical perspective on performers’ reactions in multiple, competing demand environments, it offers some unique insights that can serve as a foundation for future research. Beyond the specific research propositions offered, many other questions and issues are relevant foci for future study. For example, left unexamined in our treatment thus far is the relative power of the feedback environment and other factors as an influence on the allocation of attention and efforts. Implicit in the way that our propositions were stated (e.g., “among tasks of equal urgency. . .”) is the notion that urgency or task importance is the fairly dominant driver of attention and effort allocation. What then is the relative contribution to attention and effort allocation of the feedback environment?

Notable too is the fairly passive role ascribed to the performer in our model. The performer responds to the differential feedback environment for various goals. It is likely that performers are not passive regarding feedback, but rather take active steps to seek it actively (Ashford, 1986). What needs to be articulated next is a dynamic model describing the interplay over time of the feedback environment and the active feedback-seeking performer. It may be (for example) that for tasks and goals that the organization deems important, performers actively seek and create feedback, thereby altering the feedback environment that they confront. Our faculty member could, for example, regularly seek feedback from colleagues on articles, make commitments with coauthors on which they will naturally provide feedback, and seek more explicit annual feedback from a department chair. Alternatively, resource allocations toward particular tasks likely enhance the probability of positive self-efficacy on those tasks, which in turn could direct feedback seeking toward the (now) higher self-efficacy tasks. In this scenario, the faculty member who spends more time on teaching becomes better at using teaching time effectively, and therefore may be even more likely to seek additional feedback on teaching. In either case, this kind of explicit feedback seeking alters the feedback environment for the multiple, competing demands on which the performer is focused. The performer then responds to that same feedback environment with commensurate resource allocations over time.
This article has tried to spell out why it is critically important for organizations to actively manage the feedback environment for their performers. The feedback environment plays an important role in guiding performer attention and effort allocation; left unmanaged, the feedback environment’s role potentially becomes a “loose cannon” determining employee performance. Although beyond the scope of the current article, the role of the individual as an active agent in the feedback environment—and the implications of that for an organization’s effective management of the feedback environment—need to be addressed as well. Organizations may be particularly interested in finding out how training individual performers to be more effective at feedback-seeking on high-(stated)-priority tasks can help reinforce an organization’s stated priorities—even in the face of apparently conflicting signals from supervisor-provided feedback.

Also left unspecified in our model are the effects of holding a mix of group- and individual-level goals for performance. In some initial thinking in this area, Shalley and Johnson (1996) proposed that various characteristics of the goals themselves (e.g., their specificity and difficulty) will influence effort allocation. We know from feedback research that feedback can also be offered to the group or the individual (Barr & Conlon, 1994; Robinson & Weldon, 1993). How will the feedback environment for goals at these two levels affect effort allocations? Will group feedback be less visible to the individual performer and, therefore, have less of an impact on effort allocation? Certainly, a goal discrepancy is more likely to be detected with multiple group members available to attend to it. Will group-level feedback create more of the feeling of personal urgency that motivates effort allocation? Particularly of interest would be how group dynamics (such as social comparison effects; Festinger, 1954) might cause groups to socially construct and reinforce urgency from detected discrepancies. On the other hand, “social loafing” research (e.g., Latane, Williams, & Harkins, 1979) suggests that efficacy may be weaker in group situations where individual performance can only marginally control group outcomes. Groups could in fact be more likely to detect discrepancies, more likely to socially construct a sense of urgency, but then less likely to act on that urgency than individuals.

Even more complex would be a consideration of a mix of goals and tasks that cross levels (individual and group). This setting would beg the question of how group members allocate their resources across conflicting individual and group tasks and goals. The contrast of both the feedback environment and the different settings (level) for the performance may especially illuminate the effects of our hypothesized mediators, in understanding the effects of organizational feedback environments in managing the resource allocations of individuals among competing goal and task demands.

References


