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**James L. Perry**

Indiana University-Purdue University Indianapolis

**Debra Mesch**

Indiana University-Purdue University Indianapolis

**Laurie Paarlberg**

San Francisco State University

### Motivating Employees in a New Governance Era: The Performance Paradigm Revisited\*

What lessons does prior research on employee motivation offer public managers operating in, and researchers studying the dynamics of, a new governance era of results-based, downsized, networked, and customer-focused public organizations?<sup>1</sup> We summarize in this article what a voluminous body of prior social and behavioral science research tells us about motivating human performance in public, private, and nonprofit organizations. Informing the analysis is a "review of reviews" of a sprawling research base that examines four elements of the traditional performance paradigm: financial incentives, job design, employee participation, and goal setting (Locke et al. 1980). We discern from this formidable body of research what is known about employee motivation, what is left to know, and how useful the classic perform-

ance paradigm is in light of these new governance challenges.

Sweeping contextual changes surrounding the way the public's business is conducted suggest a renewed need to visit the drivers of human performance in the public sector. The attention given to the new public service (Light 1999) and new governance (Salamon 2002) may signal fundamental transformations to factors influencing human performance in public contexts. These transformations are so sweeping that it is impossible to summarize all of them, but several merit attention in passing.

The first and most general transformation is globalization, the integration of economic, cultural, and political systems across geographic boundaries. Thomas Friedman

(2000, 2005), the *New York Times* foreign affairs columnist, links globalization to fundamental transformations in constraints imposed on nation states. The economic integration attendant to globalization reduces both economic and political policy choices.

A second sweeping transformation involves a cluster of factors related to the demographics of the workforce. The World War II generation is passing from the scene, baby boomers are turning 60, generations new to the workforce are both quite varied and different from their elders, and the workforce is increasingly diverse.

The third sweeping change encompasses the nature of work itself. Work is more knowledge based and interdependent. Lateral relationships—working across boundaries—have become far more prevalent than relationships managed by simple hierarchy. A recurring theme at the 2005 Academy of Management conference was the need to move to "relationship" organization behavior and organization theory models in order to reflect interdependence of positions and organizations.

As an outgrowth of globalization, changing demographics and work, and evolving worldviews of governance, institutional rules that long have been taken for granted also are changing. Rules that we once took as givens, such as security of employment and defined benefit retirement systems, are now giving way to rules that are financially more predictable and less generous. Competitive international labor and product markets demand that we rethink wage and benefit policies to keep American goods competitive. This rethinking is having ripple effects from the private to the public sectors.

Despite the fundamental transformations in the world around us, are the underlying motivational dynamics or the programs to realize them different? If the performance paradigm is different, how has it changed? Now is an appropriate time to take stock. What we "take for granted" not only may have changed because of changing contexts and institutions, but what we took for granted may have been distorted because of myths and stereotypes.

### **What Do We Know and How Do We Know It?**

We began our review from the premise that organizations need to elicit three different types of behaviors to survive and function effectively (Katz 1964):

- Membership behaviors—i.e., attracting people to and retaining them in the organization;
- Reliable role behaviors—e.g., on-time arrival for work, regular attendance, and performance of assigned job responsibilities to a satisfactory level;
- Innovative and spontaneous activity—i.e., initiative and creative activity in achieving organizational objectives that are outside role specifications.

However, because market and other extra-organizational influences affect membership, we focused primarily on two types of behaviors—reliable role behaviors and innovative and spontaneous activity—as the outcomes that define performance.<sup>2</sup>

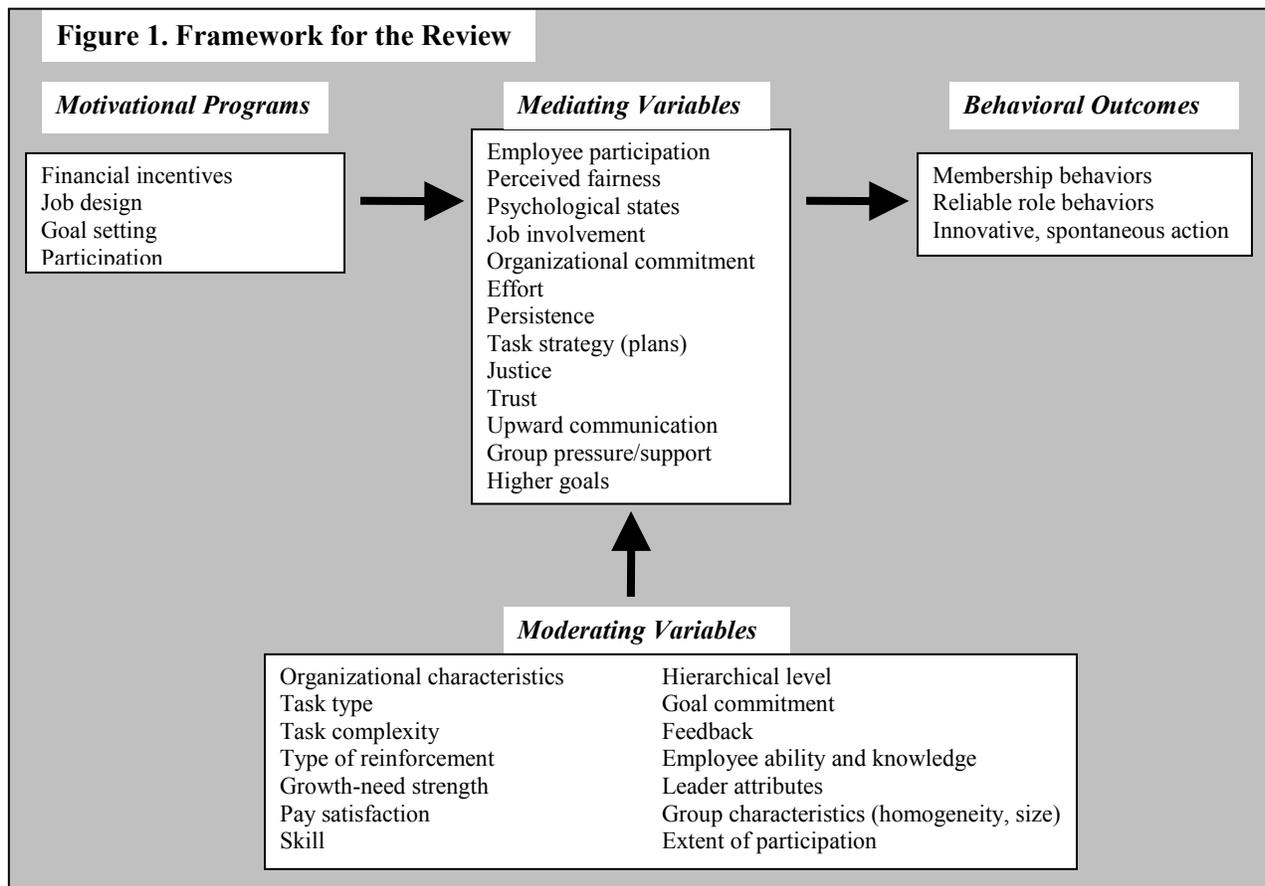
Figure 1 summarizes the conceptual model that underlies our review and analysis. We initially defined the model exclusively in terms of motivational factors/programs leading to specific behavioral outcomes.

Factors identified during the course of our analysis were added as mediating and moderating components of the model. Mediating variables are those factors that we expect to affect the relationship between the independent variables (i.e., motivational programs) and the dependent variables (i.e., behavioral outcomes). Many of the reviews examined whether or not motivational programs caused changes in behavioral outcomes through mediators. For example, one review investigated whether or not high goals mediated the effects of incentives on performance; another looked at trust as a mediator of the relationship between participation and productivity.

Several reviews also included moderator—or interaction—effects. Mediation implies a causal sequence among three variables; no causal sequence is implied by an interaction.

For example, merit pay plans may be successful for individuals working in the private sector, but not the public sector; as such, organizational characteristics would moderate the relationship between financial incentives and performance. Our conceptual model (see figure 1) includes the mediating and moderating variables found in our reviews of the four motivational programs. From the research informing this model, we identify 13 broad propositions for practitioners to ponder and researchers to test and further refine regarding the impact of financial incentives, job design, participation, and goal setting on employee and organizational performance.

To uncover as many sources as possible, the literature review was conducted by using a wide variety of search terms in all appropriate and available databases. The databases searched included Academic Search Elite,



Business Source Complete, Expanded Academic ASAP, PAIS International, Psyc Articles, PsycInfo, and Sociological Abstracts. In addition to these traditional databases, the authors had access to a tool called Dialog Classic, which is a collection of many databases. This was used to search a large pool of sources in various disciplines related to the search terms.

The search included terms related to the four motivational programs (financial incentives, goal setting, participation, and job design).<sup>3</sup> The sources found from this broad search were pared down by excluding articles that did not deal with some kind of behavioral outcome (a membership behavior, reliable role behavior, or innovative activity). From here, the list of sources was limited further by excluding those articles that were not meta-analyses, research syntheses, or narrative reviews. By beginning the search with broad search terms and then paring down, this review is considered thorough, but not exhaustive.

The analysis focuses on 62 articles reviewing the impact of the four sets of motivational tools on employee performance. Reviews examined included 17 narrative reviews, 15 syntheses, and 30 meta-analyses of prior research.<sup>4</sup> Collectively, the articles examined at least 2,612 studies, reflecting an enormous volume of empirical research across the public, private, and nonprofit sectors on these critical components of the classic performance paradigm.<sup>5</sup> The diversity of organizational forms and structures in the public sector make it increasingly difficult to dismiss any intervention as "outside" a transformed and still-evolving public sector.

At the same time, however, we were conscious of whether the findings specifically

applied to the public sector, why or why not, and in what respects. Tables 1 through 4 summarize the review of the literature by motivational program (see Appendix A).

### **Financial Incentives**

What are the logic and impacts of financial incentives on employee motivation? Use of monetary or other financial incentives in the classic performance paradigm is based primarily on the theoretical propositions of reinforcement theory. Reinforcement theory focuses on the relationship between the target behavior (e.g., performance) and its consequences (e.g., pay) (Skinner 1969), and is premised on the principles and techniques of organizational behavior modification (Luthans 1973; Stajkovic and Luthans 1997). Organizational behavior modification (OB-Mod) is a framework within which employee behaviors are identified, measured, and analyzed in terms of their functional consequences (i.e., existing reinforcements) and where an intervention is developed using principles of reinforcement (Luthans and Kreitner 1975; Stajkovic and Luthans 1997).

Our review of the literature focused on organizations using financial incentives to increase both individual and group performance and productivity. These types of monetary incentives included individual and small-group rewards, as well as profit-sharing and gainsharing incentive plans. Informing our analysis in this instance are 17 articles, summarized in table 1, among them three meta-analyses and nine research syntheses. These reviews examined these types of financial incentive systems and/or addressed issues of merit pay, pay-for-performance, variable pay plans, or group bonus plans. From this analysis, we cull three general propositions suitable for informing practice and theory building.

***Proposition 1: Financial incentives moderately to significantly improve task performance, but their effectiveness is dependent upon organizational conditions.***

Two recent reviews of the effects of OBMod indicate that monetary incentives significantly improve task performance. Stajkovic and Luthans' (2003) meta-analysis of 72 field studies found that an OBMod intervention using monetary incentives improved task performance by 23 percent, whereas an intervention with social recognition did so only by 17 percent, and with feedback only by 10 percent. Furthermore, by combining all three types of motivational reinforcers simultaneously, performance improved by 45 percent. This was a stronger effect on performance than when each approach was applied separately. Feedback combined with money and social recognition produced the strongest effect on performance.

A second meta-analysis by the same authors focused only on manufacturing and service organizations and found that performance improvements generally were larger for interventions introduced in manufacturing settings than in service organizations. Interestingly, using a combination of financial, non-financial, and social rewards produced the strongest effect in manufacturing organizations. Yet for service organizations, financial reinforcers produced a stronger effect on task performance than nonfinancial rewards.

Several reviews focused on individual monetary incentives (i.e., Bucklin and Dickinson 2001; Jenkins et al. 1998; Tolchinsky and King 1980). In general, these reviews also indicated that individual monetary incentives improved performance, but not under all conditions. Bucklin and Dickinson's (2001) review of different types of pay arrangements found, for example, that individual monetary incentives plus feedback improved performance significantly more

than hourly pay plus feedback. The most critical determinant of performance was use of a ratio schedule in which individuals earned a specified amount of money for the number of work units completed. However, these studies focused primarily on college students and included only studies using an experimental design.

Again focusing primarily on college students, Jenkins et al.'s (1998) meta-analysis of 39 studies addressed performance quantity and quality, and found that financial incentives were significantly related to performance quantity but *not* to quality. In this review, type of setting moderated the financial incentive-performance relationship. However, type of task was not related to the strength or relationship between financial incentives and performance quantity. In contrast, and related to goal setting, Tolchinsky and King's (1980) review specifically examined the role of goals as mediators of the performance-monetary incentive linkage. They found that, although monetary incentives influence performance, the relationship is not mediated by goal setting. That is, goal-setting and monetary incentives independently influence performance. Further discussion of goal setting appears later in this paper.

Relatedly, much has been written on merit pay or pay-for-performance systems. *PAR* readers looking for comprehensive discussions of the circumstances under which merit pay plans produce positive effects on individual job performance should consult Heneman's (1992) text, *Merit Pay*, and the National Research Council's *Pay for Performance* (Milkovich and Wigdor 1991). These reviews include the public and private sectors, as well as discussion of the institutional arrangements and other situational characteristics that moderate the pay-for-performance relationship. Generally, they

conclude that merit pay plans can result in positive outcomes—particularly in terms of individual job performance (Milkovich and Wigdor 1991). Again, however, differences in institutional arrangements contribute to the feasibility and effectiveness of merit pay, as do differences in employees' preferences for merit pay. Heneman (1992), however, later concludes that merit pay is at best moderately effective. He finds that it is consistently shown to be related to positive attitudes (albeit with one major exception—the federal government), but that pay is only inconsistently linked to improved performance.

***Proposition 2: Individual financial incentives are ineffective in traditional public sector settings.***

Reviews that included the public sector (e.g., Ingraham 1993; Kellough and Lu 1993; Perry 1988) appear to be at odds with findings of reviews examining financial incentives in the private sector or in lab settings using college students. In general, these reviews suggest that merit pay and pay-for-performance systems in the public sector generally have been unsuccessful, have little positive impact on employee motivation and organizational performance, and fail to show a significant relationship between pay and performance. These reviews, however, do note that the failure to find a significant pay-performance relationship is likely due to a lack of adequate funding for merit pay and the organizational and managerial characteristics necessary to make pay-for-performance work in traditional government settings.

***Proposition 3: Group incentive systems are consistently effective, but these incentive systems are not well tested in public sector settings where measures of organizational performance are often uncertain.***

Team-based or small-group incentives are characterized as rewards in which a portion of individual pay is contingent on measurable group performance (DeMatteo, Eby, and Sundstrom 1998). In general, the conditions under which team rewards will be effective are unclear, especially because experimental lab studies appear to be more supportive than field studies. Effectiveness is dependent on the characteristics of the reward system, the organization, the team, and individual team members (DeMatteo, Eby, and Sundstrom 1998). Honeywell-Johnson and Dickinson (1999) did find that equally divided small-group incentives sustain high levels of productivity and satisfaction for group members and that small-group incentives were at least as effective as individual incentives with groups of two to 12 people. However, their review again consisted primarily of experimental studies using college students.

Conversely, reviews of alternative pay systems such as profit-sharing or gainsharing plans are remarkably consistent in their findings. These incentive programs include various pay-for-performance approaches that link financial rewards for employees to improvements in the performance of the work unit (Welbourne and Gomez Mejia 1995). In general, prior research indicates that these types of incentive systems are associated in practice, as well as in employer and employee minds, with both higher productivity and improvements in organizational performance. Yet even though these findings generalize across qualitative, quantitative, and survey research studies, they again are focused exclusively on private sector settings.

**Job Design**

In *The New Public Service*, Paul Light's (1999) survey of five cohorts of MPA

graduates revealed that a common concern of respondents was "show me the work," a motivational refrain underlying the logic of all job design initiatives. Job design has its modern roots in Frederick Herzberg's (Herzberg, Mausner, and Snyderman 1959) two-factor theory of motivation (namely, hygiene and motivator factors) and his guidance for enriching jobs (and, hence, performance) by incorporating into work "satisfiers" linked to personal growth. These include jobs designed to afford a sense of challenge or accomplishment. More recently, most work design attention has centered on Hackman and Oldham's (1980) job characteristics model. They posit that jobs rich in motivating characteristics (e.g., task significance) stimulate psychological states (e.g., experienced meaningfulness of work) among job incumbents that in turn increase the likelihood of desired personal and work outcomes. For instance, the significance of a task can trigger a sense of meaningfulness of work in employees that leads to better performance.

To discern what prior research tells us about the validity of such claims, we analyzed 16 reviews, summarized in table 2, which included ten meta-analyses, four research syntheses, and two narrative reviews. These reviews focus on two motivational techniques of interest to public managers and researchers: job redesign and alternative work schedules. The motivational logic underlying the two techniques is that they can positively affect employees' autonomy—one of five critical job characteristics identified by Hackman and Oldham (1980)—which in turn improves personal and work outcomes. The reviews varied in their attention to sector, with about a third of the job design reviews intentionally addressing this topic. All three of the reviews of the impact of alternative work schedules considered sector, and one of the reviews focused exclusively on

the public sector (Golembiewski and Proehl 1980). From these, however, three propositions are readily discernible.

***Proposition 4: Job design is an effective strategy that enhances performance.***

Job design and alternative work schedules appear to be effective strategies for improving performance. Most reviews did not isolate the size of the overall effect of job redesign, but one review found a median impact on improved productivity of 6.4 percent and on work quality of 28 percent. Moreover, and significantly, the effects of job redesign persist across outcomes. Job redesign has been found to reduce turnover and absenteeism and to increase job satisfaction, organizational commitment, productivity, and work quality.

***Proposition 5: Job design interventions more strongly influence affective than behavioral outcomes.***

Many reviews of motivational research conclude that job redesign may be more influential for affective (that is, attitudinal) than for behavioral outcomes. Hackman and Oldham's (1980) job characteristics model posits a causal chain between job design and work outcomes: various job characteristics lead to various psychological states, which in turn produce various personal and work outcomes. Corroborated since in several reviews, Griffin and his collaborators conclude in an early review of job design research that "the task design/performance relationship has not been as consistently demonstrated as have task design/affective response relationships" (1981, 655). Why might this be the case? Some analysts suggest that performance or behavioral outcomes may be attenuated by moderators like those listed in figure 1 that influence the chain of causation between affective and performance outcomes (Brown 1996; Fried and Ferris 1987; Kelly 1992). Another

common explanation for different affective and behavioral impacts is that performance is more difficult to measure and more variable across contexts than affective outcomes.

***Proposition 6: Moderators and implementation are important influences on the efficacy of job design.***

As figure 1 illustrates, Hackman and Oldham's (1980) original formulation of job characteristics theory argued that the outcomes of job redesign were influenced by several moderators. Notable among these moderators are differences in the degree to which various individuals or employees desire personal or psychological development. Although only a limited number of reviews addressed the significance of moderators, three reviews looked explicitly at them and found them to be critical influences on the work design-performance relationship (Berlinger, Glick, and Rodgers 1988; Fried and Ferris 1987; Spector 1986). For example, the most prominent moderator of the effects of job design listed in figure 1, the strength of an employee's higher-order or growth needs, can reinforce or diminish changes in mediating psychological states variables, which in turn affect behavioral outcomes. Nor does prior research on job design understate the importance of avoiding known implementation pitfalls. All assert that successful job redesign requires a rigorous process in which implementers identify the nature of the problem, assess the efficacy of manipulating job characteristics to mitigate the problem, and ascertain context to assure that threats to success are not present.

**Participation**

How effective is employee participation in motivating improved performance and organizational outcomes? The classic performance paradigm uses numerous terms to describe employee participation in the

workplace, including employee involvement, participative management, and employee empowerment. In a narrow sense, employee participation is "joint decision making or influence sharing between employees and managers" (Doucouliagos 1995, 60). More broadly, participation is "a conscious and intended effort by individuals at a higher level in an organization to provide visible extra-role or role-expanding opportunities for individuals or groups at a lower level in the organization to have a greater voice in one or more areas of organizational performance" (Glew et al. 1995, 402). Despite strong professional interest in and theoretical support for participative systems, a review of eight meta-analyses and four narrative reviews and syntheses, summarized in table 3, suggests that participation has positive effects on affective attachments to the organization, but only small positive effects on performance.

***Proposition 7: Participation has a strong positive impact on employees' affective reactions to the organization.***

Our review of reviews finds that participation, broadly defined, generally leads to higher satisfaction with organizational processes and decisions, and ultimately to stronger commitment to the organization. Spector (1986) summarizes that employees who perceive more control at work are more satisfied, more motivated, and more committed to the organization. Shared decision making may improve employees' satisfaction with both decisions made and the process by which such decisions are made. This may strengthen employees' commitment to decisions, as well as their sense of justice in the process (Cawley, Keeping, and Levy 1998) and their trust in the organization (Nyhan 2000). Ultimately, however, the combination of a climate of participation (Miller and Monge 1986) and a perception of having one's voice heard (Cawley, Keep-

ing, and Levy 1998) may have a stronger impact on employee satisfaction than does the perception of improvement in decision quality.

***Proposition 8: Participation has a positive but limited impact on employee performance.***

While participation seems to affect employees' attitudes positively, the link to performance is less clear. Wagner's (1994) meta-analysis of participation research, for example, concludes that participation has positive but limited effects on employee performance. Most important, public managers and researchers should expect decision processes that provide limited opportunities for employee involvement, are restricted to specific processes, or are of limited duration to have limited results on performance (Ledford and Lawler 1994).

Locke and Schweiger (1979) note that numerous contextual factors influence the relationship between participation and performance. Other organization-level factors that may have a negative influence on this relationship include organization size, task complexity, quality of existing working relationships, and leadership skills. Individual moderating factors that can negatively influence the impact of participation include low employee support of the participation process, low employee knowledge of and experience with the job, and low general levels of employee motivation. Unfortunately, researchers are rarely able to explore systematically these contextual factors across empirical studies. In addition, and as noted earlier, organizations usually introduce participation interventions simultaneously with others, including reward systems, goal setting, performance feedback, and job design (Ledford and Lawler 1994). This makes it difficult to isolate the impact of participation on performance.

***Proposition 9: The promise of participation may lie in improved decision making.***

While many studies of participation focus on affective and performance outcomes of shared decision making, our analysis of prior research suggests that the greatest organizational gains from employee participation may come from producing better decisions. In particular, participation may improve the information and knowledge sharing necessary for high-quality decision making. In the process, individuals who might not normally share information may do so, including those at various levels in the hierarchy (Wagner et al. 1997). Participation also can be structured to encourage employees who have intimate knowledge about the requirements of their jobs to be more involved in making decisions, leading to higher decision quality and more creative responses. However, few researchers have moved beyond motivational measures of performance and paid close attention to the value of information sharing in the workplace (Locke and Schweiger 1979).

**Goal Setting**

With public and nonprofit managers pressed to clarify organizational goals and measure results, what lessons can practitioners and researchers draw from prior research on the relationship between goal setting and performance? Goal-setting theory posits that conscious and well-specified goals—defined as the object or aim of an action to attain a particular standard—positively affect the actions of employees. Moreover, after nearly 40 years of research, producing more than 1,000 articles and reviews, goal-setting theory is the single most researched and dominant theory of employee motivation in the field (Mitchell and Daniels 2003). In the process, researchers have applied goal-setting theory to studies of more than 40,000 participants' performance on well over 100 different tasks in eight countries in both lab

and field settings (Locke and Latham 2002). From all this, we derived four sets of propositions for practitioners to weigh and researchers to test, elaborate, and refine in future research.

***Proposition 10: Challenging and specific goals improve the performance of employees.***

A review of 11 meta-analyses and six narrative reviews of goal-setting research, summarized in table 4, suggests that goal setting *does* increase individual, group, and work unit performance. Early goal-setting research provided strong support that specific and challenging goals are more associated with higher levels of performance than are either no goals or general "do your best goals" (Mento, Steel, and Karren 1987). In contrast, that body of research suggested that narrow goals and multiple or potentially conflicting goals might decrease performance.

More recently, Locke and Latham (1990) proposed an integrated model of work motivation and satisfaction in which challenging and specific goals lead to high performance, which leads to increased rewards, greater satisfaction, and, ultimately, a stronger commitment to the organization. Again, however, prior research suggests that the relationships between goal setting and various measures of performance are moderated by numerous contextual factors, including task structure and employee characteristics.

Additional research also is emerging on the impact of goal setting on higher levels of performance, such as creativity (Egan 2005), as well as on elements of organizational citizenship behavior (Ambrose and Kulik 1999). For example, Shalley (1991) found that participants with a "do your best" or difficult goal, as well as a goal for creativity, were more likely to exhibit high levels of

productivity and creativity, while employees with only a productivity goal were less creative. When studying individuals' willingness to revise their task responsibilities positively and spontaneously, going above and beyond standard expectations, Staw and Boettger (1990) found that setting specific goals dramatically reduced the tendency to revise tasks as needed. However, they found that goals that emphasized "do your best" or "do what is right" may actually be superior when the task requires that employees spontaneously innovate over time.

***Proposition 11: Setting learning goals, as opposed to merely difficult-to-attain goals, may be most effective when tasks are complex.***

If challenging goals can stimulate high performance, prior research suggests that the complexity that some bring can afford motivational challenges as well. Indeed, task complexity, the interdependent and dynamic nature of tasks, can have profound implications for the goal-performance relationship. When tasks are complex, in fact, setting difficult goals may lead to *decreased* performance, while setting "do your best goals" or goals that encourage employees to explore strategies to tackle the task may improve performance (Locke and Latham 2002). The knowledge and experience of the employee, as well as the strategies required to complete the task at hand, also influence the goal-performance relationship.

These caveats notwithstanding, our review of reviews confirms that goals appear to provide an important mechanism to stimulate employees to develop plans to attain desired ends. In situations in which public employees find themselves tackling complex issues, the establishment of learning goals not only may enhance employee mastery of the task, but also may create an atmosphere conducive to continual problem solving and

knowledge acquisition within the organization.

***Proposition 12: The goal-performance relationship is strongest when people are committed to their goals and individuals receive incentives (monetary or otherwise), gain input, and receive feedback related to performance towards goals.***

Our review also suggests, however, that managers and researchers can expect challenging or difficult goals to be especially performance enhancing when committed employees give input, receive feedback, and perceive incentives for achieving them (Ambrose and Kulick 1999; Klein et al. 1999). While participation in goal setting may not directly influence performance, participation may *indirectly* influence commitment to goals and encourage employees to set more difficult goals, both of which ultimately lead to higher performance.

In turn, while our review of the literature suggests that external rewards are not always required to strengthen the relationship between goals and productivity, the presence of rewards may enhance employees' perceptions of the importance of the goals and ultimately improve commitment to them (Wright 2001). To be sure, Ambrose and Kulick (1999) report that individuals with high levels of self-efficacy (i.e., who have great confidence in their own abilities) typically set high personal goals and achieve high levels of performance without external prods. In addition, people with high self-efficacy also are more committed to assigned goals, find better task strategies to attain them, and respond more positively to negative feedback than do people with low self-efficacy. However, as individuals learn their jobs, self-efficacy may be less important than the motivating and energizing influence of challenging personal goals.

Thus, as always, managers profit by taking time to understand their subordinates before employing one-size-fits-all prescriptions for motivation. Yet they also do well by not assuming that efficacy is beyond their control to affect. In concluding their meta-analysis, for instance, Wofford and his associates (1992) suggest that managers who want to assure that challenging goals are set and met should try to improve employees' abilities to carry out goals, as well as their knowledge of the results their efforts are producing. To increase employees' commitment to their goals, managers should build employees' self-confidence by ensuring that the task is difficult, but not too complex. Write Wofford and his associates, "If workers can begin with tasks that they can begin well and then progressively be given more challenging tasks so that their performance remains positive, they may be expected to set high level personal goals. If managers are to encourage participation in goal setting, then it is important that employees already be highly engaged in work place decision-making" (1992, 612).

***Proposition 13: Goal setting may face unique challenges in the public sector.***

Prior research also suggests that goal-setting theories are very appropriate for public managers operating in diverse settings in both complex situations and in settings in which tasks are routine and simple. Applying them, however, is not without its own peculiar challenges (Perry and Porter 1982). Wright (2001) suggests, for example, that while goal-setting theory may prove to be an important organizing framework for public sector motivation, it is a very complex framework. Moreover, the strong influence of individual-level factors such as individual-level sense of efficacy, job experience, and desire for performance feedback may make successful implementation of goal-

setting plans difficult. In addition, Wright (2001) notes that two unique qualities of public sector employment may reduce the influence of goal setting on public employee performance. First, public employees' perceptions of a weak link between performance and financial reward may diminish the incentives that are available to public sector managers to make organizational goals important to employees. Second, numerous procedural constraints in the public sector may lower employees' perceptions of their ability to achieve their goals. These points, however, remain speculative. To date, limited application of goal-setting theory exists in empirical research on employee motivation in public settings.

### **Conclusion**

We began our review of empirical research by focusing on four motivational programs that influence employee behavior: financial incentives, job design, participation, and goal setting. Before sharing some general observations based on our review, we first want to emphasize how the formal systems are part of a larger cycle of motivation (Locke and Latham 1990) that is embedded not only in an environmental context, but strongly influenced by the value systems of individual employees. In public and non-profit organizations, public service, task, and mission motivations (Perry and Wise 1990; Rainey and Steinbauer 1999) may strongly influence employees' perceptions of the importance of organization goals and job responsibilities, as well as their perceptions of the valence of incentives and the equity of the reward process.

How do the traditional motivation programs we reviewed fit together to reinforce the individual values of public sector employees? Using goal-setting theory as a hub of the motivation cycle, Locke and Latham (1990) propose that the relationship between setting

specific and difficult goals and the mediating influences of work effort, persistence, direction, and task strategies that lead to high performance are moderated by employees' perceptions of the importance of the goals and the goals' congruence with their own values. If employees perceive that an organization's goals are consistent with their self-concept, then work towards the accomplishment of such goals becomes an end in itself (Bowditch and Buono 2005; Perry 2000; Wright in press). Organizational interests ultimately advance personal values, and high performance encourages employees to have greater confidence in their ability to undertake increasingly challenging tasks.

Continuing through the motivation cycle suggests that high performance leads to the receipt of rewards, both intrinsic and extrinsic, which leads to increased employee satisfaction when such rewards are valued by the employee and perceived as equitable. Such relationships push us to question to what extent content of goals is congruent with employees' values and also whether the process of an organization's motivational systems is consistent with employee values.

Expectancy theory suggests that rewards used to influence employee behavior must be valued by individuals. Crewson's research on the relationship between public service motivations and performance proposes that "organizations can expect favorable outcomes when incentives and individual motives are congruent" (1997, 508). Similarly, the psychological contract construct (Rousseau 1995) helps us to understand that the very nature of motivation systems used to secure employee compliance also must be congruent with employee expectations. If organizations seek to increase employee commitment to organizational goals or loyalty to the organizational mission, they need to provide congruent sym-

bolic rewards and recognitions, moving away from sole reliance upon financial contracts. This allows employees to feel that their contributions favorably compare to the benefits received. The importance of such congruence may explain the weak relationship between pay and performance in government organizations, the importance of combining social recognition with monetary rewards, and the strong moderating influence of higher-order motivations on the effects of work redesign initiatives. Proponents of participation also suggest that shared decision making may improve employees' satisfaction with goals set and the process by which such decisions are made, strengthening employees' commitment to such decisions as well as their sense of justice in the process.

Locke and Latham (1990) conclude that satisfaction with rewards is associated not only with spontaneous and extraordinary role behaviors and a desire to stay with the organization, but also with a stronger commitment to the job, the organization, and its goals and beneficiaries. Such commitment encourages employees to set even more difficult and challenging goals, completing the loop on the performance cycle. The ability to take part in workplace decision making also may influence the performance cycle. Participation in workplace decisions may positively moderate not only employees' commitment to goals, but also their ability to develop strategies to undertake difficult tasks.

In summary, using goal setting as the hub of the motivation cycle reinforces our expectation that both the content and process of motivation systems must be in line with employees' public service values. As Bowditch and Buono conclude, "...if people are expected to exhibit greater commitment to and motivation toward their work, the organization, and its goals, they must be provided

with opportunities to fulfill valued personal goals such as a sense of autonomy, authority, and influence over organizational decision-making processes" (2005, 89).

This said, and in closing, we offer four general observations premised on our review of the literature. First, our analysis indicates that we know more about human performance than we have historically recognized, especially because prior research relied on limited scrutiny of the literature (e.g., Behn 1995). Still, we must understand that intervening to change human performance will always be an uncertain and indeterminate process. Moreover, although the language of much of the literature and research on programs like incentive pay, management by objectives, and job design is individually oriented, our review suggests that an understanding of individual human behavior is but an important building block for thinking more expansively about the design and management of public sector systems.

Our second general observation is that we are cautiously optimistic that the generalizations about motivation derived from our review of reviews can be applied in a transformed public sector. Importantly, the increasing diversity of organizational and structural forms in the public sector brings a variety of motivational tools long identified with the private sector into play for a transformed public sector. What is more, our review also indicates that social science theories underlying traditional motivational programs are sufficiently robust to at least be used as heuristics for designing new programs for a transformed public sector. However, the current tendency to study human motivation in the laboratory instead of in the field raises important questions about the applicability of these concepts across diverse settings. This is particularly germane when looking at the literature on monetary

incentive systems. The positive findings of the pay-performance linkage found in our review of financial incentives have been conducted using college students under lab conditions—which raises doubts about their generalizability to public sector settings. In addition, as noted previously, the need for public motivation systems to be congruent with employee values requires that managers and researchers pay closer attention to the design and implementation of motivation systems in public sector settings.

Third, our first two general observations notwithstanding, we still have much to learn about motivating human performance. Moreover, some of these gaps in our knowledge are particularly relevant to the changing public sector. Regardless of whether applied in old or new governance settings, an immediate issue that we believe the field must confront is an answer to this question: "To what extent are managers and organizations pursuing interventions grounded in good theory and research?" At the beginning of this article, we noted contextual factors that are driving change in society and in the public sector. In the face of these contextual factors and uncertainties and myths surrounding motivation in the public sector, we believe the prospects are high that public managers and organizations are pursuing ineffective motivational strategies. We believe systematic research about what public organizations are doing to motivate employees and how those systems measure up to research and normative models for given settings would provide a foundation for developing appropriate interventions and reforms.

An institutional change that is part of the new governance, reduction in employment security, is at the center of a knowledge gap to which Perry and Porter (1982) called attention years ago. One outgrowth of new models of governance and public manage-

ment is decreased job security for employees across the public sector. Declines in employment security are manifest in increasing use of contingent workers, downsizing, and the disappearance of traditional civil service protections and career ladders (Kellough and Nigro 2005). In their review, Perry and Porter (1982) called for developing a better understanding of the motivational costs and benefits of public sector job security practices.

Developments since the 1980s reinforce the need for research on the motivational effects of employment security. Although employment security has declined in the public sector, scholars continue to raise doubts about the extent to which security should be decreased. Given that security is one of the most basic of human needs, employee perceptions of employment security may influence attitudes, such as job satisfaction (Adkins, Werbel, and Fahr 2001; Ashford, Lee, and Bobko 1989; Davy, Kinicki, and Scheck 1997), organizational commitment (Adkins, Werbel, and Fahr 2001; Ashford, Lee, and Bobko 1989; Davy, Kinicki, and Scheck 1997; Pfeffer 1998), and organizational cynicism and distrust. Job insecurity may reduce employees' perceptions of their ability to plan for and control their work performance (Burchell 1999), and ultimately their confidence in their ability to perform their job. Job insecurity also may lead to reduced work effort (Greenhalgh and Rosenblatt 1984), poor relationships with co-workers and supervisors (Kinnunen et al. 2000), and the propensity of the most talented employees to leave the organization (Adkins, Werbel, and Fahr 2001; Davy, Kinicki, and Scheck 1997; Greenhalgh and Rosenblatt 1984). In addition, insecure employees may have less incentive to invest in attaining specific job skills (Burchell 1999) and reduced levels of organizational learning (Pfeffer 1998). Although efforts to in-

crease organization efficiency through layoffs, restructuring, and incentive system changes may be inevitable and even desirable, Pfeffer (1998) cautions against doing so through means that increase employees' sense of insecurity. Instead, consistent with the findings from our literature review, he concludes that high performance in organizations is dependent upon "people-centered management." Feelings of job insecurity can be reduced when employees participate in decisions that affect their future; have opportunities to act out their normative and affective goals; and perceive that the organization is committed to their personal and professional development.

We also believe research is needed to fill gaps in our knowledge about the use of individual and group financial incentives to reward performance. Our understanding of group financial incentives is especially weak given their recent application in the public sector. A recent study by Heinrich (2005) concludes that high performance bonus systems in government, which are intended to align the interests of government employees with organizational goals that reflect the public interest, are not achieving their desired results in recognizing and motivating exceptional performance or performance improvements. This empirical study illustrates the problems that can arise when trying to false fit motivational techniques that work in the private sector to the complexities of public sector settings. Researchers and practitioners alike would be well advised to test alternative ways to implement financial incentive systems—perhaps by considering how to reward both individual and organization-wide achievements simultaneously and to recognize and reward performance in such a way as to make them more meaningful for employees (Heinrich 2005).

We also need to understand better how participation in workplace decision making enhances decision making and learning in complex situations, particularly when task accomplishment is dependent upon multiple parties internal and external to the organization. Ledford and Lawler summarize the challenges of both the design and implementation and the study of participative management in a short phrase. They conclude, "Limited participation has limited effects" (1994, 635), and they encourage researchers and managers to move onto the really interesting questions of participation. What are the nonlinear effects of the mutual reinforcement of various organizational systems? How do the characteristics of individual participants and organizational structure and culture influence participative processes? Most important, what is the impact of deeply embedded and long-lasting cultures and processes of participation on both individual and organizational performance?

Much of the research on goal setting is situated in hierarchical settings where authority and tasks are distributed in hierarchical and formal ways. The growth in collaborative public management and networked structures demands an extension of goal-setting research to these new contexts. It is important to note that task complexity, which may significantly increase when service is provided through networks, may weaken the relationship between effort and performance. O'Leary-Kelly, Martocchio, and Frink's (1994) review of goal setting in collaborative settings reports mixed and even negative results of the impact of goal setting on individual performance when tasks are interdependent, while group goals tend to have positive impacts on group performance. Greater attention must be paid to how to measure group performance and how to establish shared goals effectively for

interdependent work teams. Given the importance placed on fostering the capacity of government organizations to be adaptable and innovative, our review suggests that we need to know more about how each of these motivation systems influences employees' innovative and spontaneous activities (Katz 1964).

Fourth, and finally, we appeal to public managers and scholars. Professionals in public organizations can contribute significantly to the expansion of our knowledge about performance in public organizations by (1) being more transparent, (2) partnering with researchers to assess organizational interventions, and (3) engaging in more experiments to determine what works. This admittedly will be difficult for many public organizations and administrators whose agendas may be driven by and who must answer to political leadership. By the same token, public leaders, political and nonpolitical, can enhance the credibility of their actions and improve performance across the public sector by taking steps to increase learning about the choices they make.

## Notes

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1. We use the term *employee* motivation with a caveat. In this new-governance era, public managers must be attentive to the motivation of both employees and, in some circumstances, non-employees who are involved in implementation networks or other new structural arrangements. Although we use the term employee motivation, we intend the label to apply to both employees and non-employees who are agents of public action.

2. Any model of organizational performance must take other factors into account in creating a comprehensive model of performance. For instance, employee abilities and organizational support are critical to the performance equation. Our focus is largely on performance that is directly affected by human agency given both its alterability by managers and its centrality to how we think about performance.

3. Search terms relating to financial incentives in-

cluded: monetary incentives, financial incentives, pay for performance, reinforcement, merit pay, group rewards, and contingent pay. Search terms relating to goal setting included: management by objectives, goal setting, goal commitment, and group goals.

Search terms relating to participation included: participative decision making, participation, empowerment, total quality management, and involvement. Search terms related to job design included: public service motivation, job characteristics model, task identity, autonomy, task significance, skill/task variety, job security, feedback, job challenge, task complexity, job enrichment, task/job scope, and work/job redesign.

4. Narrative reviews are thematic reviews that assess a body of literature, but lack transparency in how evidence was identified and collected. Research syntheses are systematic searches and analyses of literature that rely on qualitative methods. Meta-analyses are a class of reviews that statistically combine results across studies.

5. We added together the number of studies identified in each article. Narrative reviews typically did not identify the number of articles reviewed, so the total is likely larger than 2,612. This undercounting is offset, however, by probable overlap in empirical studies included in reviews.

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## APPENDIX A

**Table 1. Summary of Financial Incentives Research Reviews**

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/Findings/Conclusions
Bucklin, Barbara R., and Alyce M. Dickinson. 2001. Individual Monetary Incentives: A Review of Different Types of Arrangements between Performance and Pay. <i>Journal of Organizational Behavior Management</i>	Narrative review	15 studies using experimental design, primarily college students	Individual monetary incentives		Performance	<ul style="list-style-type: none"> <li>Individual monetary incentives plus feedback improved performance in comparison to hourly pay plus feedback.</li> <li>Most critical determinant of performance is the ratio schedule contingency between performance and pay.</li> </ul>
DeMatteo, Jacquelyn S., Lillian T. Eby, and Eric Sundstrom. 1998. Team-Based Rewards: Current Empirical Evidence and Directions for Future Research. <i>Research in Organizational Behavior</i>	Research synthesis	3 studies, college students (lab); 11 field studies, public and private sector	Team-based rewards; portion of individual pay contingent on group performance		Effectiveness: organizational level (productivity, turnover, incentive system costs), group level (team productivity and effectiveness), individual level (employee job satisfaction and commitment)	<ul style="list-style-type: none"> <li>Conditions under which team rewards will be effective are unclear. Propose that effectiveness is dependent on characteristics of reward system, organization, team, and individual team members.</li> <li>Lab studies more supportive than field studies.</li> </ul>
Heneman, Robert L. 1992. <i>Merit Pay: Linking Pay Increases to Performance Ratings</i>	Research synthesis	44 studies, private and public sector	Merit pay plans	Institutional arrangements and other situational characteristics	Attitudes, performance, motivation	<ul style="list-style-type: none"> <li>Institutional arrangements contribute to feasibility of merit pay.</li> <li>Differences exist in preferences for merit pay across organizational members.</li> <li>Merit pay is moderately effective—consistently shown to be related to positive attitudes (with the exception of federal govt.), but inconclusive results linking merit pay to improved performance.</li> </ul>
Honeywell-Johnson, Judith A., and Alyce M. Dickinson. 1999. Small Group Incentives: A Review of the Literature. <i>Journal of Organizational Behavior Management</i>	Research synthesis	12 experimental studies, primarily college students	Small group incentives		Performance, satisfaction, social interactions	<ul style="list-style-type: none"> <li>Equally-divided small group incentives result in high levels of performance and employee satisfaction.</li> <li>Effects of group incentives on social interactions inconclusive.</li> </ul>
Ingraham, Patricia W. 1993. Of Pigs in Pokes and Policy Diffusion: Another Look at Pay for Performance. <i>Public Administration Review</i>	Narrative review	Private and public sector	Pay-for-performance/ individual monetary rewards	Organizational structure, nature of personnel system, resources	Transferability of pay for performance techniques in private sector to public sector	<ul style="list-style-type: none"> <li>In private sector: not clear success for PFP.</li> <li>In public sector: general unsuccessful record; need to change some organizational and managerial characteristics to make PFP work in this sector.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/Findings/Conclusions
Jenkins, G. Douglas, Jr., Atul Mitra, Nina Gupta, and Jason D. Shaw. 1998. Are Financial Incentives Related to Performance? A Meta-Analytic Review of Empirical Research. <i>Journal of Applied Psychology</i>	Meta-analysis	39 studies, primarily college students	Individual monetary incentives	Task type, setting (lab, experimental simulation, field), theoretical framework	Performance quantity, performance quality	<ul style="list-style-type: none"> <li>Financial incentives related to performance quantity, not related to performance quality.</li> <li>Setting moderates the financial incentive-performance relationship—strongest for experimental simulations.</li> <li>Task type does not moderate strength or relationship between financial incentives and performance quantity.</li> <li>Theoretical framework affected the strength of relationship between financial incentives and performance.</li> </ul>
Kellough, J. Edward, and Haoran Lu. 1993. The Paradox of Merit Pay in the Public Sector: Persistence of a Problematic Procedure. <i>Review of Public Personnel Administration</i>	Narrative review	14 studies, public sector	Merit pay based on individual performance		Employee motivation and organization performance	<ul style="list-style-type: none"> <li>Merit pay has little positive impact on employee motivation and organizational performance in the public sector.</li> </ul>
Kling, Jeffrey. 1995. High Performance Work Systems and Firm Performance. <i>Monthly Labor Review</i>	Narrative review	17 studies on work practices, private sector	Profit sharing		Performance: quantitative and quality measures of productivity and financial performance	<ul style="list-style-type: none"> <li>Specific work practices including alternative pay systems are correlated with higher productivity.</li> </ul>
Kruse, Douglas. 1993. <i>Profit Sharing: Does it Make a Difference? The Productivity and Stability Effects of Employee Profit-Sharing Plans</i>	Research synthesis	Sectors not specified	Profit sharing		Corporate performance	<ul style="list-style-type: none"> <li>Profit sharing can improve corporate performance. Profit sharing statistically associated with significant productivity increases.</li> </ul>
Milkovich, George T., and Alexandra K. Wigdor, eds. 1991. <i>Pay for Performance: Evaluating Performance Appraisal and Merit Pay</i>	Research synthesis	Public and private sector	Individual and group pay-for-performance plans, gainsharing		Job performance, organizational performance, motivation	<ul style="list-style-type: none"> <li>Under certain circumstances, variable pay plans produce positive effects on individual job performance.</li> <li>Merit pay can have positive effects on individual job performance.</li> <li>Gainsharing plans are associated with improved organizational performance.</li> </ul>
Mitchell, Daniel J.B., David Lewin, and Edward E. Lawler, III. 1990. Alternative Pay Systems, Firm Performance, and Productivity. In <i>Paying for Productivity: A Look at the Evidence</i>	Research synthesis	Sectors not specified	Profit sharing		Productivity and performance	<ul style="list-style-type: none"> <li>Profit sharing associated with higher productivity and improved firm performance in the 1980s, although profit sharing does not seem to substitute for other forms of pay.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/Findings/Conclusions
Perry, James L. 1988. Making Policy by Trial and Error: Merit Pay in the Federal Service. <i>Policy Studies Journal</i>	Narrative review	19 studies, public sector agencies and employees in federal service	Merit Pay System (MPS) and Performance Management and Recognition System (PMRS), cash awards		Productivity, motivation, agency effectiveness	<ul style="list-style-type: none"> <li>MPS failed to show relationship between pay and performance. Failure due in large part to lack of adequate funding for merit pay and because it did not satisfy basic standards of fairness. No research showing MPS having positive effect on agency effectiveness.</li> <li>PMRS reduced tensions created by MPS and improved prospects for achieving outcomes intended for merit pay.</li> </ul>
Stajkovic, Alexander D., and Fred Luthans. 2003. Behavioral Management and Task Performance in Organizations: Conceptual Background, Meta-Analysis, and Test of Alternative Models. <i>Personnel Psychology</i>	Meta-analysis	72 field studies conducted in organizational settings	Different types of reinforcers, including money, feedback, and social recognition	Type of reinforcement	Task performance	<ul style="list-style-type: none"> <li>Money improved performance 23 percent; social recognition 17 percent, feedback 10 percent.</li> <li>Combining all three reinforcers simultaneously improved performance 45 percent and had stronger effects on performance than each applied separately.</li> <li>Addition of feedback to combination of money and social recognition produced the strongest effect on performance.</li> </ul>
Stajkovic, Alexander D., and Fred Luthans. 1997. A Meta-Analysis of the Effects of Organizational Behavior Modification on Task Performance, 1975-95. <i>Academy of Management Journal</i>	Meta-analysis	19 studies of manufacturing and service organizations	Different types of reinforcers, including financial/monetary	Type of organization (manufacturing and service), type of reinforcement	Task performance	<ul style="list-style-type: none"> <li>Stronger effects for manufacturing organizations than for service organizations.</li> <li>Using combination of financial, nonfinancial, and social rewards produced the strongest effect in manufacturing organizations, but did not produce effects significantly different from nonfinancial interventions.</li> </ul> <p>Financial reinforcers result in significantly stronger effects than nonfinancial for service organizations.</p>
Tolchinsky, Paul D., and Donald C. King. 1980. Do Goals Mediate the Effects of Incentives on Performance? <i>Academy of Management Review</i>	Research synthesis	16 studies of mediators between goal setting and performance, sectors not specified	Monetary incentives	Goal setting	Performance	<ul style="list-style-type: none"> <li>Monetary incentives influence performance, but relationship is not mediated by goal setting. Goal setting and monetary incentives can independently influence performance.</li> </ul>
Weitzman, Martin L., and Douglas L. Kruse. 1990. Profit Sharing and Productivity. In <i>Paying for Productivity: A Look at the Evidence</i>	Research synthesis	For-profit companies	Profit sharing		Productivity, employer and employee attitudes about profit sharing	<ul style="list-style-type: none"> <li>Relationship between profit sharing and productivity seems positive, but magnitude is not clear.</li> <li>Overall results show that employees and employers view profit sharing and gain sharing as positive influences on productivity and company performance.</li> </ul>

<b>Source</b>	<b>Type of Review</b>	<b>Sectors from Which the Sample is Drawn</b>	<b>Type of Job Design</b>	<b>Mediating/Moderating Variables</b>	<b>Behavioral Outcomes</b>	<b>Overall Results/Findings/Conclusions</b>
Welbourne, Theresa M., and Luis R. Gomez Mejia. 1995. Gainsharing: A Critical Review and a Future Research Agenda. <i>Journal of Management</i>	Research synthesis	162 studies, private sector	Group bonus	Participative decision-making, perceptions of fairness, contextual factors	Productivity and efficiency—assessed through labor or material cost savings	<ul style="list-style-type: none"> <li>• Positive results of firms that implement gainsharing for both qualitative and quantitative and survey research studies.</li> <li>• Employee participation is an important variable affecting success of gainsharing.</li> </ul>

**Table 2. Summary of Job Design Research Reviews**

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Baltes, Boris B., Thomas E. Briggs, Joseph W. Huff, Julie A. Wright, and George A. Neuman. 1999. Flexible and Compressed Workweek Schedules: A Meta-Analysis of Their Effects on Work-Related Criteria. <i>Journal of Applied Psychology</i>	Meta-analysis	31 sources involving 39 separate substudies, manufacturing and other organizational types, including public sector	Flexible and compressed workweek schedules	Employee type, flextime flexibility, time since change	Work-related criteria: productivity/ performance, job satisfaction, absenteeism, satisfaction with work schedule	<ul style="list-style-type: none"> <li>Flexible work schedules had positive effects on productivity, job satisfaction, satisfaction with work schedule, and employee absenteeism.</li> <li>Compressed workweek schedules had positive effects on job satisfaction and satisfaction with work schedule, not with other outcomes.</li> <li>Type of employee (general versus professionals/managers) moderates relationship, as does flextime flexibility (less flexible programs more effective).</li> <li>Effects may wane over time.</li> <li>High-rigor studies had larger effect sizes.</li> </ul>
Berlinger, Lisa R., William H. Glick, and Robert C. Rodgers. 1988. Job Enrichment and Performance Improvement. In <i>Productivity in Organizations: New Perspectives from Industrial and Organizational Psychology</i>	Meta-analysis	39 empirical studies, sectors not specified	Job enrichment as represented by the job characteristics model	Growth-need strength	Performance	<ul style="list-style-type: none"> <li>Job characteristics are correlated with performance.</li> <li>Relationship moderated by growth-need strength.</li> </ul>
Boonzaier, Billy, Bernhard Ficker, and Braam Rust. 2000. A Review of Research on the Job Characteristics Model and the Attendant Job Diagnostic Survey. <i>South African Journal of Business Management</i>	Narrative review	Sectors not specified	Job characteristics model	Individual psychological states (intervening); growth-need strength, pay satisfaction, and skill (moderators)	Internal work motivation, general job satisfaction, and work outcomes	<ul style="list-style-type: none"> <li>Strong evidence for personal outcomes (internal work motivation and job satisfaction).</li> <li>Little or no evidence for relationship with work outcomes.</li> </ul>
Farrell, Dan, and Carol Lee Stamm. 1988. Meta-Analysis of the Correlates of Employee Absence. <i>Human Relations</i>	Meta-analysis	72 studies, sectors not specified	Work environment factors: task significance, task variety, task autonomy, task identity, feedback	Personal factors (e.g., age, tenure); organization-wide factors (pay, control policy); occupation	Total time absent, absence frequency	<ul style="list-style-type: none"> <li>Work environment and organization-wide correlates better predictors of absence than psychological or demographic factors.</li> <li>Job involvement, task significance, task variety, and pay all statistically significant correlates of absence frequency.</li> </ul>
Fried, Yitzhak, and Gerald R. Ferris. 1987. The Validity of the Job Characteristics Model: A Review and Meta-Analysis. <i>Personnel Psychology</i>	Meta-analysis	76 studies, sectors not specified	Job characteristics model: task significance, task variety, task autonomy, task identity, feedback	Growth-need strength	Job performance, absenteeism	<ul style="list-style-type: none"> <li>Modest support for job characteristics model.</li> <li>Task identity has highest relationship with performance; job feedback also affects performance.</li> <li>Job characteristics-psychological outcomes stronger and more consistent than job characteristics-behavioral outcomes.</li> <li>Effects of job characteristics on work performance vary with individual or situational differences.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Golembiewski, Robert T., and Carl W. Proehl, Jr. 1980. Public Sector Applications of Flexible Workhours: A Review of Available Experience. <i>Public Administration Review</i>	Research synthesis	32 studies, all public sector	Flexible workhours programs		Behavioral effects: sick leave or absenteeism, tardiness, turnover, overtime, trends in costs	<ul style="list-style-type: none"> <li>• Flexible workhours reduce sick leave, absenteeism, tardiness, and turnover.</li> <li>• Overtime and trends in costs not affected.</li> </ul>
Golembiewski, Robert T., and Carl W. Proehl, Jr. 1978. A Survey of the Empirical Literature on Flexible Workhours: Character and Consequences of a Major Innovation. <i>Academy of Management Review</i>	Research synthesis	20 studies, 5 of which were public organizations and 15 of which were private organizations	Flexible workhours programs		Behavioral effects: sick leave or absenteeism, tardiness, turnover, overtime, trends in costs	<ul style="list-style-type: none"> <li>• Most studies show positive effects of flexible workhours on behavior, few show negative effects, and very few show no effect.</li> </ul>
Griffin, Ricky W., Ann Welsh, and Gregory Moorhead. 1981. Perceived Task Characteristics and Employee Performance: A Literature Review. <i>Academy of Management Review</i>	Narrative review	13 studies, sector not specified	Task or job scope, i.e., the degree to which a job is enriched	Growth-need strength, contextual satisfaction, need for achievement	Performance	<ul style="list-style-type: none"> <li>• Results for task scope-performance relationships are contradictory.</li> <li>• Measures for performance vary from study to study and, at best, only moderately valid.</li> </ul>
Guzzo, Richard A., Richard D. Jette, and Raymond A. Katzell. 1985. The Effects of Psychologically Based Intervention Programs on Worker Productivity: A Meta-Analysis. <i>Personnel Psychology</i>	Meta-analysis	98 studies published between 1971 and 1981; government, business, and nonprofit sectors	11 different intervention programs, including work redesign and work rescheduling		Three types of productivity outcomes: output (quantity and quality), withdrawal (turnover and absenteeism), and disruption (e.g., accidents)	<ul style="list-style-type: none"> <li>• Work redesign had moderately strong effects on output but not on the other two types of productivity.</li> <li>• Work rescheduling had small positive effects on output and withdrawal.</li> </ul>
Kelly, John. 1992. Does Job Redesign Theory Explain Job Redesign Outcomes? <i>Human Relations</i>	Research synthesis	31 field experiments; a variety of occupations were included, but none clearly from the public sector	Job redesign	Pay raises, job losses	Job satisfaction, job performance	<ul style="list-style-type: none"> <li>• Redesigns that led to perceptions of improved job content also produced higher job satisfaction.</li> <li>• No strong evidence indicating that job redesign improves job performance.</li> <li>• Changes in job performance were associated with pay raises and job losses, two changes often accompanying job redesign.</li> </ul>
Kopelman, Richard E. 1985. Job Redesign and Productivity: A Review of the Evidence. <i>National Productivity Review</i>	Research synthesis	32 experiments, 29 studies; public and private employees	Job enrichment interventions		Productivity, work quality, absenteeism	<ul style="list-style-type: none"> <li>• Median impact on productivity across studies of 6.4 percent.</li> <li>• Job redesign modestly reduces absenteeism.</li> <li>• Median effect on work quality (typically error reduction) was an improvement of 28 percent.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Job Design	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Mathieu, John E., and Dennis M. Zajac. 1990. A Review and Meta-Analysis of the Antecedents, Correlates, and Consequences of Organizational Commitment. <i>Psychological Bulletin</i>	Meta-analysis	124 published studies, sector not specified	Skill variety, task autonomy, challenge, job scope	Organizational commitment	Performance	<ul style="list-style-type: none"> <li>Individual job dimensions and summary (job scope) characteristics highly correlated with organizational commitment.</li> <li>Organizational commitment shows weak relationship with job performance.</li> </ul>
McEvoy, Glenn M., and Wayne F. Cascio. 1985. Strategies for Reducing Employee Turnover: A Meta-Analysis. <i>Journal of Applied Psychology</i>	Meta-analysis	20 field experiments, mix of public and private sector occupations	Realistic job preview (RJP), job enrichment	Task complexity	Turnover	<ul style="list-style-type: none"> <li>Job enrichment twice as effective at reducing turnover as RJP.</li> <li>Moderate effect sizes for both RJP and job enrichment.</li> </ul>
Spector, Paul E. 1986. Perceived Control by Employees: A Meta-Analysis of Studies Concerning Autonomy and Participation at Work. <i>Human Relations</i>	Meta-analysis	20 studies that met three criteria—measured job scope, one or more employee outcomes, and growth-need strength	Job scope; i.e., presence of the five dimensions of the job characteristics model	Higher-order or growth-need strength	Performance	<ul style="list-style-type: none"> <li>Both high and low need strength individuals respond favorably to high scope (i.e., enriched) jobs.</li> <li>Evidence for moderator effects of higher-order need strength on job satisfaction, motivation, and performance.</li> </ul>
Stone, Eugene F. 1986. Job Scope-Job Satisfaction and Job Scope-Job Performance Relationships. In <i>Generalizing from Laboratory to Field Settings: Research Findings from Industrial-Organizational Psychology, Organizational Behavior, and Human Resource Management</i>	Meta-analysis	27 field experiments, 7 laboratory; sectors not specified	Job scope; i.e., the degree to which a job is enriched	No moderating or intervening variables were assessed	Job satisfaction, performance	<ul style="list-style-type: none"> <li>Laboratory and field research results are highly consistent for job scope-satisfaction relationships.</li> <li>Job scope relates more strongly to satisfaction with the work itself than overall satisfaction.</li> <li>Job scope-job performance relationships are modest, but positive.</li> </ul>

Table 3. Summary of Participation Research Reviews

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Participation	Mediating/ Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Cawley, Brian D., Lisa M. Keeping, and Paul E. Levy. 1998. Participation in the Performance Appraisal Process and Employee Reactions: A Meta-Analytic Review of Field Investigations. <i>Journal of Applied Psychology</i>	Meta-analysis	27 studies, 32 samples	Performance appraisal participation	Form of participation: value-expressive participation and instrumental participation	Satisfaction, motivation to improve, utility of process, fairness	<ul style="list-style-type: none"> <li>• Strong relationship between employee participation in the performance appraisal process and employee's affective reactions to the process—employee's satisfaction with the process and system, perceived utility of the system, perceived fairness of the system, and motivation to improve performance.</li> <li>• Value-expressive participation— participation for the purpose of having "one's voice heard"—had strongest influence on outcomes than instrumental participation— sharing information.</li> </ul>
Cotton, John L., David A. Vollrath, Kirk L. Froggatt, Mark L. Legnick-Hall, and Kenneth R. Jennings. 1988. Employee Participation: Diverse Forms and Different Outcomes. <i>Academy of Management Review</i>	Research synthesis	91 studies, sectors not specified	Participative decision making: participation in workplace decisions formal, consultative participation, short-term participation, informal participation, employee ownership	Type of participation, length of participation	Performance, satisfaction	<ul style="list-style-type: none"> <li>• Multi-dimensional construct: different forms of PDM are associated with different outcomes.</li> <li>• Participation in work decisions, informal participation, and employee ownership exert positive effects on employee performance.</li> <li>• Informal participation and employee ownership enhance satisfaction.</li> <li>• Other forms of participation— short term, consultative, and representational—have no impact on performance or satisfaction.</li> </ul>
Doucouliafos, Chris. 1995. Worker Participation and Productivity in Labor-Managed and Participatory Capitalist Firms: A Meta-Analysis. <i>Industrial &amp; Labor Relations Review</i>	Meta-analysis	15 employee-owned firms and 28 capitalist firms	Worker participation: in decision making, mandated codetermination, profit sharing, worker ownership, collective ownership of assets	Type of organization, mandate of participation	Productivity	<ul style="list-style-type: none"> <li>• Codetermination laws negatively related to productivity.</li> <li>• All other variables positively associated with productivity.</li> <li>• Correlations stronger among labor-managed firms than among participatory capitalist firms.</li> </ul>
Glew, David J., Anne M. O'Leary-Kelly, Ricky W. Griffin, and David D. Van Fleet. 1995. Participation in Organizations: A Preview of Issues and Proposed Framework for Future Analysis. <i>Journal of Management</i>	Narrative review	Sectors not specified	Employee participation	Individual, organizational, and contextual factors; e.g., existing attitudes and behaviors, size of the participation project and degree of participation, previous experience with participation	Performance and job satisfaction are most common outcomes, although there are numerous other individual and organization-level outcomes	<ul style="list-style-type: none"> <li>• Weak relationships between employee participation and outcomes may be related to inconsistency in definition of participation.</li> <li>• When experience with participation systems is limited, general attitudes and behaviors will not be significantly influenced.</li> <li>• Participation in a limited activity may result in increased commitment to that particular activity as opposed to general organization commitment.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Participation	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Honold, Linda. 1997. A Review of the Literature on Employee Empowerment. <i>Empowerment in Organizations</i>	Narrative review	Sectors not specified	Empowerment broadly categorized as leadership empowering employees, employees' perceptions of internal power and control, structural and procedural components of empowerment, multi-dimensional approaches	Employee interaction, structure of organizational processes	Performance	<ul style="list-style-type: none"> <li>Empowerment is a multi-dimensional construct that involves delegation of power, as well as how employees react to such responsibility.</li> </ul>
Locke, Edwin A., and David M. Schweiger. 1979. Participation in Decision Making: One More Look. In <i>Research in Organizational Behavior, Volume 1</i>	Research synthesis	21 lab studies, 38 correlational studies, 30 field settings	Participation in decision making		Satisfaction (or morale), productive efficiency (including improved decision making)	<ul style="list-style-type: none"> <li>PDM usually leads to higher satisfaction, but not necessarily to higher productivity.</li> <li>Numerous individual (knowledge and motivation) and organization-level variables (form of PDM, task complexity, homogeneity) moderate the influence of PDM.</li> <li>PDM's value may be in its ability to influence positively numerous cognitive factors (upward communication, better utilization of information, and better understanding of job requirements and decisions) that improve productivity through the generation of more creative ideas and improved decision quality.</li> </ul>
Miller, Katherine I., and Peter R. Monge. 1986. Participation, Satisfaction and Productivity: A Meta-Analytic Review. <i>The Academy of Management Journal</i>	Meta-analysis	47 studies: 9 lab, 13 field experiments	Participation	Motivation; cognition; contingency (personality, decision situations, relationships between superiors and subordinates, values); methodological (research setting, measurement of participation)	Satisfaction, productivity	<ul style="list-style-type: none"> <li>Participation has a somewhat stronger effect on satisfaction than on productivity.</li> <li>Participation in goal setting has little impact on measures of performance.</li> <li>Participatory climate has a more substantial effect on employee satisfaction than does actual participation in specific decisions.</li> <li>Participation influences performance through both cognitive and affective mechanisms.</li> <li>Relationships are weaker in field settings in which numerous organizational variables may dilute findings.</li> </ul>
Nyhan, Ronald C. 2000. Changing the Paradigm: Trust and its Role in Public Sector Organizations. <i>American Review of Public Administration</i>	Narrative review	100 articles	Participation in decision-making, empowerment	Trust	Productivity, organizational commitment	<ul style="list-style-type: none"> <li>Participation in decision making and empowerment are positively related to trust and ultimately productivity and organizational commitment.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Participation	Mediating/ Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Spector, Paul E. 1986. Perceived Control by Employees: A Meta-Analysis of Studies Concerning Autonomy and Participation at Work. <i>Human Relations</i>	Meta-analysis	101 samples from 88 studies	Participative decision making		Job satisfaction, commitment, involvement, role ambiguity, performance, motivation, intent to turnover	<ul style="list-style-type: none"> <li>Employees who perceived more control at work are more satisfied, more involved, more committed, and more motivated.</li> </ul>
Wagner, John A., III. 1994. Participation's Effects on Performance and Satisfaction: A Reconsideration of Research Evidence. <i>The Academy of Management Review</i>	Meta-analysis	52 empirical studies used in Cotton et al. (1988) study	Participation		Performance, satisfaction	<ul style="list-style-type: none"> <li>Participation is positively associated with performance and satisfaction; however, the average effects are so small as to raise questions about the practical significance. Participation is most successful when it costs little to implement and maintain.</li> </ul>
Wagner, John A., Carrie R. Leana, Edwin A. Locke, and David M. Schweiger. 1997. A Meta-Analysis of Cognitive Versus Motivational Models of Participative Decision Making. <i>Journal of Organizational Behavior</i>	Meta-analysis	86 U.S.-based studies	Participation	Motivation, cognition	Performance, satisfaction	<ul style="list-style-type: none"> <li>Research on the relationship between participation and satisfaction may be influenced by conceptual framework used to design studies and formulate conclusions.</li> <li>Findings indicate a greater need to explore the role of information sharing in participation.</li> </ul>
Wagner, John A., and Richard Z. Gooding. 1987. Shared Influence and Organizational Behavior: A Meta-Analysis of Situational Variables Expected to Moderate Participation Outcome Relationships. <i>Academy of Management Journal</i>	Meta-analysis	70 U.S. studies, including laboratory experiments, field experiments, and non-experimental field studies	Participative decision making	Task interdependence (ns); task complexity (ns); group size (ns); performance; standards (ns)	Task performance Decision performance Satisfaction Motivation Acceptance	<ul style="list-style-type: none"> <li>Many of the significant relationships between participation and performance are related to methodological factors such as use of students in lab settings and perceptual measures of performance.</li> </ul>

**Table 4. Summary of Goal Setting Research Reviews**

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Goal Setting	Mediating/Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Ambrose, Maureen L., and Carol T. Kulik. 1999. <i>Old Friends, New Faces: Motivation Research in the 1990's. Journal of Management</i>	Narrative review	200 articles, motivation literature from 1990-1997	Nature of goals (specific goals, difficult goals, narrow goals, multiple goals); goal commitment	Goal difficulty—performance moderated by outcome and process feedback, type of goal (learning versus performance), past performance, goal commitment, task complexity; goal commitment moderated by nature of monetary incentives, performance information, self efficacy, participation		<ul style="list-style-type: none"> <li>Multiple reviews and analyses provide substantial support for basic principles of goal-setting theory, with more recent work focusing on moderators of goal difficulty/performance relationship, particularly role of commitment and personal efficacy in the process. The result is that current models of goal setting are multivariate and complex.</li> </ul>
Chidester, Thomas R., and Charles W. Grigsby. 1984. A Meta-Analysis of the Goal Setting-Performance Literature. In <i>Academy of Management Proceedings</i>	Meta-analysis	43 studies, public and private students	Difficulty of goals		Performance	<ul style="list-style-type: none"> <li>Hard goals lead to better performance than easy goals, and specific goals better than no goals or "do best" goals.</li> </ul>
Egan, Toby Marshall. 2005. Factors Influencing Individual Creativity in the Workplace: An Examination of Quantitative Empirical Research. <i>Advances in Developing Human Resources</i>	Narrative review	Sectors not specified	Creativity goal setting		Creative outputs	<ul style="list-style-type: none"> <li>Presence of a creativity goal increases creative outputs.</li> </ul>
Klein, Howard J., Michael J. Wesson, John R. Hollenbeck, and Bradley J. Alge. 1999. Goal Commitment and the Goal-Setting Process: Conceptual Clarification and Empirical Synthesis. <i>Journal of Applied Psychology</i>	Meta-analysis	74 studies—83 samples, nature of samples not specified	Goal commitment	Goal difficulty, goal origin, task complexity	Performance	<ul style="list-style-type: none"> <li>Goal commitment had a strong positive effect on performance; goal difficulty moderates this relationship.</li> <li>The relationship between commitment and performance was stronger for difficult goals relative to easy goals, while other tested moderators were not supported.</li> <li>Expectancy and attractiveness of goal attainment were positively related to goal commitment and possibly important antecedents to goal commitment.</li> </ul>
Kondrasuk, Jack N. 1981. Studies in MBO Effectiveness. <i>Academy of Management Review</i>	Narrative review	141 case studies; 12 surveys; 27 quasi experiments; 5 true experiments—185 total studies—public, private and nonprofit settings	Management by objectives		Perceptions of "success" of implementation	<ul style="list-style-type: none"> <li>The less sophisticated the research approach, the more likely to show that MBO is effective.</li> <li>Tendencies for MBO to be effective in the short term, more effective in the private sector, and in organizations not involved in direct customer contact.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Goal Setting	Mediating/ Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Latham, Gary P., and Craig C. Pinder. 2005. <i>Work Motivation Theory and Research at the Dawn of the Twenty-First Century. Annual Review of Psychology</i>	Narrative review	Work motivation literature from 1993-2003	Difficulty of goals	Learning goals, feedback seeking, cognitive understanding of the task and strategy	Performance	<ul style="list-style-type: none"> <li>Review of empirical research emphasizes the cognitive mechanisms of goal-setting theory.</li> <li>Urging employees to do their best on complex tasks or establishing high learning goals results in higher performance than high performance goals.</li> <li>High performance is not always the result of high effort, but cognitive understanding of task and strategy.</li> </ul>
Locke, Edwin A., and Gary P. Latham. 2002. <i>Building a Practically Useful Theory of Goal Setting and Task Motivation: A 35-Year Odyssey. American Psychologist</i>	Narrative review	35 years of empirical research on goal-setting theory	Conscious performance goals	Content of goal (specificity, difficulty, performance vs. learning, goal conflict); individual factors (goal commitment, feedback seeking); nature of work (task complexity)	Performance	<ul style="list-style-type: none"> <li>35 years of research confirm that goal-setting theory is essential to understanding high performance.</li> <li>Difficult and specific goals are positively related to performance.</li> <li>High performance leads to increased satisfaction with performance and rewards, greater willingness to commit to new challenges, ultimately reinforcing commitment to goals, which is essential moderator of the goal/performance relationship.</li> </ul>
Mento, Anthony J., Robert P. Steel, and Ronald J. Karren. 1987. <i>A Meta-Analytic Study of the Effects of Goal Setting on Task Performance: 1966-1984. Organizational Behavior &amp; Human Decision Processes</i>	Meta-analysis	Laboratory and field; experimental and correlational	Goal specificity/difficulty	Setting (laboratory vs. field), study type (experimental vs. correlational), level of education, incentives, feedback	Task performance	<ul style="list-style-type: none"> <li>Goal difficulty and goal specificity/difficulty strongly related to task performance across different tasks and in different settings.</li> <li>Most moderating variables require additional research. However, combining specific hard goals with feedback has powerful effect on performance.</li> </ul>
O'Leary-Kelly, Anne M., Joseph J. Martocchio, and Dwight D. Frink. 1994. <i>A Review of the Influence of Group Goals on Group Performance. Academy of Management Journal</i>	Narrative review; meta-analysis	Narrative review of 19 studies and meta-analysis of 10 studies; sectors not specified	Group goals	Goal specificity, goal difficulty, source of goal, interdependence of task	Performance of groups	<ul style="list-style-type: none"> <li>Setting group goals has positive effect on group performance.</li> <li>Negative and mixed results from those working on interdependent tasks.</li> </ul>
Rodgers, Robert, and John E. Hunter. 1992. <i>A Foundation of Good Management Practice in Government: Management by Objectives. Public Administration Review</i>	Meta-analysis	Public and private sector employees	Management by objectives	Commitment of top management, public or private setting	Organizational productivity	<ul style="list-style-type: none"> <li>Large productivity gain results when there is high commitment from top management.</li> <li>MBO "works just as well" in the public sector as it does in the private sector.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Goal Setting	Mediating/ Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Rodgers, Robert, and John E. Hunter. 1991. Impact of Management by Objectives on Organizational Productivity. <i>Journal of Applied Psychology</i>	Meta-analysis	70 studies of MBO in public and private organizations	Management by objectives	Top management support of and participation in the MBO process	Organization productivity	<ul style="list-style-type: none"> <li>• Average gain in productivity after the introduction of MBO.</li> </ul>
Tubbs, Mark E. 1986. Goal Setting: A Meta-Analytic Examination of the Empirical Evidence. <i>Journal of Applied Psychology</i>	Meta-analysis	87 studies	Difficulty of goals	Feedback, participation in goal setting	Performance	<ul style="list-style-type: none"> <li>• Goal difficulty, goal specificity, performance feedback have positive effect on performance.</li> <li>• Participation in goal setting had little consistent impact on the relationship between goal setting and performance, but participation leads to higher goals.</li> </ul>
Wofford, Jerry C., Vicki L. Goodwin, and Steven Premack. 1992. Meta-Analysis and the Antecedents of Personal Goal Level and of the Antecedents and Consequences of Goal Commitment. <i>Journal of Management</i>	Meta-analysis	78 empirical studies from 1967-1980	Goal commitment/goal level		Goal achievement	<ul style="list-style-type: none"> <li>• Antecedents of goal commitment are motivational: expectancy, self-efficacy, rewards/incentives, peer and supervisor support, need for achievement.</li> <li>• The antecedents of personal goal level are informational: feedback, prior performance, ability.</li> </ul>
Wood, Robert E., Anthony J. Mento, and Edwin A. Locke. 1987. Task Complexity as a Moderator. <i>Journal of Applied Psychology</i>	Meta-analysis	125 empirical studies from 1966-1985	Difficulty of goals, goal specificity	Task complexity (coordinative and dynamic)	Performance	<ul style="list-style-type: none"> <li>• Relationship between goal difficulty and performance was stronger on simple tasks than on complex tasks.</li> </ul>
Wright, Bradley E. 2001. Public-Sector Work Motivation: A Review of the Current Literature and a Revised Conceptual Model. <i>Journal of Public Administration Research and Theory</i>	Narrative review	Goal-setting theory	Goal content (difficult, specific), goal commitment	Moderated by employee motives, organization goals, reward systems, procedural constraints; goal commitment/performance moderated by goal importance and self-efficacy	Employee performance	<ul style="list-style-type: none"> <li>• Reviews literature on goal-setting theory and application to public sector motivation and presents a revised public sector model of work motivation.</li> </ul>
Wright, Patrick. 1990. Operationalization of Goal Difficulty as Moderator of the Goal Difficulty-Performance Relationship. <i>Journal of Applied Psychology</i>	Meta-analysis	70 empirical studies from Mento, Steel, and Karren (1987)	Goal difficulty	Operationalization of goal difficulty: assigned goal, self-set goal, performance improvement; perceived difficulty	Performance	<ul style="list-style-type: none"> <li>• The way in which goal difficulty is operationalized may have significant impact on relationship between goal difficulty and performance.</li> <li>• Self-set goals have smaller positive impact on the goal difficulty/performance relationship than do assigned goals; however, these results may be due to random nature of assigning goals.</li> </ul>

Source	Type of Review	Sectors from Which the Sample is Drawn	Type of Goal Setting	Mediating/ Moderating Variables	Behavioral Outcomes	Overall Results/ Findings/ Conclusions
Zetik, Deborah C., and Alice F. Stuhlmacher. 2002. Goal Setting and Negotiation Performance. <i>Group Processes and Intergroup Relations</i>	Meta-analysis	22 studies of goal setting in negotiation	Specific and challenging goals	Goal difficulty, performance rewards, experience	Profit outcomes	<ul style="list-style-type: none"> <li>• Negotiators with difficult goals outperformed those with easy goals.</li> <li>• Participation had no significant relationship on the relationship between goal difficulty and participation.</li> </ul>