The Effect of Employee Learning Goals and Goal Commitment on Departmental Performance

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Abstract

The relationship between employee goals at the individual level and firm performance at the department level was examined across a variety of industries. Specifically, three types of employee goals—learning, performance, and do-your-best—were studied with regard to department-level performance. Employee learning goals were related to higher levels of department-level performance than were performance or do-your-best goals. The relationship between the level of employee goal commitment and department level performance was also examined, and found to be positive and significant. The theoretical and practical significance of these findings for leaders in an economically turbulent environment are discussed.

Keywords

learning goals, performance goals, goal commitment, department-level performance

In his review of the literature, Yukl (2012) noted that "leadership is the process of influencing others to understand and agree about what needs to be done and how to do it, and the process of facilitating individual collective effort to accomplish shared objectives" (p. 7). Thus, among the most important tasks for leaders is motivating and guiding the people who report to them. This is particularly true during environmental and organizational uncertainty when company resources may be even scarcer than during times of relative stability. In an uncertain environment, setting appropriate employee goals and motivating employees to commit to these goals is likely to be more important than during times of resource abundance (Latham, 2004). Consequently, in this study, the relationship of three types of goals, and employee commitment to these different types of goals with department performance was examined. No previous study has examined the relationship of these three goals to performance in organizational settings.

Achieving departmental performance expectations in times of uncertainty may require leaders and their employees to adapt in response to emerging threats or opportunities. Yukl and Mahsud (2010) argued that organizational adaptation typically involves a change in goals and the redirection of key human resources. The role the leader plays in choosing these goals and motivating employees to commit to these goals may be one of the key adaptations required of a leader. Motivating employees to pursue goals, whether the goals are new or existing, has been shown to be a fundamental requirement in realizing desired performance outcomes.

Goal-Setting Theory

Locke and Latham's (1990, 2002) goal-setting theory states that a specific high goal leads to higher performance than urging people to do their best. Three of the four mediators are primarily motivational, namely choice, effort, and persistence. A fourth mediator is primarily cognitive. A goal cues an individual to recall extant knowledge/skills necessary to attain the goal. More than 1,000 studies in laboratory and field settings, involving myriad tasks, performed by individuals as well as groups have provided empirical support for this aspect of the theory (Mitchell & Daniels, 2003). This is because a specific goal is a regulatory mechanism for individuals to monitor, evaluate, and adjust their behavior. Moreover, a specific goal often provides a "strong situation" as to requisite behavior (Mischel, 1968).

Because the primary focus of goal-setting theory is motivation, the tasks used in testing it are typically those that an individual or group have already mastered. There is little or no uncertainty or ambiguity on how to perform them (Locke & Latham, 1990). With few exceptions, the

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goals studied by behavioral scientists have been specific performance outcomes to be attained. Several laboratory experiments, however, have shown that when people lack the knowledge/skill to perform at a specified high level, setting a vague rather than a specific goal, namely urging them to do their best, results in higher performance than specifying a high outcome to be attained (e.g., Kanfer & Ackerman, 1989; Winters & Latham, 1996). This is because a specific high performance goal imposes greater attentional demands on people when they are in a learning mode than is the case when people are given a vague or abstract goal, such as to "do-your-best." Effective performance on a task that is complex for an individual requires, in addition to effort, the discovery of the appropriate strategies for performing effectively. Mone and Shalley (1995), using a task where people lacked the knowledge to perform it, found that the dysfunctional effect of a specific high performance goal increased over a 3-day period while the performance of those with a "do-your-best" goal became increasingly better. Rather than searching systematically for effective strategies, those with a specific high performance goal to attain appeared to be mindlessly switching from one strategy to another in order to attain it.

Wood and Locke (1990) found that the effect size of goals is usually smaller on complex than simple tasks. The beneficial effects of goal setting, they said, are often delayed on complex tasks because learning is required. Hence, Winters and Latham (1996) hypothesized that a high performance outcome goal should be set only when the person or group has the ability to perform the task effectively. Ability is a moderator variable in goal-setting theory (Latham & Locke, 2007; Locke & Latham, 2002).

Of the 1,000 or more studies on goal setting, only 8 have been conducted on the effect of a learning goal on performance (Kaplan, Erez, & Van-Dijk, 2004; Kozlowski & Bell, 2006; Latham & Brown, 2006; Latham, Seijts, & Crim, 2008; Noel & Latham, 2006; Seijts & Latham, 2001; Seijts, Latham, Tasa, & Latham, 2004; Winters & Latham, 1996). A learning goal enables a leader to focus employees' attention on acquiring the knowledge/ability for performing a task effectively rather than relying on the knowledge/skill employees already possess (Seijts & Latham, 2005).

Consistent with empirical research on performance goals (Locke & Latham, 1990), research on learning goals has been proceeding inductively. Winters and Latham (1996) began research on learning goals by addressing two questions: Does a learning goal, as is the case for a performance goal, have a positive effect on subsequent task performance? Does the type of task, where a person has/has not the ability to perform effectively moderate the effect of both learning and performance goals? The answer to both questions was shown in their study to be yes. A performance goal only increases task performance when a person has the requisite knowledge/ability. When ability is lacking, a vague goal increases task performance relative to a performance goal. But, a specific high-learning goal increases task performance significantly more than either a do-your-best or performance goal. This is because a learning goal draws attention away from the end result and emphasizes the importance of understanding the task. The focus is on discovering/developing a plan for performing it effectively (Seijts & Latham, 2005). This finding has been replicated in laboratory settings by Drach-Zahavy and Erez (2002) and Kozlowski and Bell (2006). Latham et al. (2008) found that, as is the case with a performance goal, the higher the learning goal the higher a person's performance.

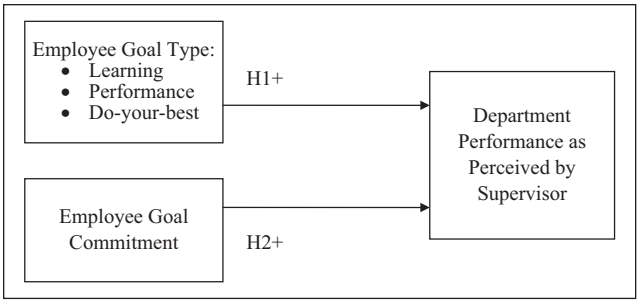

Figure 1. Theoretical model

In an educational setting, Latham and Brown (2006) found that first-year MBA students who self-set a specific high learning goal regarding ways to make their education meaningful to them had a significantly higher grade point average at the end of the academic year than those who either set a specific high distal performance goal or were urged by the Dean to "do-your-best" to obtain a meaningful education. Furthermore, satisfaction with the MBA program was highest for those people in the learning goal condition.

Model and Hypotheses

The hypothesized model that was tested in this study is shown in Figure 1. A major limitation of the paucity of studies of learning goals is that the majority of them have been conducted in a laboratory (e.g., Latham et al., 2008), a simulation (e.g., Seijts et al., 2004), or an educational setting (Latham & Brown, 2006). Thus, the generalizability of these findings to organizational settings has yet to be examined. The present study is based on field data that spanned a variety of industries, and hence addresses this limitation.

The environment in which this study was conducted was one of high economic and employment uncertainty. As the *Financial Times* (Freeland, 2009) noted, the global economic crisis had bankrupted century-old institutions and brought down once-mighty industrial organizations (e.g., AIG, General Motors, Lehman Brothers). Unemployment in the United States was relatively high. Hence, it was hypothesized that a leader's choice of goal type has a significant

effect on a department's performance. As Frese and Zapf (1994) observed, high performance is not always because of sheer effort or persistence. It is also because of cognitive understanding of the tasks. This is likely imperative in an unstable economic environment. A specific high-learning goal, unlike a performance or do your best goal, may increase the probability that a correct process or procedure will be discovered. Thus, the first hypothesis tested was,

> *Hypothesis 1*: The relationship between learning goals for employees and their department's performance is significantly higher than that for a specific performance or a vague "do-your-best" goal.

Goal commitment is defined as one's determination to attain the goal (Locke & Latham, 1990; Locke, Latham, & Erez, 1988). Thus, the commitment a leader elicits from employees to a department's goals is critical for high performance. Klein, Wesson, Hollenbeck, and Alge (1999) found a direct effect of commitment to a performance goal on performance. Seijts and Latham (2011), using a complex business simulation, also found a direct effect of commitment to a learning goal on performance. This is because "It is virtually axiomatic that a goal a person is not really trying for is not really a goal and therefore cannot have much effect on subsequent action" (Locke & Latham, 1990, p. 124).

As a result of this research conducted in laboratory settings, where the dependent variable was an individual's performance, the following hypothesis was tested in the workplace:

> *Hypothesis 2*: There is a significant, positive relationship between employee goal commitment and a department's performance.

In summary, the two following hypotheses were tested. First, the relationship between employee learning goals and the employees' departmental performance is significantly higher than that for a specific employee performance goal or a vague employee goal, namely to a "do-your-best" goal. Second, the relationship between employee commitment to a learning goal and a department's performance is significant and positive.

Method

Sample and Procedure

A survey was conducted on three different types of employee goals that were being set by leaders in industry (e.g., financial, technology, and manufacturing) in the southeastern United States. The survey was administered to 404 leaders and their employees. The survey was completed anonymously.

Of the 404 leaders with 5 or more subordinates contacted, 174 and 5 of their employees (n = 870) responded (43.1% response rate for managers and 5 employees).[1] Their respective mean ages were 37.12 years (SD = 11.17) and 29.37 years (SD = 8.22). Their respective tenure with their employing organization was 17.1 years (SD = 6.10) and 3.02 years (SD = 2.69).

Measures

Goal type. The employees responded to a 6-item, 5-point Likert-type questionnaire adapted from Seijts et al. (2004) and Seijts and Latham (2005) for assessing learning (e.g., "goals set for me by my manager are based on specific learning objectives, such as gaining knowledge or learning a new skill"), performance (e.g., ". . . are based on specific performance outcomes or results I need to achieve"), or goals that are vague/abstract (e.g., ". . . are most likely to be 'do-your-best' goals rather than specific goals").

The items were factor analyzed using varimax rotation. The items loaded on three separate factors with an eigenvalue greater than 1.0, consistent with the three types of goals. The Cronbach coefficient alphas for these three types of goals were .82, .74, and .81, respectively.

Goal commitment. Hollenbeck and Klein (1987) noted a large number of measurement problems in many of the studies of goal commitment that led to inconsistent results. Subsequently, Klein, Wesson, Hollenbeck, Wright, and DeShon (2001) developed a reliable and valid self-report scale for measuring goal commitment. This 5-point Likert-type scale was used in the present study. A factor analysis revealed that all items loaded above 0.60 on a single factor with an eigenvalue of 2.03. The Cronbach coefficient alpha was .78. Sample items include the following: "I am very committed to completing the goals given to me by my manager" and "I work hard to complete the goals given to me by my manager."

Performance. A department's (n = 174) performance was assessed by the respective manager on a 7-item, 5-point Likert-type questionnaire developed by Delery and Huselid (1998). A factor analysis revealed that all 7 items loaded above 0.60 on a single factor with an eigenvalue of 4.04. The Cronbach coefficient alpha was .84. Sample items include the following: "How would you compare your department's performance with other departments that do the same kind of work in terms of . . . quality of products?," ". . .services or performance?," ". . . satisfaction of customers or clients?"

Controls. Age and tenure of a respondent, as well as the size of the department and goal orientation, were controlled in this study.

Goal orientation. Goal orientation (Dweck, 1986) is typically assessed as a trait. People with a learning-goal orientation (vs. a performance or avoiding orientation) typically choose tasks where they can enhance their knowledge and

Table 1. Summary Statistics and Zero-Order Correlations

Variable	*M*	*SD*	1	2	3	4	5	6	7	8	9	10	11
1. Department Performance	3.98	0.59											
2. Employee Learning Goal (LG)	3.54	0.49	.27***	(.72)									
3. Employee Performance Goal (PG)	3.61	0.49	.21**	.59***	(.74)								
4. Employee Do-Your- Best Goal (BG)	2.89	0.61	–.09	.07	–.20**	(.71)							
5. Employee Goal Commitment (GC)	3.97	0.45	.26***	.30***	.52***	–.33***	(.78)						
6. Employee Learning Goal Orientation	3.91	0.50	.21**	.31***	.40***	–.23**	.70***	(.78)					
7. Employee Proving Goal Orientation	3.52	0.50	.14†	.23**	.19*	.23**	.015*	.28***	(.82)				
8. Employee Avoiding Goal Orientation	2.92	0.69	.00	.14†	.00	.50***	–.35***	–.27***	.43***	(.72)			
9. Department Size	17.9	29.3	–.01	–.05	–.06	–.02	–.15†	–.10	–.02	.03	—		
10. Supervisor Tenure	6.10	6.70	.04	.07	–.02	.10	.07	.08	.03	.12*	.04	—	
11. Employee Tenure	3.02	2.69	.03	–.09	–.02	–.07	.08	–.01	.03	–.03	.03	.01	—

Note. $N = 174$ for supervisors, 870 for employees. Reliability (α) estimates are listed on the diagonal in parentheses.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

skills. Although Seijts et al. (2004) found that goal setting as a state masks goal orientation on a dynamic task, people with a learning goal orientation performed better than those with a performance goal orientation, a predisposition to choose tasks where they can be seen as competent in the eyes of others, in the "do-your-best" condition, weak situation (Mischel, 1969). Employees in the present study were assessed with a 13-item, 7-point Likert-type scale developed by VandeWalle (1997). The items were factor analyzed using varimax rotation. The items loaded on three separate factors with an eigenvalue greater than 1.0, consistent with the three types of goal orientation. The Cronbach coefficient alphas for a learning goal orientation, performance goal orientation, and an avoiding goal orientation were .85, .79, and .83, respectively.

Results

Descriptive Statistics and Correlations

Table 1 shows the descriptive statistics, intercorrelations, and reliability measures for the study variables.

Tests of Hypotheses

The results of the analysis of the model are displayed in Table 2. Regression analysis was performed for Hypotheses 1 and 2 (Aiken & West, 1991; Cohen, Cohen, West, & Aiken, 2003).

For Hypothesis 1, effects are introduced across the columns as the model is developed, indicated as numbered in columns Model 1 and Model 2. Estimates of control variables are included in Model 1. The estimates for all three types of employee goals are introduced in Model 2. For Hypothesis 2, the estimate for employee goal commitment is introduced in Model 3.

As noted earlier, each department's performance was determined by the supervisor on a departmental level, which was typically composed of five employees.[2] A linear regression model was used with conditions of restricted maximum likelihood estimation, using the SAS Version 9.1.3 and the SAS procedure PROC.

Hypothesis 1 was supported. Learning goals explained significantly more of the variance in a department's performance than did a performance or "do-your-best" goal. The results for Model 2, shown in Table 2, indicate that the main effect of learning goals was positive and significant ($\beta = 0.25$, $p < .01$). The performance goal effect, and do-your-best goal effect were not significant ($\beta = –0.02$, $p = ns$) and ($\beta = –0.13$, $p = ns$), respectively.

The results of this study also provide support for Hypothesis 2. The hypothesized relationship of employee goal commitment to departmental performance was found to be significant and positive ($\beta = 0.18$, $p < .05$). In keeping with the concept of testing the full model of interest, all the goal type variables were kept in the regression analysis. It is noteworthy that the effect of learning goals remained significant and positive ($\beta = 0.24$, $p < .01$).

Discussion

Yukl and Mahsud (2010) argued that flexible, adaptive leadership is essential for organizational effectiveness when times are uncertain. This adaptation may be largely dependent on the clarity and accuracy of the information the leader receives, and the leader's correct interpretation of the implications for their department's performance. The goals leaders subsequently set for their respective teams should reflect this interpretation. The goals serve as the guided motivation the leaders strive to impart to their organization's employees.

As argued in this study, the type of goal used to motivate employees can take several forms. The results of this study suggest that a goal designed to focus an employee on learning the processes and procedures needed by the employee to achieve the goal is significantly related to a department's

Table 2. Results of Regression Analysis for Hypothesis 1, Hypothesis 2, and Hypothesis 3[a]

Predictor	Model 1	Model 2	Model 3
Controls			
Department size (no. of people)	0.01	0.01	0.01
Supervisor tenure (years)	–0.04	–0.03	–0.02
Employee education (years)	0.03	–0.02	–0.03
Employee tenure (years)	0.07	0.02	0.02
Learning goal orientation	0.13	0.11	0.10
Performance goal orientation	0.08	0.03	0.03
Avoiding goal orientation	0.02	0.01	0.01
Main effects			
Employee learning goal (LG)		0.25**	0.24**
Employee performance goal (PG)		0.02	–0.06
Employee do-your-best goal (BG)		–0.13	–0.08
Employee goal commitment (GC)			0.18*
Adjusted R^2	.01	.05	.07
Change in adjusted R^2		.04	.03

a. Standardized coefficients are reported.
†$p < .10$. *$p < .05$. **$p < .01$. ***$p < .001$.

performance. Defining learning goals may take more forethought on the part of the leader than setting other types of goals. For instance, performance goals may be the traditional type of goals used by an organization. In the absence of a clearly set goal, the default unspoken goal is typically interpreted as a vague "do-your-best" goal. Therefore, to achieve the benefits argued for in this study, a leader needs to consciously define employee goals in terms of discovering processes and procedures to implement to improve a department's performance.

For instance, a traditional performance goal for a loan officer in a bank might be stated as, "Increase commercial loan production by 20% this quarter compared with last quarter." A learning goal for another loan officer might be, "Determine five processes to increase commercial loan production."

This study also evaluated the effect of employee commitment to the goals they were assigned. In a simulation experiment, Seijts and Latham (2011) found that an assigned learning goal and commitment to the goal were both significantly related to student performance in the simulation. These findings suggest that the assignment of a learning goal, and commitment to that goal, act independently in regard to a department's performance. This finding suggests that leaders should focus on both a learning goal and the commitment by employees to the goals as separate actions. That is, it is not enough to presume that assigning a learning goal will translate into a commitment to that goal.

One way leaders can increase employee commitment to goals is to take into account findings by Klein et al. (1999). They reported there are strong positive overall relationships between goal commitment and the antecedents of attractiveness of goal attainment, expectancy of goal attainment, and motivational force. Locke et al. (1988) found that people must understand the logic and rationale for why a goal is set before they will commit to it.

Summary

The contribution of the present findings to the goal-setting literature is at least fourfold. First, this is the only study to assess the relationship of a learning goal to performance in industrial organizations. Second, this is the only study to examine the relationship of having one or more of three goals, namely learning, performance, and "do-your-best" with departmental performance. Third, this is the first study to examine the relationship of learning goals with a macro rather than a micro performance variable, namely, a department's performance rather than an individual's. Fourth, the present study integrated the motivational effects of goal setting with previous research findings on leadership, namely affecting employee goal commitment. In doing so, the role of goal commitment on departmental performance was examined as a direct effect.

These findings are of practical as well as theoretical importance for the following reasons. First, the results show that two types of goals, namely exhortations by a leader for employees to "do-your-best" and setting a performance goal were not significantly related to a department's performance. The fact that a "do-your-best" and a and a performance goal were not related to performance likely reflects the turbulent economic environment when this study was conducted. There was extensive television coverage of people losing their jobs because of companies shutting the doors and going out of business. Hence, it is likely that employees were uncertain as to what to do to ensure their department contributed to the employing organization's survival.

Second, the relationship between a learning goal and a department's performance was high in this study. Again, this may reflect the environmental turbulence when the study was conducted. Falling back on extant knowledge and skills to attain specific high performance goals may have been necessary but not sufficient for the survival of many of those companies. Hence, employees and their managers were likely searching for new strategies/procedures that would enhance their department's competitiveness/survival.

Arguably, an important finding was the examination of a commonly suggested variable in goal-setting theory, that is, commitment to the assigned goal. The finding that this variable acted independent from the assigned goal suggests that it deserves considerable attention by leaders. This suggests that leaders should spend adequate time understanding how

to motivate their employees to commit to assigned goals in addition to the strategic intent of the organization when they derive the goals.

Limitations and Future Research

Ideally, the present data, collected in a turbulent worldwide economic crisis, would have been compared with data collected in a relatively stable environment. No such data exist. Hence, this study should be replicated if and when relative economic stability is experienced in the United States and elsewhere.

Determining the direction of causality among the variables is not possible with correlational data. Perhaps high-performing departments are those who set high learning goals. And high-performing departments may engender goal commitment from employees. Despite the inability to draw casual inferences, the present results, viewed in conjunction with the six laboratory experiments and the field experiment in an educational setting that preceded it, suggest that organizations, in times of uncertainty, consider setting specific learning goals for their department, and taking steps to motivate goal commitment for their respective department's employees.

Declaration of Conflicting Interests

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Notes

1. Managers with five or more employees in their department were surveyed. A response was considered complete when a manager survey and five corresponding employee surveys were completed.
2. This type of relationship, namely, multiple employees in one department, represents nested or multilevel data. This is a form of multilevel data that is sometimes best handled with a mixed effect model, also referred to as a random coefficient model (RCM) or hierarchical linear model (HLM). Therefore, a mixed effect model with conditions of restricted maximum likelihood estimation, using the SAS version 9.1.3 and the SAS procedure PROC MIXED. The fit of this model was compared using the SAS procedure PROC. No additional insight was provided using the RCM approach; therefore, regression was used for the sake of parsimony.

References

Aiken, L. S., & West, S. G. (1991). *Multiple regression: Testing and interpreting interactions*. Thousand Oaks, CA: Sage.

Cohen, J., Cohen, P., West, S. G., & Aiken, L. S. (2003). *Applied multiple regression/correlation analysis for the behavioral sciences* (3rd ed.). Mahwah, NJ: Lawrence Erlbaum.

Delery, J. E., & Huselid, M. A. (1998). Issues of fit in strategic human resource management: Implications for research. *Human Resource Management Review*, *8*, 289-310.

Drach-Zahavy, A., & Erez, M. (2002). Challenge versus threat effects on the goal performance relationship. *Organizational Behavior and Human Decision Processes*, *88*, 687-682.

Dweck, C. S. (1986). Motivational processes affecting learning. *American Psychologist*, *41*, 1040-1048.

Freeland, C. (2009, April 11-April 12). Calmer Obama ushers out the age of the imperial chief. *Financial Times*, p9.

Frese, M., & Zapf, D. (1994). Action as the core of work psychology: A German approach. In H. C. Triandis, M. D. Dunnette, & L. M. Hough (Eds.), *Handbook of industrial and organizational psychology* (pp. 271-340). Palto Alto, CA: Consulting Psychologist Press.

Kanfer, R., & Ackerman, P. L. (1989). Effort and cognitive abilities: An integrative/aptitude-treatment interaction approach to skill acquisition. *Journal of Applied Psychology*, *5*, 237-264.

Kaplan, E., Erez, M., & Van-Dijk, D. (2004, April). Reconciling differences between the goal setting and self-regulation theories. In M. Erez (Chair), *Goal setting, goal orientation, and self regulation forms: An integration*. Symposium presented at the 19th annual meeting of the Society for Industrial-Organizational Psychology. Chicago, IL.

Klein, H. J., Wesson, M. J., Hollenbeck, J. R., & Alge, G. J. (1999). Goal commitment and the goal-setting process: Conceptual clarification and empirical synthesis, *Journal of Applied Psychology*, *84*, 885-896.

Klein, H. J., Wesson, M. J., Hollenbeck, J. R., Wright, P. M., & DeShon, R. P. (2001). The assessment of goal commitment: A measurement model meta-analysis. *Organizational Behavior and Human Decision Processes*, *85*, 32-55.

Kozlowski, S. W. J., & Bell, B. S. (2006). Disentangling achievement orientation and goal setting effects on self-regulatory processes. *Journal of Applied Psychology*, *91*, 900-916.

Latham, G. P. (2004). The motivational benefits of goal-setting. *Academy of Management Executive*, *18*, 126-129.

Latham, G. P., & Brown, T. C. (2006). The effect of learning vs. outcome goals on self-efficacy, satisfaction, and performance in an MBA program. *Applied Psychology: An International Review*, *55*, 606-623.

Latham, G. P., & Locke, E. A. (2007). New developments and directions for goal-setting research, *European Psychologist*, *12*, 290-300.

Latham, G. P., Seijts, G. H., & Crim, D. (2008). The effects of learning goal difficulty level and cognitive ability on strategy development and performance. C*anadian Journal of Behavioural Sciences*, *40*, 220-229.

Locke, E. A., & Latham, G. P. (1990). *A theory of goal setting and task performance*. Englewood Cliffs, NJ: Prentice Hall.

Locke, E. A., & Latham, G. P. (2002). Building a practically useful theory of goal setting and task effort. *American Psychologist*, *9*, 705-717.

Locke, E. A., Latham, G. P., & Erez, M. (1988). The determinants of goal commitment. *Academy of Management Review*, *13*, 23-29.

Mischel, W. (1968). *Personality and assessments*. New York, NY: Wiley.

Mitchell, T. R., & Daniels, D. (2003). Motivation. In W. C. Borman, D. R. Ilgen, & R. J. Klimoski (Eds.), *Comprehensive handbook of psychology: Industrial-organizational psychology* (Vol. 12, pp. 225-254). New York, NY: Wiley.

Mone, M. A., & Shalley, C. E. (1995). Effects of task complexity and goal specificity on change in strategy and performance over time. *Human Performance*, *8*, 243-262.

Noel, T. W., & Latham, G. P. (2006). The importance of learning versus outcome goals for entrepreneurs. *International Journal of Entrepreneurship and Innovation*, *7*, 213-220.

Seijts, G. H., & Latham, G. P. (2001). The effect of learning, outcome, and proximal goals on a moderately complex task. *Journal of Organizational Behavior*, *22*, 291-307.

Seijts, G. H., & Latham, G. P. (2005). Learning versus performance goals: When should each be used? *Academy of Management Executive*, *19*, 124-131.

Seijts, G. H., Latham, G. P., Tasa, K., & Latham, B. W. (2004). Goal setting and goal orientation: An integration of two different yet related literatures, *Academy of Management Journal*, *47*, 227-239.

VandeWalle, D. M. (1997). Development and validation of a work domain goal orientation instrument. *Educational and Psychological Measurement*, *57*, 995-1015.

Winters, D., & Latham, G. P. (1996). The effect of learning versus outcome goals on simple versus a complex task. *Group and Organization Management*, *21*, 235-250.

Wood, R., & Locke, E. A. (1990). Goal setting and strategy effects on complex tasks. In B. Staw & L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 73-109). Greenwich, CT: JAI Press.

Yukl, G. (2012). *Leadership in organizations* (8th ed.). Upper Saddle River, NJ: Pearson Education.

Yukl, G., & Mahsud, R. (2010). Why flexible and adaptive leadership is essential. *Consulting Psychology Journal*, *62*, 81-93.

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