



Journal of
Management
Development
21,5

376

Received March 2001
Revised July 2001
Accepted July 2001

Employee engagement and manager self-efficacy

Implications for managerial effectiveness and development

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Keywords *Employees, Management, Effectiveness, Management development*

Abstract *Although technology still dominates, human resources and how they are managed is receiving increased attention in the analysis of gaining competitive advantage. Yet, many complex questions remain. This study first examines the theoretical understanding of employee engagement. Then an empirical investigation is made of the role that a wide variety of managers' (n = 170) psychological state of self-efficacy plays in the relationship between their employees' (average of about 16 per manager) measured engagement and a multiple measure (self, subordinates and peers) of the managers' effectiveness. Results of the statistical analysis indicate that the manager's self-efficacy is a partial mediator of the relationship between his or her employees' engagement and the manager's rated effectiveness. Overall, these findings suggest that both employee engagement and manager self-efficacy are important antecedents that together may more positively influence manager effectiveness than either predictor by itself. Implications for effective management development and practice are discussed.*

Organizations have traditionally relied upon financial measures or hard numbers to evaluate their performance, value, and health. Although metrics such as profitability, revenue, and cash flow remain important financial indicators of effective performance, the so-called "soft", human-oriented measures such as employee attitudes, traits, and perceptions are also now being recognized as important predictors of employee behavior and performance (Pfeffer, 1998). For instance, researchers have found a significant positive relationship between employee cognitive attitudes and performance (Petty *et al.*, 1984; Ostroff, 1992), personality traits and job performance (Barrick and Mount, 1991; Tett *et al.*, 1991), and emotions and favorable job outcomes (Staw *et al.*, 1994). Moreover, a recent meta-analysis conducted by the Gallup Organization concluded that the most profitable work units of companies have people doing what they do best, with people they like, and with a strong sense of psychological ownership for the outcomes of their work (see Harter, 1999).

Within over 2,500 business, health care and education units, Gallup has empirically determined what it calls "employee engagement" to be a significant predictor of desirable organizational outcomes such as customer satisfaction,



retention, productivity, and profitability (see Buckingham and Coffman, 1999). This employee engagement is measured by the Gallup Workplace Audit (GWA) consisting of 12 questions such as: Do I know what is expected of me at work? At work, do I have the opportunity to do what I do best every day? and At work, have I had the opportunities to learn and grow? (see Buckingham and Coffman, 1999, p. 28). These GWA questions were derived through thousands of focus groups. The questions with a five-point Likert scale were then administered to over a million employees and factor analyzed to derive the 12 questions. They were then subjected to confirmatory analyses (see Buckingham and Coffman, 1999, Appendix D and E).

Gallup has overwhelming empirical evidence of their measured employee engagement and desirable organizational outcomes (e.g. profit, productivity, safety, retention and customer satisfaction) over the years (Buckingham and Coffman, 1999). However, linking the engagement construct to an established theory in the management literature also seems desirable for two reasons: first, such a theoretical framework can aid in further validation, understanding, and testing of Gallup's conceptualization of engagement. Second, there may be other, perhaps overlooked, theoretically-based mechanisms or mediators which could help explain and add value to the relationship between employee engagement and the effectiveness of managers in today's organizations.

Specifically, the purpose of this article is threefold: first, we plan to assess the conceptual fit of Gallup's employee engagement measure with a recognized and published psychological engagement theory framework. Second, we will specifically analyze the role that a manager's self-efficacy may play in the employee engagement – managerial effectiveness relationship. Finally, we will explore the implications that the findings may have for effective management development and practice.

Theoretical foundation for employee engagement

Much of Gallup's current research has focused on the empirical relationship between employee engagement, as measured by the 12 questions of the GWA, and desirable organizational outcomes. At this point, an alternative theoretical framework published in the management literature may add further understanding and convergent validity to this empirical research stream. Specifically, we propose that the work done by Kahn (1990, 1992) on personal engagement can provide one such convergent theory for Gallup's empirically derived employee engagement.

According to Kahn (1990), employee engagement is different from other employee role constructs such as job involvement (Lawler and Hall, 1970; Lodahl and Kejner, 1965), commitment to organizations (Mowday *et al.*, 1982), or intrinsic motivation (Deci, 1975). Instead, Kahn (1990, p. 693) suggests that:

While these constructs add to our understanding of how employees perceive themselves, their work, and the relation between the two, the understandings are too general, existing at some distance from the day-to-day process of people experiencing and behaving within particular work situations.

Employee engagement, on the other hand, focuses on how the psychological experiences of work and work contexts shape the process of people presenting and absenting themselves during task performances (Kahn, 1990). Moreover, according to Kahn (1990), engagement is a multidimensional construct. Employees can be emotionally, cognitively, or physically engaged. For psychological engagement and organizational behaviors, the two major dimensions are emotional and cognitive engagement. To be *emotionally* engaged is to form meaningful connections to others (e.g. co-workers and managers) and to experience empathy and concern for others' feelings. In contrast, being cognitively engaged refers to those who are acutely aware of their mission and role in their work environment. According to Kahn (1990, 1992), employees can be engaged on one dimension and not the other. However, the more engaged an employee is on each dimension, the higher his or her overall personal engagement.

As Kahn (1990) suggests, employees experience dimensions of personal engagement (or disengagement) during daily task performances. Engagement occurs when one is cognitively vigilant and/or emotionally connected to others. For example, employees who know what is expected of them, who form strong relationships with co-workers and managers, or who in other ways experience meaning in their work, are engaged.

Disengaged employees, on the other hand, uncouple themselves from work roles and withdraw cognitively and emotionally. Disengaged employees display incomplete role performances and task behaviors become effortless, automatic or robotic (Hochschild, 1983). Disengagement may be a result of employees who lack needed social interaction at work, who experience little autonomy in work roles, or who feel their jobs are unimportant.

Using Kahn's (1990) definition of engagement, findings have indicated that organizational members who are personally engaged (cognitively and/or emotionally) as opposed to disengaged are not only more satisfied, but also more productive. This is similar to what Gallup has found using their empirically validated GWA instrument designed to measure their conceptualization of engagement. By conceptually comparing the GWA (Buckingham and Coffman, 1999) with Kahn's (1990) theoretically derived dimensions of engagement, there seems to be a conceptual fit, and thus establish theoretical grounding for better understanding of employee engagement and a way to operationalize and measure it through the GWA.

Manager self-efficacy as a value-added mediator

In addition to the role that a theoretical framework such as Kahn's (1990, 1992) personal engagement may provide for a better understanding and Gallup's GWA operationalization and measurement of engagement (Buckingham and Coffman, 1999), testing the role of widely recognized psychological constructs such as self-efficacy as a mediator between employees' engagement and their manager's effectiveness may add considerable value. Specifically, over the past two decades, self-efficacy has emerged as a major construct that may help

explain and predict work-related effectiveness. According to Bandura (1986, 1997) and applied to the workplace by Stajkovic and Luthans (1998a), self-efficacy refers to an individual's beliefs about his or her abilities to mobilize cognitive resources and courses of action needed to successfully execute a specific task within a given context. Importantly from a management development perspective, unlike personality traits which are largely fixed, self-efficacy is state-like and dynamic; it can change over time with new information, experience, and learning. That is, self-efficacy is adaptable to human resource development and management for performance improvement.

Over 20 years of research has revealed a strong positive relationship between self-efficacy and performance. Specifically, studies have shown that the higher the person's self-efficacy, the more likely he or she will be to initiate tasks, sustain effort toward task accomplishment, and persist when problems are encountered or even in the face of failure (Bandura, 1986, 1997; Stajkovic and Luthans, 1998a,b). A recent meta-analysis by Stajkovic and Luthans (1998a) found an average weighted correlation of 0.38 between self-efficacy and work-related performance which transforms into an impressive 28 percent increase in performance. Comparatively, self-efficacy has been shown to be a better predictor of work-related performance than traditional workplace attitudes (e.g. job satisfaction and organizational commitment), personality traits, level of education, training and skill, goal setting, and feedback interventions (for this comparative analysis see Stajkovic and Luthans, 1998a,b).

Importantly, we propose that the manager's self-efficacy may be related to employee engagement because as the manager's employees become more engaged (cognitively and/or emotionally) in their work, the manager acquires confidence and belief in her/his to abilities create and build an engaged team or group successfully. This engaged team led by the efficacious manager results in desired unit/organizational outcomes. Therefore, given the considerable evidence of the positive relationship between self-efficacy and performance and that it may be related to employee engagement, as described here, we tested self-efficacy as a mediator between employee engagement and managerial effectiveness. Specifically, the following hypothesis was tested in the study:

- H1.* A manager's self-efficacy will mediate the relationship between his or her employees' engagement and multiple ratings of the manager's effectiveness (see Figure 1 for a graphical depiction).

An alternate hypothesis would be that the total effects of employee engagement on managerial effectiveness may not be fully mediated through self-efficacy. Based on Gallup's considerable research, they have found that employee

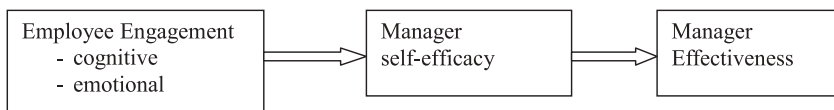


Figure 1.

engagement (GWA) has a significant direct effect on positive organizational outcomes (Buckingham and Coffman, 1999). Thus, it may be that self-efficacy is a partial rather than a complete mediator, suggesting that the effects of employee engagement on outcomes may be indirect (thus, a partial mediator) through their manager's self-efficacy. Using the analysis techniques employed by Renn and Vandenberg (1995), we tested a second hypothesis as follows:

H2. The manager's self-efficacy will be a partial mediator of the relationship between his/her employees' engagement and the manager's rated effectiveness in that the dimensions of employee engagement will have direct effects on their manager's rated effectiveness and indirect effects through self-efficacy (see Figure 2 for a graphical depiction).

The method used in the study

As part of its continuing management development program, data were collected from the Gallup Leadership Institute on 170 managers and a sampling of their subordinates (an average of 16.3 per manager). These managers were employed in a wide cross-section of levels, functions, and organizations. Surveys containing questions for this study were distributed to and completed by the managers and their subordinates at their respective organizations. Participation was endorsed by the home organization's chief executive officer, but was voluntary. The participants were assured their responses would be confidential and never released in identifiable form.

The 12 questions of the GWA (Buckingham and Coffman, 1999) were used to measure the engagement of each manager's subordinates. The self-efficacy scale administered to the subject managers consisted of ten items and was constructed by Gallup to meet Bandura's (1986, 1997) theoretical criteria. In particular, the scale was designed to meet Bandura's guidelines that it "represent beliefs about personal abilities to produce specified levels of performance, and must not include other characteristics" (Bandura, 1997, p. 45). For example, the efficacy scale was framed to be specific to the managers' performance situations and included effort items such as "I always get the job done" and persistence items such as "I persist until the goal is achieved." This ten-item, 1-5 scale self-efficacy measure had a highly satisfactory internal reliability Cronbach alpha of 0.86.

The measure of managerial effectiveness in the managers' respective organizations were derived from multiple raters including a self-rating ($n = 170$), a sampling of subordinates ($n = 158$), and peers ($n = 121$) that asked

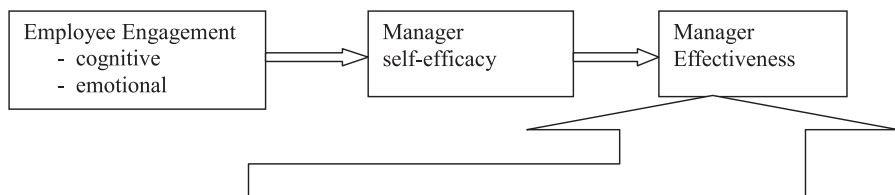


Figure 2.

a confidential effectiveness evaluation on a scale of 1-5. Each of the respondents answered the target manager's effectiveness rating adjusted for reference language.

Results of the analysis of self-efficacy

Baron and Kenny's (1986) suggested analysis approach for determining mediation was used to test the hypotheses. Their approach involves estimating three regression equations for the hypothesized relationships. In particular, *H1* states that the manager's self-efficacy may be a mediator in the relationship between the manager's subordinates' engagement and the manager's rated effectiveness. Thus, support for this hypothesis would be provided if:

- the dimensions of engagement affect self-efficacy;
- each dimension of engagement affects each of the dependent variables (i.e. employee engagement affects self, peer, or subordinates' ratings of the manager's effectiveness); and
- the manager's self-efficacy affects each of the dependent variables.

Further, the affect of each dimension of employee engagement on each of the dependent variables must be lower in magnitude when self-efficacy is controlled (i.e. the affect of employee engagement on manager effectiveness must be lower in magnitude when efficacy is controlled).

H2 states that the manager's self-efficacy will be a partial rather than a complete mediator. To provide support for this hypothesis, the results of the third regression equation must show that the independent variable affects the dependent variables when the mediator is controlled (Renn and Vandenberg, 1995). That is, employee engagement must still affect manager effectiveness when self-efficacy is controlled.

The means, standard deviations, and correlations among the study variables are presented in Table I. *H1* is that the manager's self-efficacy will possess a mediating role between the dimensions of employee engagement and the

	M	SD	1	2	3	4	5	6
1. Self ratings of leader effectiveness	4.24	0.63	-					
2. Peer ratings of leader effectiveness	3.93	0.65	0.33**	-				
3. Subordinate ratings of leader effectiveness	3.98	0.58	0.31**	0.38**	-			
4. Leader self-efficacy	4.15	0.51	0.47**	0.29**	0.24**	-		
5. Employee cognitive engagement	3.80	0.43	0.19**	0.33**	0.53**	0.16*	-	
6. Employee emotional engagement	3.83	0.33	0.25**	0.31**	0.47**	0.21**	0.76**	-

Notes: * $p < 0.05$; ** $p < 0.01$

Table I.
Means, standard deviations, and intercorrelations among study variables

manager's rated effectiveness. Following Baron and Kenny (1986), in the first regression equation, manager self-efficacy was regressed on each employee engagement dimension. To satisfy this part of the test, engagement must affect self-efficacy in the first regression equation. As seen in Table II, all the regression coefficients representing the main effect of the engagement dimensions on self-efficacy was statistically significant. These Table II results, therefore, satisfied the first part of the Baron and Kenny test for mediation.

In the second regression equation, each of the dependent variables (manager effectiveness) was regressed on the independent variables (employee engagement dimensions). This test required that the engagement variables affect each dependent variable in the second regression equation. Findings in Table III show that the regression coefficients representing employee engagement's main effects on self, peer, and subordinates' ratings of managerial effectiveness were all significant. These findings satisfied the Baron and Kenny second test for mediation.

In the third regression equation, each of the dependent variables was regressed on the employee engagement dimensions and manager self-efficacy. This test required that self-efficacy affect each outcome variable in the third regression equation, and that the affects of engagement be lower in magnitude in the third versus the second regression equation. As seen in Table IV, all of the regression coefficients representing the main effect of the manager's self-efficacy on self, peer, and direct report perceptions of managerial effectiveness were significant.

A final test for mediation in the Baron and Kenny approach required that the partial regression coefficients representing employee engagements' main effects on the manager effectiveness ratings be lower in magnitude in the regression equations that controlled for manager self-efficacy (shown in Table

Table II.

Regression results for employee engagement dimensions' effects on manager self-efficacy

Engagement dimension	Self-efficacy
Cognitive	0.18*
Emotional	0.31*

Notes: $n = 170$. Standard regression coefficients reported * $p < 0.05$

Table III.

Regression results for the employee engagement dimensions' effects on manager effectiveness

Manager effectiveness	Regression coefficients for engagement	
	Cognitive	Emotional
Self ratings ^a	0.33**	0.39*
Peer ratings ^b	0.47**	0.64**
Subordinates ratings ^c	0.85**	0.10**

Notes: Standardized regression coefficients are reported * $p < 0.05$; ** $p < 0.01$

^a $n = 170$

^b $n = 121$

^c $n = 158$

IV) than the regression coefficients obtained from the regression equations that excluded self-efficacy (regression results shown in Table III). A comparison of the partial regression and regression coefficients (results in Table IV vs Table III) revealed that the affects of employee engagement on self, peer, and subordinate perceptions of managerial effectiveness were all lower in magnitude when efficacy was controlled. These findings satisfied the second part of the final test for mediation. Combined, the results of the three regression equations satisfied all three tests for mediation suggested by Baron and Kenny (1986). In total, these findings support *H1*.

The second hypothesis states that self-efficacy will be a partial rather than a complete mediator of the engagement-manager effectiveness relationship. The test for this hypothesis related to the partial regression coefficients representing the engagement dimensions' affects on the dependent variables when self-efficacy was controlled (see Table IV). In particular, Renn and Vandenberg (1995) note that if the partial regression coefficients of the employee engagement dimensions' affects on the outcomes are significant when manager self-efficacy is controlled, support for the partial mediation hypothesis exists. By contrast, if the partial regression coefficients are not significant when self-efficacy is controlled, support for a complete mediator is provided. As seen in Table IV, all of the partial regression coefficients were significant after self-efficacy was controlled. Thus, the findings support the second hypothesis that the manager's self-efficacy is a partial rather than a complete mediator variable.

Finally, the regression results shown in Table V also indicated that manager self-efficacy explained significant amounts of variance in self, peer, and subordinates' ratings of effectiveness beyond the employee engagement

Predictor	Manager effectiveness ratings		
	Self	Peer	Subordinates
Cognitive engagement	0.21*	0.29**	0.78**
Self-efficacy	0.72**	0.21*	0.19*
Emotional engagement	0.27*	0.29*	0.97**
Self-efficacy	0.68**	0.21*	0.22*

Notes: Standardized regression coefficients are reported. * $p < 0.05$; ** $p < 0.01$

Table IV.
Regression results for employee engagement dimensions' and manager self-efficacy's effects on manager effectiveness

Predictor	R^2 for manager effectiveness ratings		
	Self	Peer	Subordinates
Engagement dimensions	0.31*	0.21*	0.28*
Manager self-efficacy	0.35*	0.15*	0.30*

Notes: * $p < 0.05$
Manager self-efficacy entered into regression equation after the engagement dimensions

Table V.
Outcome variance explained by employee engagement dimensions and manager self-efficacy

dimensions. As expected, the dimensions of engagement alone accounted for significant amounts of variance in the outcome variable (managerial effectiveness rating). However, the proportion of variance accounted for in the outcome variable increases significantly when manager self-efficacy was added to the regression equation. Specifically, adding manager self-efficacy to the regression equations significantly increased the proportion of explained outcome variance in self ratings by 10 percent ($F = 46.2, p < 0.05$), peer ratings by 9 percent ($F = 35.7, p < 0.05$), and subordinate ratings by 16 percent ($F = 62.5, p < 0.05$).

In summary, our findings provided support for both hypotheses. First, results highlight that both the emotional and cognitive engagement of employees are related to their manager's self-efficacy and that the manager's self-efficacy was related to their perceived effectiveness as evaluated by the managers themselves, their peers, and their subordinates. Finally, results showed that the manager's self-efficacy was a partial mediator of the relationship between the emotional and cognitive engagement of their subordinates' and their perceived managerial effectiveness.

Summary and implications for management development

For explanation and operationalization, Gallup's conceptualization and measurement of "employee engagement" makes a conceptual fit with Kahn's (1990, 1992) personal engagement theory which contains both cognitive and emotional dimensions. For practical guidelines and development purposes, this study suggests that managers must help to create an environment in which their employees become both emotionally engaged (i.e. form strong ties to work, co-workers, and their managers) and cognitively engaged (i.e. express feelings of mission or purpose, and are provided with information and feedback). Also, there was verification of the importance that Gallup's GWA measures of engagement relate to not only workplace desirable performance and retention outcomes, but also managerial effectiveness.

Our study findings also indicate that the widely recognized psychological state of self-efficacy may provide both understanding and strengthen the employee engagement-managerial effectiveness relationship, and thus, would seem to provide added value to workplace outcomes and management development. Although the findings did not support the manager's self-efficacy as a complete mediator of the employee engagement-managerial effectiveness relationship, results did indicate that both emotional and cognitive dimensions of employee engagement had direct and indirect effects via the manager's self-efficacy on their perceived effectiveness.

Considerable research by Bandura (1997) and others have clearly demonstrated that self-efficacy can be increased in four major ways. The most obvious is through enactive mastery (successful direct experiences in a training context or on the job), vicarious learning (modeling in a training context or on-the-job through mentoring/shadowing programs), simple verbal persuasion and social support for lower level jobs and strategy development for higher

level jobs. Interestingly, the least recognized input into self-efficacy, psychological arousal, may be most closely associated with the cognitive and emotional engagement of the manager's subordinates. In other words, a major input into increasing managers' self-efficacy may be the engagement of their employees because of its effect on the psychological arousal of the managers: the managers become enthusiastic about their engaged employees which then enhances their efficacy. In other words, they feel good and efficacious about being able to build an engaged work team/group.

Employees who have strong emotional ties to their managers, who feel that their opinions count, and who believe their managers have an interest in their development (i.e. emotional engagement) are more likely to positively respond to their managers and produce favorable outcomes that help the managers to be more effective. This success in turn builds the manager's self-efficacy. Similarly, employees who know what is expected of them, understand their purpose or mission, who are given opportunities to excel and grow, and who are constantly seeking information regarding how to improve their progress (i.e. cognitive engagement) are more likely to experience success. This of course leads to the enhanced self-efficacy of their managers. In other words, the cognitive and emotional engagement of employees leads to the enhanced self-efficacy of their managers through experienced success and psychological arousal.

The reverse is also true. The increased self-efficacy of the managers also leads to the enhancement of their employees' engagement and effectiveness. This positive spiral in employee engagement and manager self-efficacy seems to provide new insight and important practical guidelines for effective management practice and development.

Since self-efficacy already has a widely recognized theoretical foundation and is generally considered to be one of, if not the best empirical predictor of work-related performance (Stajkovic and Luthans, 1998a, b), its role in employee engagement as at least a partial mediator to desired outcomes such as managerial effectiveness seems very valuable to selection and development. Specifically, not only should managers strive to have their employees become engaged, but should also be selected for their self-efficacy, and unlike established "Big Five" personality traits such as conscientiousness, have their efficacy developed. For example, Bandura (2000) has recently provided three specific approaches for how to develop self-efficacy in practicing managers.

First, is what he calls *guided mastery* which includes instructive modeling to acquire a skill or competency, guided skill perfection, and then transfer the training back to the job to insure self-directed managerial success. Second, is for the more complex, but increasingly common in the modern workplace, ways to enhance a manager's efficacy for decision-making and problem solving. He calls this *cognitive mastery modeling* to learn thinking skills and how to apply them by observing the decision rules and reasoning strategies successful models use as they arrive at solutions to problems and make effective decisions. For example, one study taught managers how to generate ideas to

improve the quality of organizational functioning and customer service by providing them guidelines and practice in innovative problem-solving (Gist, 1989). Finally, he suggests the development of self-regulatory competences (i.e. self-motivation or self-management). The development of this increasingly important self-management involves a variety of interlinked self-referent processes such as self-monitoring, self-efficacy appraisal, personal goal setting, and use of self-motivation incentives.

Whether using the more pragmatic training aimed at enhancing the four sources (i.e. mastery experiences, vicarious learning/modeling, social persuasion/feedback, and physiological/psychological arousal) or the more sophisticated approaches as suggested above, there is proven effectiveness of this development of manager self-efficacy and the potential for the future seems unlimited. In other words, both employee engagement and manager self-efficacy can be developed, and, as this study has shown, each can positively affect the other to lead in a synergistic, spiraling manner to better, more effective management of today's employees.

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