The Attenuating Effect of Role Overload on Relationships Linking Self-Efficacy and Goal Level to Work Performance

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The effort to sustain a high level of work performance over time can be a tenuous balancing act, even for the most capable individuals. On one hand, self-regulation resources such as self-efficacy beliefs and challenging personal goals contribute to a well-established high-performance cycle (Bandura, 1997; Locke & Latham, 1990), whereas on the other, stress-laden work environments threaten to interfere with self-regulation and performance (Jex, 1998). In fact, recent research suggests that high performers tend to be more affected by the distraction and stress of overload than are lower performers (Britt, 2003; Jex & Adams, in press).

Previous research has established that enactive mastery and resource availability foster self-efficacy beliefs and that self-efficacy, in turn, is positively related to challenging personal goals and work performance (Bandura, 1997; Locke & Latham, 1990). Less is known about whether and how role overload disrupts effective self-regulation and work performance.

Role overload is endemic in today’s fast-track organizational environments and has the potential to upset the high-performance cycle energized by self-efficacy and goal setting. A recent survey of 150 human resources executives indicated that 70% of them believed employees in their firms were overburdened with work (HR Agenda, 2002). In view of the demands of increasingly complex and burdensome work demands (Kirwan-Taylor, 2001), it is important to understand whether and to what extent role overload compromises (a) the formation of positive self-efficacy beliefs and the setting of challenging personal goals and (b) the positive effects of self-efficacy and goal-setting on performance. It is not clear whether role overload disrupts the high performance cycle by (a) moderating the antecedent effects of previous performance and perceived task-relevant resources on self-efficacy, (b) moderating the effects of self-efficacy on personal goal level, or (c) moderating the effects of self-efficacy and goal level on performance. Understanding its effects will contribute insights regarding high performance and self-regulation processes and have implications for work load management.

We developed a moderated mediation model of the high performance cycle that indicates both theoretical processes and boundary conditions on their operation. A primary objective was to identify moderating effects of role overload on the antecedents and outcomes of self-efficacy and personal goals. Another was to identify boundary conditions on the mediating effects of personal goals on the self-efficacy–performance relationship. We used longitudinal and multisource data from an industrial selling context. We are not aware of previous studies that have assessed the disruptive effects of role overload on the high performance cycle in an actual work setting.

Model Development

The conceptual model guiding the study is represented in Figure 1. Consistent with previous research (e.g., Bandura, 1997; Locke & Latham, 1990), our model positions previous performance and organizational resources as antecedents of self-efficacy and self-efficacy and goal level as antecedents of performance. Self-efficacy is represented as an antecedent of goal level and as having direct and indirect influences on performance (e.g., Locke & Latham, 1990; Wood & Bandura, 1989). It is noteworthy that the model also specifies role overload as a moderator of these relationships.

Role Overload

When role demands create the perception that available resources are inadequate to deal with them, resulting in distraction and stress, individuals experience role overload (Kahn, Wolfe,
Kahn et al. (1964) hold that role overload is a very prevalent, complex form of conflict that combines “aspects of person-role and intersender conflicts” (p. 20). Overall, as a form of person–role conflict, role overload amounts to a perception that role demands are overwhelming relative to available resources. In complex task environments, such as in boundary-spanning roles, role overload is also frequently manifested as a form of intersender conflict, in which individuals are expected to meet the expectations of multiple role senders (House, 1980; Kahn et al., 1964; Singh, 2000). Whereas any one of these expectations might be reasonable by itself, collectively, they require more than the individual’s available resources to satisfy (Kahn et al., 1964). Role overload is likely to reduce the strength of relationships in the high performance cycle because it forces people to stretch their attention, effort, and resources thinly to cover overwhelming demands. This may moderate even high performers’ estimates of their self-efficacy, acceptance of challenging personal goals and subsequent performance levels.

Role overload is a serious and increasing problem in many work environments. For example, in a recent survey of 270 salespeople in diverse industries, substantial proportions of respondents reported that their job demands had prevented them from exercising regularly (72.2%), caused them to put on weight (69.2%), caused them to become ill (58.7%), harmed their marriage or a significant relationship (48.8%), contributed to a long-term health condition (36.6%), caused them to smoke or drink more alcohol (32.9%), and prevented them from finding a significant other (18.4%) (Cummings, 2001, p. 46). It is also likely that role overload interferes with self-regulatory effectiveness and interrupts the high performance cycle.

Figure 1. Hypothesized relationships.

Formation of Self-Efficacy Beliefs

Self-efficacy refers to individuals’ beliefs that they possess the skills and resources necessary to succeed at a specific task. As such, individuals’ previous performance level and their perceptions of the task-relevant resources available from the organization are likely to positively influence self-efficacy beliefs (Bandura, 1997). However, we posited that role overload will moderate antecedent influences on self-efficacy.

Organizational Resources

Even highly capable individuals may lack a sense of efficacy when they are not provided the necessary tools and resources to accomplish performance-relevant tasks. As previously noted, in the absence of role overload, we would expect a positive relationship between individuals’ evaluations of the organizational resources provided and self-efficacy beliefs. However, role overload may attenuate this relationship because excessive role demands may restrict the effectiveness with which organizational resources can be applied. The sense of efficacy that comes from perceptions of having resources on which to draw will be negated to some extent by the perception that one also confronts an overwhelming workload.

Hypothesis 1: Role overload will moderate the relationship of perceived organizational resources with self-efficacy such that the relationship is stronger when role overload is low compared to when it is high.

Previous Performance

An abundance of prior research indicates that enactive mastery, as demonstrated through previous performance, is the strongest source of self-efficacy beliefs. According to Bandura (1997), “Enactive mastery experiences are the most influential source of efficacy information because they provide the most authentic evidence of whether one can muster whatever it takes to succeed” (p. 20). Empirical assessments of enactive mastery effects relative to other sources of self-efficacy, such as behavioral modeling or instruction (e.g., Bandura, Adams, & Beyer, 1977; Gist, Schwoerer, & Rosen, 1989), show that “enactive mastery produces stronger and more generalized efficacy beliefs than do [other] modes of
influence” (Bandura, 1997, p. 80). In view of the strength and resilience of the effects of enactive mastery, we do not expect role overload to attenuate the previous performance–self-efficacy relationship.

Goal Setting

A substantial amount of research indicates a strong positive relationship between self-efficacy and personal goal level. According to Locke and Latham (1990), “The stronger the perceived self-efficacy, the more challenging the goals people set for themselves” (p. 20). Bandura (1997) has maintained that self-efficacy motivates individuals by influencing the challenges they choose to undertake and asserts that “personal goal setting is influenced by self-appraisal of capabilities” (p. 117). Bandura also avers that high self-efficacy individuals create discrepancies between goals and performance by increasing their goal level when attainment of a previous standard seems assured. Empirical findings uniformly support a positive relationship linking self-efficacy to goal level (e.g., Brown, Cron, & Slocum, 1998; Locke, Frederick, Lee, & Bobko, 1984; Wood & Bandura, 1989).

It seems likely, however, that this positive relationship will be moderated by role overload. When people visualize conceivable future achievements in goal setting, perceptions of role overload are likely to constrain their visions of the attainable to some extent. When role overload is low, they are likely to form cognitive representations of possible future performance outcomes largely on the basis of assessments of their personal capabilities and resources (Bandura, 1997; Locke & Latham, 1990). In contrast, the stress and distraction of task focus caused by overwhelming role demands are likely to weaken the link between self-efficacy beliefs and the outcomes one believes possible when role overload is high. This reasoning leads to the prediction of an interaction between role overload and self-efficacy with respect to goal level.

Hypothesis 2: Role overload will moderate the relationship of self-efficacy with personal goal level such that the relationship is stronger when role overload is low compared to when it is high.

Performance

Self-efficacy and personal goal level have also been firmly established as crucial antecedent influences on performance (Bandura, 1997; Locke & Latham, 1990; Mento, Steel, & Karen, 1987; Stajkovic & Luthans, 1998). Individuals who have positive self-efficacy beliefs focus their attention and motivation on the tasks necessary for achieving targeted performance levels and persevere in the face of difficulties. Setting challenging goals motivates people to stretch their abilities and efforts, master new challenges, and exceed previous performance.

It is likely, however, that role overload will moderate the positive effects of self-efficacy and personal goal level on performance. Role overload may interfere with the positive effects of self-efficacy and personal goal setting by imposing demands that require more resources than individuals are able to marshal. Role overload may also prompt ruminative thought concerning the demands of role requirements or the consequences of failure. As Martin and Tesser (1996) suggested, “When the environment is too demanding or not demanding enough, people experience off-task thoughts” (p. 12). Such ruminative thought is likely to detract from the task focus that is instrumental in producing the performance-enhancing effects of self-efficacy and personal goals (Bandura, 1997; Locke & Latham, 1990). Hence, the positive motivational effects of self-efficacy and personal goal level on performance may be negated because of the time, thought, and effort required by a profusion of task demands. In addition, preoccupation with ruminative thoughts (e.g., “Why can’t I perform this task?”) causes further distraction and negation of these positive motivational effects. The copious task demands characteristic of role overload also make commitment to any individual goal more difficult (Locke & Latham, 1990). In essence, the self-regulatory mechanisms that normally keep effective people on track to achieve their performance goals may be overwhelmed by the pressure of role demands (Locke & Latham, 1990). Thus, when role overload is high, self-efficacy and personal goal level are likely to have only negligible effects on subsequent performance.

Hypothesis 3: Role overload will moderate the effects of (a) self-efficacy and (b) goal level on performance such that these effects are weaker when role overload is high as compared to when it is low.

Moderation of the Mediating Effects of Goal Level

An abundance of research indicates that personal goals mediate an indirect effect of self-efficacy on performance (e.g., Bandura, 1997; Locke & Latham, 1990; Wood & Bandura, 1989). Self-efficacy affects performance in large part by motivating individuals to set and pursue high performance standards, which help to stimulate, organize, and direct effort in goal pursuit. However, if role overload moderates the effects of self-efficacy and goal level on performance, as predicted in Hypothesis 3, then it is likely that the mediating effect of goal level on the indirect self-efficacy–performance relationship will also be moderated. This pattern of effects is referred to by Baron and Kenny (1986) and James and Brett (1984) as moderated mediation. According to Baron and Kenny (1986, p. 1179), this effect would be demonstrated by showing that a Role Overload × Goal Level interaction mediates the interaction of role overload with self-efficacy. Such a pattern would indicate a boundary condition on a key process by which self-efficacy influences performance. Because we expected weak or nonsignificant effects of self-efficacy and goal level on performance when role overload is high, we expected that goal level will mediate the effect of self-efficacy on performance only when role overload is low.

Hypothesis 4: Role overload will moderate the mediating effect of goal level on the self-efficacy–performance relationship such that goal level mediates the relationship when role overload is low but not when role overload is high.

Method

To test the hypothesized model, we collected data from a sample of independent sales representatives working on an independent contractor basis for an office supply manufacturer. The representatives were compensated with straight commission on sales revenue. The manufacturer provided a list of 295 independent representatives for whom complete sets (2
years’ worth) of previous objective sales volume measures (previous performance) were available. The manufacturer also provided objective measures of the dollar sales volumes produced by each representative for 3 consecutive calendar years.

Procedure
The questionnaire was mailed approximately 2 months after the company closed the books on the previous year’s sales results (previous performance) and approximately 10 months before the subsequent year’s results (performance) were announced. A follow-up packet was mailed to nonrespondents 3 weeks later. A total of 205 responses (69%) were returned. However, a number of the responses were excluded because some representatives had either bought or sold all or part of their business during the 3 years relevant to the study or had missing questionnaire data. The realized sample included 172 usable responses. The average age and tenure representing this manufacturer were 51 years and 16 years, respectively. Eighty-one percent (141) were male.

Measures
Previous performance. Previous performance was defined as the percentage increase in dollar sales volume between the 1st and 2nd of the 3 years for which we had objective sales performance measures. Use of the percentage sales increase controlled, to some degree, for the fact that the representatives’ sales bases differed considerably in size (range: $150,000–$1.5 million). The percentage index was not significantly correlated with the previous year’s dollar sales (r = .03, p = .67), indicating that the previous performance measure was not a function of the size of the individual’s sales base.

Perceived organizational resources. Our measure of perceived organizational resources consisted of five composite factors, for which items were developed on the basis of findings of preliminary depth interviews. Measurement items are presented in the Appendix. They consist of the following:

Sales support (α = .86): The sales support factor consisted of six items indicating representatives’ perceptions of the manufacturer’s performance in building a strong brand image, generating useful sales leads, providing advertising support, keeping the company name in front of customers, and keeping the representative’s name in front of customers.

Administrative support (α = .70): The administrative support factor consisted of four items relating to the manufacturer’s performance in billing accuracy, handling returns and allowances, billing for outsourced shipments, and paying vendors.

Product issues (α = .76): Four items indicated the manufacturer’s performance on product-related issues such as product assortment, pricing, developing new products, and having up-to-date products.

Compensation and incentives (α = .82): Three items tapped representatives’ perceptions of the manufacturer’s performance on providing reasonable compensation, motivational incentive programs, and motivational recognition programs.

Representative orientation (α = .87): Seven items tapped representatives’ perceptions of the extent to which the manufacturer is frank in fulfilling its commitments, puts a high priority on customer satisfaction, works hard to help representatives succeed, and “tells it like it is.”

We conducted a hierarchical confirmatory factor analysis of the organizational resources construct. The model consisted of the 24 measurement items loading on the five first-order factors, as described above, and the five first-order factors loading on the second-order organizational resources construct. The analysis indicated an acceptable fit of the model to the data, $\chi^2(247) = 475.92$, $\chi^2/df = 1.93$, root-mean-square error of approximation (RMSEA) = .073 (Browne & Cudeck, 1993). All first- and second-order factor loadings were statistically significant at $p < .01$. Only one of the 24 first-order factor loadings was less than .50 (range: .42–.87), and all of the second-order loadings exceeded .50 (range: .53–.83). The perceived organizational resources score consisted of the average of the five summed first-order factor scores.

Although all study participants represented the same manufacturer, they managed their own businesses without direct oversight from the manufacturer. Variation in perceived organizational resources arises from sources such as individual differences among representatives (e.g., personality, background, experiences), different experiences with the manufacturer and its employees (e.g., different service contacts and types of transactions), and interactions between individual differences and situational factors (Brown et al., 1998; Dienesch & Liden, 1986; James, James, & Ashe, 1990). We found substantial variation in perceptions of organizational support.

Self-efficacy. Self-efficacy was measured with the confidence scores recommended by Bandura (1997). We presented 10 potential levels of sales growth (from 2% to 20%, in 2% increments) and asked each representative to indicate his or her confidence (from 0%–100%) in achieving each level. Self-efficacy scores consisted of the summation of confidence ratings indicated by the representatives.

Personal goal level. We measured personal goal level by asking study participants to indicate their target level of sales for the current year (to be completed 10 months hence) as a percentage increase over the preceding year.

Performance. We measured performance as the percentage increase in objective dollar sales between the 2nd and 3rd years for which we had sales volume data. This measure was not significantly correlated with the dollar volume of sales for either the 1st or 2nd years for which we had performance data ($rs = -.05, -.03; ps = .46, .65$, respectively), indicating that the performance measure was not a function of size of the representatives’ sales bases.

Role overload. We measured role overload with four items adapted from House (1980) and taken from Singh (2000). We asked how often (1 = never, 5 = always) participants experience each of the following feelings: “the amount of work you do interferes with how well the work gets done”; “you do not have enough help and resources to get the job done well”; “you do not have enough time to get the job done well”; and “you have to try to satisfy too many different people.” Collectively, these items are consistent with the conceptual definition of role overload as specified by Kahn et al. (1964) and with previous research (House, 1980; Singh, 2000). Coefficient alpha for this measure was .85.

Results
The hypotheses were tested with seemingly unrelated regressions (SURs). SURs are appropriate when a series of regression analyses is conducted, and the dependent variable in one regression becomes an independent variable in subsequent analyses (Johnston, 1984, pp. 330–338). In such cases, the residuals can be correlated and heteroscedastic, violating basic regression assumptions. SUR estimates and controls for the covariances among the residuals (Johnston, 1984; Zellner, 1962), thereby alleviating these potential problems. Descriptive statistics and construct intercorrelations are presented in Table 1. Results of the SURs testing the hypotheses are presented in Table 2.

Antecedents of Self-Efficacy
As expected, both previous performance and perceived organizational resources were significantly related to self-efficacy. The effect of organizational resources was qualified by a marginally significant Role Overload $\times$ Organizational Resources interaction with respect to self-efficacy ($\beta = -.117, t = -1.59, p = .057$).
Because this interaction appeared to indicate a relationship between organizational resources and self-efficacy that is contingent on the level of role overload, we probed it with methods suggested by Aiken and West (1991). Specifically, we examined the conditional effect of organizational resources on self-efficacy at high and low levels of role overload by adding and subtracting a standard deviation from the mean-centered role overload scores and assessing the impact on the standardized regression coefficient associated with organizational resources. This analysis indicated a significant positive effect of organizational resources on self-efficacy when role overload was low ($\beta = .247, p < .05$) but no effect when role overload was high ($\beta = .003, p = .78$). These “simple slopes” (Aiken & West, 1991) are presented in Figure 2A.

**Goal Setting**

Results of estimating the goal level model revealed only a significant main effect of self-efficacy. No other effects, including the Role Overload $\times$ Self-Efficacy interaction predicted in Hypothesis 2, were significant. Thus, Hypothesis 2 was not supported.

**Performance**

We analyzed the performance model in three stages, in a manner consistent with Baron and Kenny (1986). First, we estimated a model that omitted goal level to assess the effects of self-efficacy and the Role Overload $\times$ Self-Efficacy interaction in the absence of goal level. In the second stage, we added the main effect of goal level. According to Baron and Kenny (1986), if the Role Overload $\times$ Self-Efficacy interaction is significant in Stage 1 but not in Stage 2, then a pattern of mediated moderation (as opposed to the moderated mediation predicted in Hypothesis 4) would be demonstrated. The Stage 2 model also tests Hypothesis 3a, predicting a significant Role Overload $\times$ Self-Efficacy interaction. In the third stage, we added the Role Overload $\times$ Goal Level interaction to the model. If the Role Overload $\times$ Self-Efficacy interaction is significant in Stage 2 but not in Stage 3, then the predicted pattern of moderated mediation (Hypothesis 4) would be found. The Stage 3 model also tests Hypothesis 3b, predicting a significant Role Overload $\times$ Goal Level interaction.

The results of the Stage 1 and Stage 2 models show a significant Role Overload $\times$ Self-Efficacy interaction as predicted in Hypothesis 3a. We examined the direct effect of self-efficacy on performance at high and low levels of role overload by adding and subtracting a standard deviation to the mean-centered role overload scores in the Stage 2 model. We found that self-efficacy was significantly related to performance when role overload was low ($\beta = .310, p < .01$) but not when role overload was high ($\beta = .026, p = .78$). These results are presented in Figure 2B. The Role Overload $\times$ Self-Efficacy interaction remained significant and virtually unchanged between Stage 1 and Stage 2, indicating that the main effect of goal level did not mediate the moderating effect of role overload on the self-efficacy–performance relationship (Baron & Kenny, 1986).

In contrast, when the Role Overload $\times$ Goal Level interaction ($\beta = -.346, p < .01$) was added in the Stage 3 analysis, the Role

### Table 1
**Descriptive Statistics and Intercorrelations**

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Previous performance</td>
<td>-.025</td>
<td>.074</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>2. Organizational resources</td>
<td>2.859</td>
<td>.563</td>
<td>.045</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Self-efficacy</td>
<td>320.041</td>
<td>195.044</td>
<td>.275</td>
<td>.085</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Goal level</td>
<td>.100</td>
<td>.108</td>
<td>-.029</td>
<td>.036</td>
<td>.300</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Performance</td>
<td>.050</td>
<td>.219</td>
<td>.312</td>
<td>.113</td>
<td>.283</td>
<td>.251</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Role overload</td>
<td>2.724</td>
<td>.779</td>
<td>.048</td>
<td>-.433</td>
<td>.099</td>
<td>.019</td>
<td>-.024</td>
<td>—</td>
</tr>
</tbody>
</table>

Note. $N = 17$. Correlations $\geq .15$ are significant at $p < .05$. Correlations $\geq .20$ are significant at $p < .01$.

### Table 2
**Seemingly Unrelated Regression Results**

<table>
<thead>
<tr>
<th>Predictor</th>
<th>Self-efficacy</th>
<th>Goal level</th>
<th>Stage 1</th>
<th>Stage 2</th>
<th>Stage 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Previous performance (PP)</td>
<td>.258***</td>
<td>-.100</td>
<td>.230***</td>
<td>.252***</td>
<td>.233***</td>
</tr>
<tr>
<td>Organizational resources (OR)</td>
<td>.138**</td>
<td>-.003</td>
<td>.059</td>
<td>.059</td>
<td>.066</td>
</tr>
<tr>
<td>Role overload (RO)</td>
<td>.143</td>
<td>-.021</td>
<td>-.021</td>
<td>-.017</td>
<td>-.004</td>
</tr>
<tr>
<td>RO $\times$ PP</td>
<td>-.024</td>
<td>-.088</td>
<td>.078</td>
<td>.097</td>
<td>.085</td>
</tr>
<tr>
<td>RO $\times$ OR</td>
<td>-.117*</td>
<td>.028</td>
<td>.024</td>
<td>.018</td>
<td>.029</td>
</tr>
<tr>
<td>Self-efficacy (SE)</td>
<td>.334***</td>
<td>-.006</td>
<td>-.164*</td>
<td>-.163*</td>
<td>-.089</td>
</tr>
<tr>
<td>RO $\times$ SE</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Goal level (GL)</td>
<td>.219***</td>
<td></td>
<td>.292***</td>
<td></td>
<td></td>
</tr>
<tr>
<td>RO $\times$ GL</td>
<td>-</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$</td>
<td>.112</td>
<td>.111</td>
<td>.174</td>
<td>.217</td>
<td>.247</td>
</tr>
</tbody>
</table>

* $p < .10$. ** $p < .05$. *** $p < .01$. 
Overload × Self-Efficacy interaction became nonsignificant ($\beta = -.125, p = .25$). This indicates the moderated mediation effect predicted in Hypothesis 4. In other words, goal level mediates the effect of self-efficacy on performance, but only when role overload is low. Examination of the Role Overload × Goal Level interaction revealed that goal level was strongly related to performance when role overload was low ($\beta = .506, p < .0001$) but not when role overload was high ($\beta = -.042, p = .74$). These results are presented in Figure 2C. When role overload is high, neither self-efficacy nor goal level is significantly related to performance.

It is noteworthy that not following Baron and Kenny’s (1986) recommended procedure for testing moderated mediation (i.e., testing only the Stage 3 model) would lead to the false conclusion that role overload does not moderate the self-efficacy–performance relationship. Although this type of analysis is rarely encountered, it may reveal interesting effects that are theoretically and practically meaningful and that would otherwise remain hidden in the data.

**Discussion**

The results, based on longitudinal and multisource data from an actual work setting, indicate boundary conditions on the effects of self-efficacy and goal setting on performance. These relationships, generally considered to be among the most robust in the motivation and performance literature, appear susceptible to the deleterious influence of role overload, an increasingly endemic factor in today’s work environments. Role overload derails effective self-regulation and goal pursuit by attenuating positive antecedent effects and breaking the linkages of self-efficacy and goal level to performance.

Role overload moderates the relationship between perceived organizational resources and self-efficacy. Resource perceptions are not related to efficacy beliefs when role overload is high but are positively related when role overload is low. In contrast, role overload does not moderate the previous performance–self-efficacy relationship. These results are consistent with the view that enactive mastery is the strongest and most resilient source of self-efficacy (Bandura, 1997).

Role overload attenuates the relationships of both self-efficacy and goal level with performance. When role overload is low, both self-efficacy and goal level are positively related to performance (e.g., Bandura, 1997; Locke & Latham, 1990), but when role overload is high, neither is related to performance. This indicates that the self-regulation and performance benefits of self-efficacy and goal setting are negated by role overload.

The results indicate a pattern of moderated mediation, in which goal level mediates the indirect effect of self-efficacy on performance when role overload is low but not when role overload is high. When role overload is low, self-efficacy has both direct and indirect effects on performance (Wood & Bandura, 1989), but high role overload negates both types of effects. Although the self-efficacy and goal-level relationship remains strong even when role overload is high, the direct goal level–performance relationship breaks down under high role overload.

**Managerial Implications**

The positive effects of self-efficacy and personal goals on performance depend on individuals’ perceptions that their resources are adequate to cover their role requirements. Increasing role demands without also increasing resources can tip this balance unfavorably, resulting in “disconnects” between self-efficacy and performance. Managers should resist the temptation to put heavier task burdens on the shoulders of the most capable people because
doing so may negate the very advantages that make these people the most productive employees. Even when they have positive self-efficacy beliefs and set high personal goals, individuals experiencing role overload are not likely to perform any better than others who are less self-efficacious and less effective goal setters.

The results clearly show breakdowns in performance and self-regulatory effectiveness when role overload is high. The following practical steps might be taken to reduce role overload: First, managers should be alert for signs that employees are suffering from role overload. Symptoms of role overload may include absence from work, being late for appointments, missing deadlines, being mistake prone, or undergoing a noticeable change of appearance (Cummings, 2001). Second, when these symptoms appear, management interventions, such as talking the issues out with employees, are likely to be beneficial. Talking regularly with employees about workload issues and helping them prioritize tasks may ultimately result in greater productivity. Third, careful scheduling of all activities a person needs to accomplish, including personal quality time, may help facilitate productivity at the same time as it reduces perceptions of overload. Fourth, reducing the number of items on individuals’ to-do lists to the most important priorities can help reduce overload.

Limitations and Research Directions

Although our conceptualization and measurement of role overload were taken directly from previous research (i.e., House, 1980; Kahn et al., 1964; Singh, 2000), the prevalence of role overload in today’s fast-track organizational environments may suggest the need to develop more elaborated conceptual and operational definitions of the construct. It might be useful, for example, to identify facets of role overload that contribute to the perception that role demands outstrip available resources. Even so, our measure proved reliable and valid and generally performed as predicted in the context of the structural model.

It would also be worthwhile to attempt to measure objective work load and assess the relationship between perceived and objective work loads. The relationship between perceived and objective work load could then be analyzed as a function of individual difference variables such as self-efficacy, experience, expertise, objective and subjective knowledge, and so on. Such research would have important implications for employee selection and management of work loads. Other types of measures, such as psychophysical measures and decrement in task performance when another task is added, could also prove useful (Gopher & Donchin, 1986).

Further understanding of the effects of role overload on self-efficacy beliefs should also be a research priority. Our results regarding the moderating effects of role overload on antecedent influences were consistent with our conceptualization, but it is interesting that role overload did not have a direct effect. Whereas perceptions of role overload might plausibly have a negative influence on efficacy beliefs, it is also possible that self-efficacious individuals may receive (or voluntarily take on) heavier work loads because of their capabilities to complete the work. If so, it would be interesting and worthwhile to attempt to disentangle these countervailing effects.

Conclusion

When role overload is low, self-efficacy and goal levels form the basis of a high-performance cycle and effective self-regulation. When role overload is high, however, the self-regulatory mechanisms that keep individuals on track to achieve high performance lose their potency. In this study, we found that (a) perceptions of organizational resources lose their ability to influence self-efficacy beliefs when role overload is high, (b) the direct effects of both self-efficacy and personal goal level on performance are negated when role overload is high, and (c) goal level mediates an indirect effect of self-efficacy on performance only when role overload is low. Cumulatively, the results indicate that avoiding perceptions of role overload is critical for promoting effective self-regulation and high performance.

References


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**Appendix**

**Measurement Items for Organizational Resources**

Please rate how effectively XYZ is performing in a number of areas to help you do your job and satisfy customers. Please rate XYZ’s performance in each of the following areas. (1 = very poor, 5 = excellent).

**Sales Support**

- Building a strong brand image
- Generating useful sales leads
- Advertising support
- Keeping the XYZ name in front of the customer
- Keeping the representative’s name in front of the customer
- Providing information about competitive products

**Compensation and Incentives**

- Providing reasonable compensation
- Providing motivational incentive programs
- Providing motivational recognition programs

**Administrative Support**

- Billing accuracy
- Handling returns and allowances
- Billing for outsourced shipments

**Product Issues**

- Product quality
- Product assortment
- Pricing
- Developing new products
- Having up-to-date products

**Representative Orientation**

In this section, please indicate your level of agreement or disagreement with each statement as it pertains to your relationship with XYZ. (1 = strongly disagree, 5 = strongly agree).

- XYZ has been frank in dealing with me.
- XYZ is a customer-oriented organization.
- XYZ treats its representatives as true partners.
- XYZ fulfills its commitments.
- XYZ puts a high priority on customer satisfaction.
- XYZ works hard to help its representatives succeed.
- XYZ “tells it like it is.”

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