The Effects of Organizational Citizenship Behavior on Performance Judgments: A Field Study and a Laboratory Experiment

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The process linking organizational citizenship behavior (OCB) with performance judgments was investigated in a field and a laboratory study. In the field study, managers rated the task performance and OCB of 148 subordinates. In the laboratory research, 136 students viewed and rated videotaped segments of teaching performance that demonstrated either high or low task performance and high or low OCB. In both studies, liking and perceived affective commitment mediated the relationship between OCB and overall evaluation. Liking also mediated the relationship between OCB and reward recommendations. Further, the field study indicated that the causal motive attributed by the manager for the employee's OCB mediated the relationship between OCB and overall evaluation.

It is now commonly accepted that an essential condition of organizational effectiveness is a willingness of participants to "go above and beyond" the formal specifications of prescribed roles (Barnard, 1938; Katz & Kahn, 1978; Organ, 1990). Discretionary organizational citizenship behavior (OCB) (Bateman & Organ, 1983; Smith, Organ, & Near, 1983) includes behaviors such as constructive or cooperative gestures that are neither mandatory in-role behavior nor directly or contractually compensated for by formal organizational reward systems (Organ & Konovsky, 1989). Aggregated over time and persons, citizenship behaviors become important because they facilitate the accomplishment of organizational goals and enhance organizational performance (Organ, 1990; Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1997).

Recent research indicates that managers attend to the OCB of employees with ensuing consequences of import. These studies indicate that both task-related performance and OCB contribute independently to overall performance evaluations and that supervisors perceive OCBs as contributing to the value of an employee's performance (e.g., Borman, White, & Dorsey, 1995; Motowidlo & Van Scotter, 1994; Orr, Sackett, & Mercer, 1989; Werner, 1994). Although the existing research has convincingly demonstrated that OCB does influence performance judgments (see also Avila, Fern, & Mann, 1988; Jackson, Keith, & Schlacter, 1983; MacKenzie, Podsakoff, & Fetter, 1991, 1993; Podsakoff & MacKenzie, 1994), there has been a surprising lack of systematic empirical research designed to investigate how and why these effects occur. Simply demonstrating that OCB does influence performance evaluations does not further an understanding of the psychological mechanisms that may underlie this effect. Because overall evaluations of performance have a variety of important uses within organizations and can have serious consequences for employees, it is important to better understand the process by which OCB influences performance judgments. Therefore, the purpose of the present research was to investigate the underlying processes involved in linking OCB with global performance judgments by focusing on the social-cognitive processes of raters. Specifically, we tested several variables (i.e., liking, perceived affective commitment, job expectations, and attributed motive) thought to be implicated in the effect of OCB on overall evaluation and reward recommendations in a field study and a laboratory experiment.

Theoretical Development

MacKenzie, Podsakoff, and their colleagues proposed several reasons why managers may consider OCBs in their performance evaluations. These reasons include norms of reciprocity and fairness, schema-triggered affect, informa-
tional distinctiveness and accessibility, illusory correlations, and implicit performance theories (MacKenzie et al., 1991, 1993; Podsakoff, MacKenzie, & Hui, 1993). Most of these theoretical explanations have been drawn from social information-processing theory. The social information-processing model stipulates that humans have limited information-processing capabilities, hence many shortcuts are taken when attaching meaning to and forming expectations about the individual traits and behaviors of others (e.g., DeNisi, Cafferty, & Meglino, 1984; Feldman, 1981; Lord, 1985). Effects in information processing can be traced to the use of these cognitive simplifications as evaluations of others are based on only part of the available information. Moreover, these expectations form a cognitive context that affects future interactions with individuals (Lord & Maher, 1991). Terms such as prototypes, schemata, implicit theories, and cognitive categories have been adopted to describe the processes that individuals use to simplify and organize the multitude of information received. A number of models to explain these processes have been proposed; however, in general, the primary stages in the processing of information consist of attention, categorization, recall, and information integration.

Extrapolating from the concepts of social information-processing theory, it seems likely that OCB influences how a ratee is categorized. The information-processing model proposes that raters are most likely to attend to information that is salient and that raters mentally assign employees to categories on the basis of salient characteristics of the employee (e.g., DeNisi et al., 1984). As suggested by Podsakoff et al. (1993), because OCB is not required by an organization, it is likely to be a particularly distinctive and salient behavioral cue. Consequently, instances of OCB may be used to categorize an employee. Categorization is also based on the extent to which the ratee matches the characteristics of a prototype (an abstract set of representative features that define members of a category). One prototype may be held by raters is that of the "good employee" (Cardy & Dobbins, 1994a; Murphy & Cleveland, 1991). Because OCBs consist of performance that is above and beyond the call of duty and is geared toward the effective functioning of the organization, employees who engage in OCB are likely to match the prototypical features of the good employee. That is, the social information-processing model suggests that OCB elicits a cognitive response in the rater as he or she recognizes the prototype of the good employee.

In sum, we hypothesized that acts of OCB influence rater cognitive processes and impressions of subordinates, which in turn affect performance judgments. Once an individual is categorized, subsequent retrieval of information and corresponding judgments tend to be based on the prototypical characteristics of the category (Feldman, 1981). Further, the categorization can influence what is noticed about the employee’s performance and the attributions made for observed behavior (Feldman, 1986). Fiske and Pavelchak (1986) suggested that behaviors easily encoded as consistent with an existing cognitive category can result in category-based affect (e.g., liking) and strong category-based memory. Moreover, other affective characteristics associated with the category (e.g., presumed commitment to the organization) are likely to be attached to the cognitive representation of the employee and directly associated with performance judgments. The specific variables thought to be implicated in the relationship between OCB and performance judgments are further discussed below.

Affect and Liking

Because employees who perform OCBs make a manager’s job easier, instances of OCB may produce an affective response and hence enhance a manager’s liking for a subordinate. Fiske’s (1981, 1982) theory of schema-triggered affect may help explain this process (see also Fiske & Pavelchak, 1986). The theory suggests that affective values are stored at the top level of a schema, accessible immediately on categorization of an event matching the affect-laden schema. It seems likely that individuals who engage in acts of OCB will trigger positive affect from their managers. Consequently, individuals who display high levels of OCB will be better liked.

Research has demonstrated that performance evaluations are influenced by rater affect or liking for the ratee (see Cardy & Dobbins, 1994b, for a review). Generally, the findings have suggested that positive affect toward a subordinate has a positive effect on supervisory performance ratings and the allocation of organizational rewards and results in a reduced likelihood of disciplinary action (e.g., Cardy & Dobbins, 1986; Dobbins & Russell, 1986; Fandt, Labig, & Urich, 1990; Judge & Ferris, 1993; Tsui & Barry, 1986). Accordingly, we hypothesized that the relationship between OCB and performance judgments would be mediated by liking for the ratee.

Perceived Affective Commitment

Engaging in OCB may also influence rater perceptions regarding how committed an employee is to the organization. Acts of citizenship are characteristic of the behaviors also associated with highly committed employees. For example, employees considered committed to an organization are expected to work long hours and to place a greater importance on the interest of the organization than on personal interests when the two interests are in conflict. Moreover, because OCB is volitional in nature, engaging in these behaviors provides favorable information regard-
ing an employee's motivation (Borman & Motowidlo, 1993). Consequently, employee acts of OCB may serve as behavioral cues on which managerial presumptions of employee commitment to the organization are based. Indeed, Shore, Barksdale, and Shore (1995) found that OCB predicted perceived affective commitment.

There is also preliminary evidence suggesting that perceptions of commitment are positively related to other managerial judgments. Shore et al. (1995) found that perceived affective commitment was positively related to managerial potential and promotability ratings. Similarly, Allen, Russell, and Rush (1994) found a positive relationship between perceived organizational commitment and reward recommendations. Because highly committed employees are seen as vital to an organization, employers may find it desirable to offer more rewards to their committed employees or managers (Powell, 1993). Thus, we proposed that the relationship between OCB and performance judgments would be mediated by perceived affective commitment.

Job Expectations

Several researchers have commented on the degree of ambiguity regarding the boundary between task performance and OCB (e.g., Graham, 1991; Morrison, 1994; Schnake, 1991; Van Dyne, Cummings, & Parks, 1995). Although some research has found that managers can and do distinguish between in-role behaviors and OCB (e.g., Werner, 1994; Williams & Anderson, 1991), there is also evidence to indicate that behavior assumed to be and operationalized as discretionary in nature may actually be considered an expected part of the job (Morrison, 1994). Hence, there are differences between individuals with regard to work behaviors believed to be discretionary versus behaviors believed to be nondiscretionary.

Research has yet to examine this issue from the perspective of the rater. As Morrison (1994) stated, if a behavior is thought of as an in-role requirement, the behavior will be conceptualized differently than if the behavior is perceived as beyond requirements. Differences in beliefs regarding expected job behaviors may affect the degree of influence that OCB has on the evaluation process. That is, OCB may not have the same positive effect on liking and perceived affective commitment when the rater views the behavior as an ordinary part of the individual's job versus when the rater views the behavior as above and beyond the call of duty. Accordingly, it is proposed that the relationships of OCB with liking and with perceived affective commitment should be moderated by the extent that OCB is viewed as exceeding the ratee's job requirements. More specifically, the enhancing effect of OCB on liking and perceived affective commitment should be greater when the behaviors are viewed as beyond job expectations than when the behaviors are viewed as an expected part of the job.

Attribution and Motive

Attribution theory has been useful for attempting to understand how perceptions of performance are interpreted. The central tenet of attribution theory is that humans construct causal explanations for their own and others' behavior in a need to predict and understand the environment (Heider, 1958). To date, the research examining causal attributions in organizational contexts has focused on traditional task performance (e.g., Green & Mitchell, 1979; Mitchell, Green, & Wood, 1981; Pence, Pendleton, Dobbins, & Sgro, 1982). It seems likely that individuals also search for causal explanations of OCB. Indeed, Eastman (1994) found that when raters were presented with the same set of extrarole behaviors, they attached different causal labels (i.e., good citizenship versus ingratiation) to the behaviors. Further, employees whose behavior was believed to be good citizenship rather than ingratiation received higher overall performance evaluations and greater pay raises.

Eastman's (1994) findings suggest that one of two causal motives may be associated with instances of OCB: altruistic motives and instrumental motives. Elements of altruistic motives would include personal values, loyalty to the organization, and a sense of moral standards, whereas instrumental motives would include a desire to impress the boss, to obtain recognition or other organizational rewards, or to build up favors for later exchange. Behaviors associated with altruistic motives are likely to positively influence performance judgments, whereas those associated with instrumental motives may be devalued or discounted (Podsakoff et al., 1993). It is assumed that an altruistic motive is dominant in the conception of a good employee, as it would be consistent with other positively valued schema-triggered affect (cf. Fiske, 1981, 1982). This view is also consistent with Organ's (1990) view that OCB is essentially self-sacrificing as opposed to controlled and self-serving, at least until some threshold of fairness is violated. Accordingly, it is proposed that the relationship between OCB and performance judgments will be mediated by the motive attributed to the behavior.

In summary, the specific hypotheses guiding the study were as follows:

Hypothesis 1. The relationship between OCB and the dependent variables, overall evaluation and reward recommendations, will be mediated by liking.

Hypothesis 2. The relationship between OCB and the dependent variables, overall evaluation and reward recommendations, will be mediated by perceived affective commitment.

Hypothesis 3. The relationship of OCB with liking and
OCB with perceived affective commitment will be moderated by the extent that OCB is viewed as discretionary, such that the relationships will be stronger when the behaviors are viewed as exceeding job expectations.

**Hypothesis 4.** The relationship between OCB and the dependent variables, overall evaluation and reward recommendations, will be mediated by the motive attributed to the OCBs.

To provide a rigorous and comprehensive investigation of the hypotheses, we conducted two studies so that issues of both internal and external validity could be addressed. Furthermore, because we were interested in isolating the effects of OCB, we measured task performance and included it as a control variable in all analyses. We tested all of the hypotheses in the field study. We tested all but Hypothesis 4 in the lab study.

**Study 1: Field Study**

**Method**

**Participants**

The participants were managers with ongoing supervisory responsibilities for one or more subordinates. Eighty different managers provided a total of 148 subordinate ratings. The sample included managers employed by a manufacturing firm, managers of participants in a university-based management development program, and managers from multiple organizations who were contacted via other university sources (e.g., faculty, advanced graduate students). The overall sample of managers contained 76.6% men; average age was 47.3 years (SD = 9.8); 96.1% were Caucasian; average organizational tenure was 13.7 years (SD = 10.2); average job tenure was 4.4 years (SD = 4.3). Demographics by sample source are available on request.

**Procedure**

We asked managers to complete questionnaires for up to four subordinates. Instructions were provided on how to determine which four subordinates to rate in situations where a manager had more than four. Participants mailed surveys directly back to the primary researcher. Ten out of 10 survey packets were returned from the managers solicited from the manufacturing firm for a response rate of 100%. We contacted 70 managers to provide ratings of the participants in the management development program. Of those 70, a total of 54 surveys were returned for a response rate of 77.1%. For the remaining sample, we distributed a total of 35 survey packets to various managers, and 16 were returned (45.7%).

**Measures**

We used established, validated scales when available. We grouped items by construct but did not identify them as such. Except where noted, responses were based on a 5-point scale ranging from strongly disagree (1) to strongly agree (5), and we averaged scores across the items to form each scale score.

**Task performance.** We measured task performance with the 7-item scale developed by Williams and Anderson (1991; e.g., ‘‘Fulfilling responsibilities specified in job description’’). We used a 5-point scale with responses ranging from ineffective (1) to highly effective (5). Those authors reported a Cronbach reliability estimate of .91; in this study, the estimate was .95.

**OCB.** We measured OCB using the 24-item scale developed by Podsakoff, MacKenzie, Moorman, and Fetter (1990; e.g., ‘‘This employee is always ready to lend a helping hand to those around him/her’’). These items reflect the five dimensions of OCB proposed by Organ (1988). Podsakoff et al. (1990) reported reliabilities ranging from .70 to .85 for each of the five subscales. Using a variation of the same scale, MacKenzie et al. (1991) reported similar reliabilities (.70 to .84). We used the overall composite score in the present study, with a reliability estimate of .93.

**Perceived affective commitment.** We assessed perceived affective commitment using the 4-item affective commitment subscale of Shore et al.’s (1995) Manager-rated Commitment Scale (e.g., ‘‘This employee appears to be highly committed to the organization’’). Shore et al. reported a Cronbach alpha estimate of .87; in this study, the estimate was .88.

**Job expectations.** Similar to the process used by Morrison (1994), respondents were asked to classify each of the 24 items that were used to measure OCB into one of two categories: (a) This behavior is viewed as an expected part of the job; or (b) This behavior is viewed as somewhat above and beyond what is expected for the job (negatively worded items were positively reworded). This categorization process was completed solely for the purpose of creating the job expectations measure. Behaviors that were considered ‘‘expected’’ were coded 0, and behaviors considered beyond expectations were coded 1. We computed a scale mean by summing the responses and then dividing by the total number of behaviors. Hence, scale responses could range from .00 to 1.0, with a score of .00 indicating that every behavior was expected and a score of 1.0 indicating that every behavior was beyond expectations. The reliability estimate for the scale was .86.

**Attribution of motive.** We measured perceived motive with a 12-item scale developed for this study. The items were designed to measure attribution of motive to altruistic causes (six items; e.g., ‘‘sense of moral standards’’) and attribution of motive to instrumental causes (six items; e.g., ‘‘desire to seek the spotlight’’). These items immediately followed the items used to measure OCB and were preceded by the following instructions: ‘‘After reading the list below, please indicate the extent to which you agree that each of the following may be the reason for or cause of this employee’s actions on occasions when he/she exhibits behaviors considered ‘above and beyond the call of duty’.’’ The Cronbach alpha reliability estimate in a pilot study was .84 for the altruistic subscale and .90 for the instrumental subscale; in the present study, the estimate was .83 for the altruistic subscale and .89 for the instrumental subscale.

**Overall evaluation.** We developed five items to assess the manager’s overall evaluation of the ratee (e.g., ‘‘This employee
makes an important contribution to the organization”). The Cronbach alpha reliability estimate in a pilot study was .74; in the present study, the estimate was .91.

**Reward recommendations.** We used five items to assess the extent to which the rater would recommend the ratee for five common organizational rewards (salary increase, promotion, high profile project, public recognition [e.g., company award], and opportunities for professional development). Responses were based on a 5-point scale ranging from would definitely not recommend (1) to would recommend with confidence and without reservation (5), alpha = .90.

**Demographic variables.** We asked respondents to provide information regarding their age, sex, race, job tenure, and organizational tenure.

**Results**

**General Analytic Strategy**

We tested hypotheses through the use of hierarchical multiple regression. We used the criteria established by James and Brett (1984) to determine if mediation effects existed: (a) The independent variable must be significantly correlated with the mediator variable, (b) the mediator variable must be significantly related to the dependent variable, and (c) when the influence of the mediator variable is held constant, the effect of the independent variable on the dependent variable should be nonsignificant. First-order correlations controlling for the effect of task performance were computed and indicated that Conditions 1 and 2 were met for each hypothesis proposing mediation (a copy of the first-order correlations is available on request). Condition 3 was tested by (a) entering task performance into the regression equation as a control variable, (b) adding OCB to the equation, and then (c) adding the proposed mediator variable to the equation. We used the significance of the beta weight associated with OCB at each step to determine mediation. This procedure was followed for both dependent variables. We also used the procedures described by James and Brett (1984) as a basis for testing moderator effects. Moderation is supported when the addition of the interaction term (the product of the moderator and the predictor) results in a significant increment in variance associated with the dependent variable beyond the variance accounted for by the main effects. Intercorrelations are presented in Table 1.

**Hypotheses Testing**

The results regarding Hypotheses 1, 2, and 4 are shown in Table 2. Hypothesis 1 proposed that the relationship between OCB and the dependent variables would be mediated by liking. As shown in Table 2, the addition of liking into the equation predicting overall evaluation resulted in a significant increment in variance ($R^2\Delta = .07, p < .001$), and the beta weight associated with OCB became nonsignificant. Similarly, the addition of liking in the equation predicting reward recommendations resulted in a significant increment in variance ($R^2\Delta = .05, p < .001$), and the beta weight associated with OCB became marginally significant, indicating partial mediation. Together, these results provide reasonable support for Hypothesis 1.

Table 2 also shows that the addition of perceived affective commitment in the equations predicting overall evaluation resulted in a significant increment in variance ($R^2\Delta = .08, p < .001$) and that the beta weight associated with OCB became nonsignificant. In contrast, the addition of perceived affective commitment in the equation predicting reward recommendations resulted in a significant increment in variance ($R^2\Delta = .04, p < .001$); however, the beta weight associated with OCB remained significant. Hence, it appears that both OCB and perceived affective commitment have significant direct relationships with reward recommendations. Thus, only partial support was found for Hypothesis 2.

Hypothesis 3 proposed that job expectations would moderate the relationship of OCB with liking and OCB with perceived affective commitment. Analyses failed to show any significant effects for the interaction term regardless of whether liking was the dependent variable ($R^2\Delta = .00, ns$) or perceived affective commitment was the dependent variable ($R^2\Delta = .00, ns$). Thus, no support was found for Hypothesis 3.

Last, Hypothesis 4 stated that the relationship between OCB and the dependent variables would be mediated by the causal motive attributed to OCB. We entered the two causal dimensions, altruistic and instrumental, as a set in the regression equation. Results indicated that the addition of the causal motive variables in the equation predicting overall evaluation resulted in a significant increment in variance ($R^2\Delta = .07, p < .001$), and the beta weight associated with OCB became nonsignificant. Inspection of the beta weights for the two causal motive variables revealed that the mediation effect occurred solely through the altruistic motive variable. Instrumental attributions appeared to have little effect. By contrast, the addition of the causal motive variables in the equation predicting reward recommendations resulted in a significant increment in variance ($R^2\Delta = .02, p < .01$), but the beta weight associated with extrarole performance remained significant, indicating that both OCB and causal motives had direct effects. It was again noted that only altruistic motives appeared to be related to the dependent variable. Thus, partial support was found for Hypothesis 4.

**Discussion**

The results of the field study provide evidence indicating that liking mediates the relationship between OCB
Table 1
Zero-Order Correlation Coefficients Among Study Variables—Field Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
<th>8</th>
<th>9</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Task performance*</td>
<td></td>
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<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
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<tr>
<td>2. OCB*</td>
<td>.66**</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Liking*</td>
<td>.52**</td>
<td>.74**</td>
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<td>4. Perceived commitment*</td>
<td>.52**</td>
<td>.66**</td>
<td>.61**</td>
<td></td>
<td></td>
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<td>5. Job expectations*</td>
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<td>.06</td>
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<td></td>
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<td>6. Altruistic motive*</td>
<td>.55**</td>
<td>.72**</td>
<td>.60**</td>
<td>.76**</td>
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<td>7. Instrumental motive*</td>
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<td>-.59*</td>
<td>-.49*</td>
<td>-.37*</td>
<td>-.17*</td>
<td>-.46**</td>
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<td>8. Overall evaluation*</td>
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<td>.67**</td>
<td>.02</td>
<td>.66**</td>
<td>-.27**</td>
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<td>9. Reward recommendations*</td>
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<td>M</td>
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<td>SD</td>
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<td>0.63</td>
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<td>1.00</td>
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</tbody>
</table>

Note. OCB = organizational citizenship behavior. Sample sizes ranged from 134 to 148.

* Based on a 5-point scale, with higher values indicating a greater degree of the construct (e.g., higher OCB). 

Table 2
Results of Regression Analysis—Field Study

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Overall evaluations</th>
<th>Reward recommendations</th>
</tr>
</thead>
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<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
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<tr>
<td>Hypothesis 1</td>
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<tr>
<td>Task performance</td>
<td>.64***</td>
<td>.43***</td>
</tr>
<tr>
<td>OCB</td>
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<td>.03</td>
</tr>
<tr>
<td>Liking</td>
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<td>.40</td>
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<tr>
<td>R² at each step</td>
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<td></td>
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<tr>
<td>F</td>
<td>47.83</td>
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</tr>
<tr>
<td>Hypothesis 2</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task performance</td>
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<td>.41***</td>
</tr>
<tr>
<td>OCB</td>
<td>.36***</td>
<td>.14</td>
</tr>
<tr>
<td>Perceived affective commitment</td>
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<td>.49</td>
</tr>
<tr>
<td>R² at each step</td>
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<td>.08***</td>
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<td>F</td>
<td>62.08</td>
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<tr>
<td>Hypothesis 4</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task performance</td>
<td>.65***</td>
<td>.41***</td>
</tr>
<tr>
<td>OCB</td>
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<td>.16</td>
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<tr>
<td>Altruistic motive</td>
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<td>.06</td>
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<tr>
<td>Instrumental motive</td>
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<tr>
<td>R² at each step</td>
<td></td>
<td>.07***</td>
</tr>
<tr>
<td>F</td>
<td>43.54</td>
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</table>

Note. OCB = organizational citizenship behavior. Ns = 127–140.

All F values were significant at p < .001.

*p < .05, two-tailed. **p < .01, two-tailed.
effects. In concert, these results suggest that much of the effect that OCB has on overall evaluations of performance is indirect, via the effect that it engenders on other variables. These findings suggest that the effect that OCB has on performance evaluations found in previous studies largely occurs as a result of the cognitively elicited affective reactions and favorable impressions of the employee that engaging in OCB produces. That is, employees who frequently engage in OCB are well-liked, thought to be committed to the organization, and presumed to engage in OCB for altruistic reasons.

No support was found for the hypothesis that the relationship of OCB with liking and OCB with perceived affective commitment would vary to the extent that OCB was viewed as discretionary by the rater. This suggests that regardless of whether or not the behavior is viewed as expected versus beyond expectations, the positive influence that the behavior has is the same.

A major limitation to the present study should be noted. The cross-sectional correlational nature of the data represents a threat to internal validity in that there is ambiguity regarding the causal direction of the relationships observed (e.g., does liking influence ratings of OCB or does OCB influence liking?; Cook, Campbell, & Peracchio, 1990). Further, given that the data consisted of managerial ratings of task performance and OCB, there is no firm basis from which to argue that levels of performance functioned as inputs to cognitive processes rather than as outputs of the processes. To address these limitations, we conducted a carefully designed conceptual replication of the field study, with controlled, objective levels of task performance and OCB, using an experimental laboratory methodology. Convergent results from the laboratory experiment will support the assertion that OCB influences the intervening and outcome variables as hypothesized.

Study 2: Laboratory Study

Method

Participants

The participants were undergraduate psychology and business students at a large southeastern university. Participants were asked to sign up for two sessions in exchange for course credit. A total of 154 students participated in the first session. Of those 154, 136 returned for the second session. The 136 students who participated in both sessions included 75 men and 61 women, who ranged in age from 18 to 47 years (M = 23.07, SD = 4.87). Their racial backgrounds were White (89.7%), Black (3.7%), Asian (4.4%), and other racial background (2.2%).

Procedure

The research was couched in the context of a study of effective teaching behavior in which students were to complete a university survey and then view and rate videotaped segments of graduate student teaching performance. Participants were told that their feedback would be used to develop future training programs for effective teaching. Participants initially completed a survey containing the job expectations measure and other filler items (e.g., satisfaction with the university). During the second session, held approximately one to two weeks later, participants viewed a 9-min color videotape of an instructor interacting with a class and delivering a lecture. We randomly assigned participants to 1 of 16 conditions (low vs. high task performance × low vs. high OCB, replicated across two male and two female instructors). Cell sizes across the four experimental conditions used for hypothesis testing ranged from 31 to 38. After viewing the videotape, participants were asked to respond to the dependent measures, manipulation checks, and questions regarding demographic information.

Development of Materials for the Video

Scripts. We took several steps to develop the behavioral scripts required for each condition in the design. First, we conducted structured interviews with six undergraduate students who provided examples of effective and ineffective teaching behaviors, as well as examples of behaviors considered to be above and beyond the call of duty. We then presented the examples considered to be above and beyond the call of duty to an independent group of 40 students who used a 5-point scale to indicate the extent to which they considered each behavior to be above and beyond the call of duty. We included the behaviors rated as most highly above and beyond the call of duty in the behavioral script to represent the presence of high levels of OCB. We also consulted the list of critical incidents of teaching performance developed by Sauser, Evans, and Champion (1980) for instances of effective and ineffective teaching and used them to develop the scripts for the high and low task performance conditions. Examples of high OCB included taking the class on a field trip and agreeing to see a student to discuss a personal problem outside of scheduled office hours. Examples of high task performance included using examples to help clarify the lecture material and encouraging class discussion.

Videotapes. Four different actors played the role of instructor, each performing all of the four roles defined by the manipulations. All actors were advanced doctoral students with prior experience in teaching and as role-players in training contexts, assessment center contexts, or both. We had two men and two women to rule out the possibility that observed effects were due to gender or other personal characteristics of the individual actor as opposed to the experimental conditions. To help control for potential bias, the actors wore the same type of attire and were trained to display similar mannerisms and type of demeanor. In addition to the instructor, the videotapes displayed an initial segment in which another actor, playing the role of a student, walked to the front of the class and spoke with the instructor. Though unseen, several other people could be heard on the videotape interacting with the instructor as students. The final product was a realistic depiction of a 9-min lecture segment that included student–teacher exchanges.
and rated the videotapes. We used a Latin-squares-type design wherein each of the raters watched four of the teaching segments and provided ratings of the observed level of task and OCBs. Judges rated the instructor's task performance on a 5-point scale ranging from highly ineffective (1) to highly effective (5). The mean rating under the low condition was 1.67 (SD = .65), and the mean rating under the high condition was 4.58 (SD = .52), t(134) = -11.22, p < .001. Judges were also asked to indicate if the instructor demonstrated behaviors that could be considered citizenship or extrarole (i.e., above and beyond the call of duty) on a 3-point scale ranging from there were no examples of extrarole behavior (1) to there were definitely several examples of extrarole behavior (3). The mean rating under the low condition was 1.16 (SD = .39). Ratings under the high condition all converged at 3 (t = -16.32, p < .001).

Measures

The same items used to measure liking, perceived affective commitment, and overall evaluation in the field study were slightly modified to fit the present classroom setting (e.g., “This employee appears highly committed to the organization” was changed to “This instructor appears highly committed to the university”; alpha = .89, .91, and .92 respectively). To measure job expectations, we gave students a list of 20 teaching behaviors and asked them to indicate the extent to which they believed each behavior was an expected part of teaching or if the behavior was above and beyond expectations of the job. Higher scores indicated that the behaviors were more likely to be viewed as beyond expectations while lower scores indicated that the behaviors were more likely to be viewed as expected (alpha = .79). To assess reward recommendations, students indicated the extent to which they would recommend the instructor for three rewards that academic institutions commonly offer (e.g., a teaching award; alpha = .92).

Manipulation Checks

After responding to the items related to the main constructs, participants were asked to rate the task (a 5-point scale ranging from highly ineffective, 1, to highly effective, 5) and citizenship behavior (a 3-point scale ranging from no examples of citizenship behavior, 1, to definitely examples of citizenship behavior, 3) of the instructor as manipulation checks. Analyses indicated that participants in the low task-performance condition rated the task performance of instructors (M = 1.73) significantly lower than did participants in the high task-performance condition (M = 3.33), t(134) = -10.10, p < .001. Participants in the low OCB condition also rated the OCB of instructors (M = 1.28) significantly lower than did participants in the high OCB condition (M = 2.10), t(134) = -7.91, p < .001. However, in multiple-factor designs it is possible that one manipulation may affect the independent variable associated with a different manipulation.1 That is, confounding can occur. Consequently, following the guidelines provided in Perdue and Summers (1986), we conducted a 2 x 2 factorial analysis of variance to examine the effect of the task and OCB manipulations on each manipulation check. The results of the analyses of variance did suggest that the manipulations were confounded. Specifically, OCB had a significant main effect on the task performance manipulation check, F(1, 132) = 49.33, p < .001. Likewise, task performance had a significant main effect on the OCB manipulation check, F(1, 132) = 20.87, p < .001. Given the significant result, we assessed the effect size associated with each main effect by calculating omega squared. With regard to the task performance manipulation check, the effect size associated with the task performance manipulation was .463 compared with .147 for the OCB manipulation. With regard to the OCB manipulation check, the effect size associated with the OCB manipulation was .336 compared with .088 for the task performance manipulation. As stated by Perdue and Summers, when the effect sizes for the unintended variables are much smaller than that of the manipulated variable, then their statistical significance should not be of great concern. In summary, although not completely orthogonal, the manipulations did appear to be effective.

We used analysis of variance to determine if there were significant differences in the task performance and OCB ratings given to the four raters (actors). No significant differences were detected in task performance ratings, F(3, 132) < 1.0, ns, or OCB ratings, F(3, 132) < 1.0, ns, across the four raters. These results provide evidence that any observed effects were due to the nature of the performance manipulations and not due to the gender or other unique characteristics of the actors who portrayed the rates.

Results

Intercorrelations among the variables in the study are presented in Table 3. The means across each of the experimental conditions are presented in Table 4.

Hypotheses Testing

We tested hypotheses using the same hierarchical multiple regression procedures described for the field study. We created dummy-coded variables to represent the distinction between low versus high task performance and low versus high OCB (low = 0; high = 1).

Table 5 provides results of the regression analyses. Hypothesis 1 proposed that the relationship between OCB and the dependent variables would be mediated by liking. As shown in Table 5, the addition of liking in the equation predicting overall evaluation resulted in a significant increment in variance (R²Δ = .27, p < .001), and the beta weight associated with OCB became nonsignificant. Similarly, the addition of liking to the equation predicting reward recommendations resulted in a significant increment in variance (R²Δ = .22, p < .001), and the beta weight associated with OCB became nonsignificant. Thus, full support was found for Hypothesis 1.

We also proposed that the relationship between OCB and the dependent variables would be mediated by per-

1 We thank an anonymous reviewer for bringing this to our attention.
Table 3
Zero-Order Correlation Coefficients Among Study Variables—Lab Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
<th>6</th>
<th>7</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Task performance</td>
<td>—</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. OCB</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>3. Liking</td>
<td>.50*</td>
<td>.49*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>4. Affective commitment</td>
<td>.33*</td>
<td>.68*</td>
<td>.81*</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>5. Job expectations</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>6. Overall evaluation</td>
<td>.56*</td>
<td>.26*</td>
<td>.80*</td>
<td>.66*</td>
<td>.04</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>7. Combined recommendation</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
<td>—</td>
</tr>
<tr>
<td>M</td>
<td>.69</td>
<td>.62</td>
<td>.80</td>
<td>.81</td>
<td>.01</td>
<td>.80</td>
<td>.83</td>
</tr>
<tr>
<td>SD</td>
<td>0.98</td>
<td>1.09</td>
<td>0.53</td>
<td>0.96</td>
<td>1.23</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. OCB = organizational citizenship behavior. Sample sizes for correlations ranged from 135 to 142. **p < .01, two-tailed.

cieved affective commitment. As shown in Table 5, the addition of perceived affective commitment in the equations for overall evaluation and reward recommendations resulted in significant increments in variance ($R^2\Delta = .17$ and .13, $p < .001$, respectively), and the beta weight associated with OCB in each case became nonsignificant. These results provide full support for Hypothesis 2.

Hypothesis 3 proposed that job expectations would moderate the relationship of OCB with liking and with perceived affective commitment. The test for moderation failed to show any significant effect either for liking or for perceived affective commitment ($R^2\Delta = .00$, ns). Thus, no support was found for Hypothesis 3.

### Discussion

Consistent with the results of the field study, the results of the laboratory study indicated that liking mediated the relationship between OCB and both dependent variables and that perceived affective commitment mediated the relationship between OCB and overall evaluation. However, unlike the field study, the lab study also indicated that perceived affective commitment mediated the relationship between OCB and reward recommendations. Also consistent with the field study, but contrary to the initial hypothesis, whether or not the OCBs were viewed as expected or beyond expectations did not moderate the relationship between OCB and liking or OCB and perceived affective commitment. Implications for these findings are considered under the General Discussion.

### General Discussion

The results of this research offer several notable findings regarding the effects of OCB on performance judgments. First, consistent with previous research, results of both the laboratory and the field study indicate that OCB adds significantly to the prediction of overall evaluation and reward recommendations beyond the effect of task performance, thus providing additional evidence that raters do in fact attend to the OCBs of employees with ensuing consequences.

Both studies offered strong evidence that the relationship of OCB with overall evaluations and with reward recommendations was mediated by liking. The findings suggest that engaging in OCBs triggers positive affect for

Table 4
Means for Measured Variables by Experimental Condition—Lab Study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Task performance</th>
<th>OCB</th>
<th>Low task performance</th>
<th>High task performance</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Low</td>
<td>High</td>
<td>Low</td>
<td>High</td>
</tr>
<tr>
<td>Liking</td>
<td>2.18</td>
<td>3.17</td>
<td>2.22</td>
<td>3.18</td>
</tr>
<tr>
<td>Perceived affective</td>
<td>2.25</td>
<td>2.96</td>
<td>1.90</td>
<td>3.38</td>
</tr>
<tr>
<td>commitment</td>
<td>2.01</td>
<td>1.97</td>
<td>2.04</td>
<td>1.94</td>
</tr>
<tr>
<td>Job expectations</td>
<td>1.82</td>
<td>2.88</td>
<td>2.12</td>
<td>2.61</td>
</tr>
<tr>
<td>Overall evaluation</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Reward recommendations</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

Note. OCB = organizational citizenship behavior.
Table 5
Results of Regression Analyses—Lab Study

<table>
<thead>
<tr>
<th>Independent variable</th>
<th>Overall evaluations</th>
<th>Reward recommendations</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Step 1</td>
<td>Step 2</td>
</tr>
<tr>
<td>Hypothesis 1</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Task performance</td>
<td>.56***</td>
<td>.58***</td>
</tr>
<tr>
<td>OCB</td>
<td>.30***</td>
<td>-.10</td>
</tr>
<tr>
<td>Liking</td>
<td></td>
<td></td>
</tr>
<tr>
<td>$R^2$ at each step</td>
<td>.31</td>
<td>.40</td>
</tr>
<tr>
<td>$R^2$Δ</td>
<td>.09***</td>
<td>.27***</td>
</tr>
<tr>
<td>$F^*$</td>
<td>90.34</td>
<td></td>
</tr>
</tbody>
</table>

Hypothesis 2

| Task performance     | .56*** | .58*** | .33*** | .59*** | .61*** | .40*** |
| OCB                  |        |        |        | .42*** | .02    |
| Perceived affective  |        |        |        | .57*** |
| communication         |        |        |        |        |
| $R^2$ at each step   | .31    | .40    | .57    | .34    | .51    | .64    |
| $R^2$Δ               | .09*** | .17*** | .17*** | .13*** |
| $F^*$                | 58.86  |        |        | 78.79  |

Note. OCB = organizational citizenship behavior. Ns = 134–135.

* All F values were significant at p < .001.
** p < .01. *** p < .001.

the ratee and that this positive affect in turn influences overall evaluations and reward recommendations. The results are consistent with Cardy and Dobbins' (1994b) supposition that one way liking may affect performance judgments is through schemas. According to Cardy and Dobbins, the early and intense nature of liking make it a probable candidate for forming the basis of schematic processing. The results of the lab study are especially supportive of this contention. After viewing one segment of teaching performance, raters had clear positive or negative affective reactions to the instructor.

Results regarding the role of perceived affective commitment and causal motives were somewhat more complex. Specifically, results of the laboratory study indicated that the effect of OCB on overall evaluation and on reward recommendations was mediated by perceived affective commitment. The results from the field study differed. Perceived affective commitment mediated the relationship between OCB and overall evaluation; however, mediation was not supported when predicting reward recommendations. Although the effect of causal motives was assessed in only the field study, we obtained a similar result. Specifically, the motive attributed to the OCB mediated the relationship between OCB and overall evaluation; however, mediation was not supported when predicting reward recommendations.

One possible explanation for these findings is a consideration of automatic versus controlled cognitive information processing. Controlled cognitive processes have been defined as those occurring under the conscious awareness of the person, whereas automatic processing is thought to be in operation when the individual processes information and renders judgments without conscious monitoring or critical deliberation (Ilgen & Feldman, 1983). It seems likely that providing reward recommendations in the field setting required more controlled processing than that which was required in the lab setting. Specifically, the two settings are different in that for students, making recommendations regarding instructors entails no subsequent consequences. Recommending an instructor for a teaching award does not typically have a personal impact on the student rater. On the other hand, for managers, reward recommendations typically have direct personal consequences. For example, contemplating whether someone should be recommended for a salary increase necessitates budget considerations. Thus, when rendering this type of judgment, managers may be forced into a more controlled mode of processing in which they search for and integrate information from a variety of sources to determine reward recommendations.

Of additional interest is the finding that managers do attribute different causal motives to the OCB of their employees. The motive ascribed appears to covary with the frequency of OCB reported. That is, individuals who were reported as engaging in OCB more often were also more likely to have the cause of the behavior attributed to altruistic motives, whereas individuals who were reported as engaging in OCB less often were more likely to have the
cause of the behavior attributed to instrumental motives. It appears that managers use consistency information in determining the employee's motive for engaging in OCB. This is congruous with previous research, which has identified consistency as one type of information that supervisors use when evaluating employee motives (Kelley, 1973).

In both studies, job expectations did not moderate the relationship between OCB and liking or between OCB and perceived affective commitment. The results indicate that although there were differences across individuals in the degree to which they classified behaviors as beyond expectations, this classification did not influence the effect that OCB had on liking and perceived affective commitment. It appears that regardless of whether or not the rater views this class of behavior as an expected part of the job, the behavior is recognized as positive, and hence the extent to which it is expected appears to bear no influence on the effect the behavior has on related judgments. This finding also has relevance to recent dialogue concerning the definition underlying terms such as extrarole behavior and organizational citizenship behavior (Organ, 1997; Van Dyne et al., 1995). As Organ (1997) suggested, it may no longer be useful to dichotomize behavior as either inrole or extrarole. Distinctions such as that of contextual and task performance as articulated by Borman and Motowidlo (1993), which are less reliant on formal role expectations, may have more theoretical and practical meaning.

Overall, results of this research have a number of theoretical implications. The results suggest that social information-processing theory may be useful for understanding how OCB influences performance judgments. Although the present research did not include a direct test of cognitive processes per se, a consideration of this theory helps shed some light on the method by which OCB exacts an effect on performance judgments. Specifically, it seems likely that employees who exhibit OCB match the prototype of the good employee. As such, positive affect and other characteristics (e.g., commitment to the organization) associated with a good employee are attached to the cognitive representation of the ratee. These additional attributes serve as mediators in transmitting the effect of OCB on performance judgments. Consistent with previous research, OCB appears to have a great deal of effect on performance judgments; however, its influence is primarily through the effect it engenders on other psychological factors.

Despite the strong results suggesting that a great deal of the effect of OCB on performance judgments is transmitted through other variables, additional processes also appear to be operating. Mediation effects were less pervasive when considering reward recommendations. The results suggest that the process linking OCB with performance judgments may depend on the type of judgment considered (i.e., overall evaluation vs. reward recommendations) and the context in which the judgment is rendered.

The present findings also have theoretical implications regarding the causal ordering of the liking–performance rating relationship. Liking effects have generally been assumed to reflect rater biases. Most research has taken the perspective that supervisors give high performance ratings to subordinates whom they like rather than they like high performing employees better (Judge & Ferris, 1993). On the other hand, Cardy and Dobbins (1994b) speculated that supervisor liking may be a function of ratee performance. Recent field research, using a structured diary-keeping strategy, indicated support for this conjecture (Varma, DeNisi, & Peters, 1996). Results of the current lab study clearly indicated that, given objective levels of performance, more effective performers were liked more than were less effective performers. Thus, the present findings provide further evidence that liking should not automatically be assumed as a source of bias and that it may indeed be a function of ratee performance.

One intent of conducting both a lab and a field study was to help address the weaknesses inherent in the use of any single research design. When two designs are combined in one investigation to explore the same issue, the strengths of one design can help compensate for the weaknesses of the other (Wayne & Ferris, 1990). Nevertheless, limitations to the present research should be considered. In the field study, the use of data collected at a single point in time, from a single source, introduces the possibility of common method variance. Although common method bias is an unlikely explanation for results that are convergent across the two studies, the effects of such bias cannot be completely ruled out.

Another concern might be that in the lab study college students, not managers, served as raters. However, participants were put in a rating situation they were very familiar with, and the purpose of their participation was made realistic. It should also be kept in mind that the primary purpose of the laboratory study was to determine if the findings observed in the field study could be replicated under objectively defined conditions of task performance and OCB. With this in mind, concerns about the internal validity of the study took precedence over concerns about the generalizability of the results (Mook, 1983; Sackett & Larson, 1990). It can also be argued that the psychological processes that were the focal point of interest in the present study are common to all individuals, and hence generalizability is less of an issue (Cardy & Dobbins, 1994a).

One final limitation to both studies concerns the identification of the locus of the effects observed. That is, although the results are suggestive of the cognitive processes that raters undergo in reaction to OCB, the present investi-
gation did not include an actual test of the cognitive mechanisms involved. As noted by Cardy and Dobbins (1994b), examining the effects of manipulations on ratings can lead to only an inference regarding the resultant cognitive operations.

With these limitations in mind, the current results suggest several avenues of future research worthy of pursuit. In terms of the processes whereby OCBs influence performance judgments, results of both the field and lab study indicate the involvement of a complex system of interrelated affective and cognitive variables. Although the present study provided a theoretical vantage point for beginning to understand these processes, further theoretical development is needed to better understand how OCB uniquely produces performance judgment changes. One consideration for future research is to examine if these processes differ across the various dimensions of citizenship (e.g., altruism, conscientiousness). Additional research is also needed to identify other variables that may be involved in this phenomenon. For example, perceived affective commitment is likely to be affected by a multitude of factors in addition to observed OCBs (e.g., organizational tenure, willingness to relocate). Moreover, there may be variables that moderate the relationship between OCB and performance judgments. Inclusion of additional variables in a full-information model would help researchers better understand the relationship between OCB and performance judgments.

Future research should also examine the extent to which managers purposefully reward OCB. For example, Podsakoff et al. (1993) speculated that managers may deliberately and consciously recall acts of OCB and intentionally reward employees out of a desire to reciprocate. Moreover, additional research examining factors such as promotion rates and salary levels of individuals as a function of level of OCB would be helpful in understanding how this class of behavior contributes to the actual allocation of organizational rewards.

In summary, the present research has attempted to expand the nomological net surrounding the effect of OCB on performance judgments. The results of the two studies permit considerable confidence in the conclusion that additional psychological factors are involved in the effect of OCB on performance judgments. Given the effect of OCB on the outcomes investigated and the significant impact of other attributes, researchers should continue to examine the influence of cognitive and affective factors on performance evaluation and reward outcome variables in order to gain a greater appreciation of the decision processes involved. Additional research in this area seems not only warranted but critical to advancing theory and practice regarding performance judgments.

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