

Individual- and Organizational-Level Consequences of Organizational Citizenship Behaviors: A Meta-Analysis

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Although one of the main reasons for the interest in organizational citizenship behaviors (OCBs) is the potential consequences of these behaviors, no study has been reported that summarizes the research regarding the relationships between OCBs and their outcomes. Therefore, the purpose of this study is to provide a meta-analytic examination of the relationships between OCBs and a variety of individual- and organizational-level outcomes. Results, based on 168 independent samples ($N = 51,235$ individuals), indicated that OCBs are related to a number of individual-level outcomes, including managerial ratings of employee performance, reward allocation decisions, and a variety of withdrawal-related criteria (e.g., employee turnover intentions, actual turnover, and absenteeism). In addition, OCBs were found to be related ($k = .38$; $N = 3,611$ units) to a number of organizational-level outcomes (e.g., productivity, efficiency, reduced costs, customer satisfaction, and unit-level turnover). Of interest, somewhat stronger relationships were observed between OCBs and unit-level performance measures in longitudinal studies than in cross-sectional studies, providing some evidence that OCBs are causally related to these criteria. The implications of these findings for both researchers and practitioners are discussed.

Keywords: organizational citizenship behaviors, contextual performance, meta-analysis, customer satisfaction, withdrawal

If the number of articles that have been published over the past quarter century is any indication, it would appear that organizational citizenship behaviors (OCBs) are firmly embedded in the fabric of the fields of organizational behavior and industrial-organizational psychology. For example, since Organ and his colleagues (Bateman & Organ, 1983; Smith, Organ, & Near, 1983) first coined the term in the early part of the 1980s, over 650 articles have been published on OCBs and related constructs such as organizational citizenship performance (Borman, 2004), prosocial organizational behavior (Brief & Motowidlo, 1986; George, 1990, 1991; George & Bettenhausen, 1990), extrarole behavior (Van Dyne, Cummings, & Parks, 1995), organizational spontaneity (George & Brief, 1992; George & Jones, 1997), voice behavior (LePine & Van Dyne, 1998; Van Dyne, Ang, & Botero, 2003; Van Dyne & LePine, 1998), and contextual performance (Borman &

Motowidlo, 1993, 1997). Perhaps more impressive is the fact that the vast majority of these articles (66%) have been published since the turn of the 21st century.

Organ (1988) originally defined organizational citizenship behavior as “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (p. 4). However, more recently, he modified this definition to say that OCB is “performance that supports the social and psychological environment in which task performance takes place” (Organ, 1997, p. 95). The advantage of this revised definition is that it (a) maintains the distinction that has empirically been shown to exist between task performance and OCBs (MacKenzie, Podsakoff, & Fetter, 1991; Motowidlo & Van Scotter, 1994; Rotundo & Sackett, 2002), (b) is more consistent with Borman and Motowidlo’s (1993) definition of contextual performance, and (c) avoids some of the difficulty with viewing OCBs as discretionary behavior for which an individual might not receive formal rewards. Nevertheless, regardless of which of Organ’s definitions one relies on, one of the main reasons for the interest in OCBs is that they are expected to be positively related to measures of organizational effectiveness.

Of course, if one assumes that OCBs have an effect on organizational performance, it makes sense to identify those variables that increase these behaviors in organizational settings. That is probably why most of the research in this domain has focused on the potential antecedents of OCBs, such as personality traits (cf. Borman, Penner, Allen, & Motowidlo, 2001; Konovsky & Organ,

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1996; Organ & Ryan, 1995), employee attitudes (Bateman & Organ, 1983; Konovsky & Pugh, 1994; Organ & Ryan, 1995), employee perceptions of fairness (Moorman, 1991; Niehoff & Moorman, 1993), leader behaviors (Pillai, Schriesheim, & Williams, 1999; Podsakoff, MacKenzie, Moorman, & Fetter, 1990), and a variety of task characteristics (Piccolo & Colquitt, 2006; Podsakoff, MacKenzie, & Bommer, 1996).

However, this does not mean that researchers in the field have completely neglected the effects that OCBs have on employee and organizational outcome variables. Indeed, an examination of the literature indicates that there is a growing interest in the relationships between OCBs and their potential consequences (e.g., Allen & Rush, 1998; X.-P. Chen, 2005; Dunlop & Lee, 2004; Ehrhart & Naumann, 2004; Koys, 2001; MacKenzie et al., 1991; Podsakoff & MacKenzie, 1997; Walz & Niehoff, 2000). At the individual level, these consequences include performance evaluations, managers' reward allocation decisions, and employee withdrawal, whereas at the organizational level they include a variety of objective effectiveness measures (e.g., productivity, efficiency, costs, and profitability).

There are several good reasons for the growing interest in the effects that OCBs have on these types of outcomes. First, if OCBs do have positive relationships with organizational effectiveness criteria, then it is important for us to quantify these effects so that we have a more complete picture of the potential impact that OCBs have on the "bottom line" of the organization. Second, it is important to examine the relationships between OCBs and organizational effectiveness criteria because, despite the fact that OCBs are assumed to be positively related to unit or organizational effectiveness, there is some evidence that this assumption is not always true. For example, in their study of 116 insurance agencies, Podsakoff and MacKenzie (1994) found that helping behaviors on the part of sales agents actually decreased (rather than increased) agency effectiveness as measured by a composite sales index. Related to this, there is a growing body of literature regarding the potential dysfunctional consequences of OCB, including increased levels of role overload, stress, and work-family conflicts (Bolino & Turnley, 2005). Thus, identifying the effects of OCBs on organizational effectiveness will allow researchers and managers alike to more accurately weigh the potential positive and negative consequences that may result from encouraging OCBs on the part of employees. Finally, if OCBs and task performance both contribute to managerial evaluations and reward allocation decisions, then it is important to determine which of these variables managers give the greatest weight to in their decision-making processes.

Therefore, the purpose of this article is to provide a quantitative summary of the empirical relationships between OCBs and individual and organizational outcomes. As a first step in this process, we review several theoretical explanations for why we expect OCBs to influence both individual and organizational outcomes. Following this, we conduct a meta-analytic review of the studies examining these relationships. Finally, we discuss the implications of these results and identify several avenues for future research.

This study makes several contributions to the literature. First, although there have been a substantial number of meta-analyses that have reported the relationships between OCBs and some of their antecedents (Borman et al., 2001; Dalal, 2005; Hackett, Farh, Song, & Lapierre, 2003; Ilies, Nahrgang, & Morgeson, 2007; Judge, Thoreson, Bono, & Patton, 2001; LePine, Erez, & Johnson,

2002; Organ & Ryan, 1995; Podsakoff et al., 1996), we are not aware of any meta-analytic review of the relationships between OCBs and their consequences. Although Podsakoff, MacKenzie, Paine, and Bachrach (2000) presented a narrative review of the relationships between OCBs and some of their consequences, this review was limited to a relatively small set of individual- and organizational-level outcomes and these authors did not provide quantitative estimates of these relationships. We think that this last point is important, because confidence intervals, corrected estimates, and measures of variability in correlations across studies provide important evidence about the strength and consistency of the relationships between two variables. Second, it is important to note that whereas Podsakoff and his colleagues included 36 independent samples in their narrative review, our meta-analysis includes almost six times this number (206 samples). Third, our study examines the relationships between OCBs and a variety of withdrawal-related criteria (i.e., turnover intentions, turnover, and absenteeism) that have not been summarized in any previous meta-analytic study. Fourth, our study also explores whether OCBs can be accorded casual priority in relationships with unit-level outcomes by comparing the differences in the correlations obtained in studies that employed longitudinal designs with those that employed cross-sectional designs. Finally, understanding the relationships between OCBs and their consequences is important from both a theoretical and a practical perspective. These relationships are important theoretically, because of the key role that consequences play in Organ's (1988, 1997) definition of OCBs. In addition, they are practically relevant because it is important for practicing managers to know whether these behaviors actually enhance organizational effectiveness.

Background and Hypotheses

The Dimensionality of OCBs

Although there are a number of ways in which OCBs have been conceptualized over the years (cf. Bateman & Organ, 1983; Organ, 1988, 1990; Smith et al., 1983; Van Dyne, Graham, & Dienesch, 1994; Williams & Anderson, 1991), the two most popular conceptualizations are those developed by Organ (1988, 1990) and Williams and Anderson (1991). Organ (1988) originally proposed a five-factor OCB model consisting of altruism, courtesy, conscientiousness, civic virtue, and sportsmanship. However, he subsequently expanded this model (Organ, 1990) to include two other dimensions (peacekeeping and cheerleading). There is good empirical evidence (Bell & Menguc, 2002; Hui, Lee, & Rousseau, 2004; Lam, Hui, & Law, 1999; Podsakoff et al., 1990) that managers have little difficulty distinguishing between Organ's (1988, 1990) sportsmanship, civic virtue, and conscientiousness dimensions. According to Organ (1988), *sportsmanship* is defined as a willingness on the part of employees to tolerate less than ideal circumstances without complaining and making problems seem bigger than they actually are; *civic virtue* is behavior indicating that employees take an active interest in the life of their organization; and *conscientiousness* (often called *compliance*) is behavior indicating that employees accept and adhere to the rules, regulations, and procedures of the organization. However, empirical research (Bachrach, Bendoly, & Podsakoff, 2001; MacKenzie et al., 1991; Podsakoff & MacKenzie, 1994) indicates that

managers often have difficulty making some of the distinctions between the other dimensions identified in Organ's conceptual model, and that they tend to view altruism, courtesy, peacekeeping, and cheerleading as part of an overall helping dimension. Thus, helping behavior is probably best viewed as a second-order latent construct comprising these four first-order dimensions, because as noted by Podsakoff, Ahearne, and MacKenzie (1997), these dimensions "clearly involve helping others with or preventing the occurrence of work-related problems" (p. 263).

The second major conceptualization of OCBs is that proposed by Williams and Anderson (1991). These authors organize OCBs into categories on the basis of the target or direction of the behavior. More specifically, they call behaviors directed toward the benefit of other individuals *OCBI*, whereas behaviors directed toward the benefit of the organization are called *OCBO*. Williams and Anderson originally identified Organ's (1988, 1990) altruism dimension as an exemplar of OCBI. However, based on the fact that courtesy, peacekeeping, and cheerleading behaviors are aimed at helping other individuals, it is also appropriate to include them in the OCBI category. Similarly, although Williams and Anderson originally used Organ's compliance (or conscientiousness) dimension as an exemplar of OCBO, other authors (Coleman & Borman, 2000; Hoffman, Blair, Meriac, & Woehr, 2007; LePine et al., 2002) have also included civic virtue and sportsmanship in this category. Thus, all of Organ's (1988, 1990) OCB dimensions can be captured by Williams and Anderson's conceptual scheme.

In addition, Williams and Anderson's (1991) categorization scheme incorporates most other OCB-related constructs into it. For example, OCBI captures not only Organ's (1990) altruism, courtesy, peacekeeping, and cheerleading dimensions but also Graham's (1989) interpersonal helping, Van Scotter and Motowidlo's (1996) interpersonal facilitation, and Farh, Earley, and Lin's (1997) helping coworkers and interpersonal harmony constructs. In a similar way, OCBO captures not only Organ's (1990) compliance, civic virtue, and sportsmanship dimensions but also Graham's (1991) organizational loyalty; Borman and Motowidlo's (1993, 1997) endorsing, supporting, and defending organizational objectives; Van Scotter and Motowidlo's (1996) job dedication; LePine and Van Dyne's (1998) voice behavior; Morrison and Phelps's (1999) taking charge (or individual initiative); and Farh, Zhong, and Organ's (2004) promoting the company's image constructs. As a result of this, and the fact that Organ (1997, pp. 94–95) himself seems to be favorably disposed to this approach, we used Williams and Anderson's conceptualization in our study.

Effects of OCB at the Individual Level

We now turn our attention to the relationships between OCBs and a number of individual-level outcomes, including performance evaluations and reward allocation decisions, as well as a variety of employee withdrawal-related activities (e.g., turnover intentions, actual turnover, and absenteeism).

Effects on performance evaluations and reward allocation decisions. There are a variety of reasons why managers may include OCBs in their performance evaluations and reward allocation decisions (Allen & Rush, 1998; Podsakoff, MacKenzie, & Hui, 1993; Podsakoff et al., 2000). For example, managers may recognize that OCBs such as helping, civic virtue, and sportsmanship make their own jobs easier. If this is the case, managers are

likely to reciprocate (Blau, 1964; Homans, 1961) by providing higher performance evaluations and more organizational rewards for employees who exhibit OCBs. In addition, Shore, Barksdale, and Shore (1995) have noted that because OCBs are somewhat more volitional than task performance, managers may use them as indicators of how motivated employees are to make the organization effective. As a result, OCBs may serve as behavioral cues of an employee's commitment to the success of the organization that managers incorporate in their assessments of employee job performance. Finally, Lefkowitz (2000) has argued that managers like employees who exhibit OCBs, and that this liking subsequently influences the manager's performance ratings and reward allocation decisions. Taken together, the above arguments suggest that employees who exhibit higher levels of OCB should receive higher performance evaluations and more rewards than those who exhibit lower levels of OCB. This is consistent with empirical evidence that OCB-like behaviors are positively related to both performance evaluations (Allen & Rush, 1998; MacKenzie et al., 1991; Werner, 1994) and reward recommendation decisions (Allen & Rush, 1998; Johnson, Erez, Kiker, & Motowidlo, 2002). Therefore, we hypothesize the following:

Hypothesis 1: OCBs are positively related to managers' ratings of employee performance.

Hypothesis 2: OCBs are positively related to the rewards managers allocate to employees.

Effects on employee withdrawal behaviors. Chen and her colleagues (X.-P. Chen, 2005; X.-P. Chen, Hui, & Segó, 1998) have argued that OCBs are relatively discretionary forms of behavior and that, as a result, low or decreasing levels of these forms of behavior may serve as an indication of an employee's withdrawal from the organization. Consistent with these expectations, several studies (X.-P. Chen, 2005; X.-P. Chen et al., 1998; Mossholder, Settoon, & Henagan, 2005) have shown that OCBs are negatively related to both employee turnover intentions and actual turnover. Therefore, we hypothesize the following:

Hypothesis 3: OCBs are negatively related to employee (a) turnover and (b) turnover intentions.

Although Chen and her colleagues (X.-P. Chen, 2005; X.-P. Chen et al., 1998) restricted their research to the effects that OCBs should have on employee turnover and turnover intentions, it is important to note that their theoretical rationale should also apply to other forms of withdrawal behaviors, such as employee absenteeism. Indeed, one would expect that employees exhibit lower levels of OCBs would also be those who exhibit lower attendance levels at work. Therefore, we hypothesize the following:

Hypothesis 4: OCBs are negatively related to employee absenteeism.

Potential Moderators of Individual-Level OCBs

In addition to providing point estimates of relationships, one of the advantages of meta-analysis is that it also permits a researcher to examine potential moderator variables. In this study, we examined two potential moderators of the relationships between OCBs

and individual-level outcomes: (a) the source of the OCB ratings (same vs. different source) and (b) the target of the OCBs (OCBI vs. OCBO).

Source of rating as a potential moderator. Several researchers (cf. MacKenzie, Podsakoff, & Fetter, 1993; Podsakoff et al., 2000) have noted that the strength of the relationships between OCB ratings and performance evaluations may be affected by whether these variables are obtained from the same source as opposed to different sources. The reason for this is that when OCBs and performance ratings are obtained from the same source, the relationship observed between the ratings may reflect not only “true” systematic variation among these variables but also systematic variation due to factors such as implicit performance theories, consistency motifs, and leniency biases possessed by the rater (Podsakoff, MacKenzie, Lee, & Podsakoff, 2003; Podsakoff & Organ, 1986). Traditionally, the concern has been that these forms of bias might inflate the relationships between these variables. Consistent with this expectation, MacKenzie et al. (1993) reported that OCBs accounted for substantially less variance in managers’ evaluations of employee performance in samples of 261 insurance agents and 108 pharmaceutical sales managers when same source variance was controlled than when it was not controlled. Therefore, we expect the following:

Hypothesis 5: Rating source moderates the relationship between OCB and overall performance evaluations, such that this relationship is more positive when ratings are obtained from the same source as opposed to different sources.

OCB target as a potential moderator. As noted earlier, Williams and Anderson (1991) have distinguished between those citizenship behaviors aimed at helping other individuals (OCBIs) and those aimed at the organization (OCBOs). This distinction may be important, because even though LePine et al. (2002) have concluded that there are few differences in the nature of the relationships between predictors of OCBO and OCBI, some recent studies appear to raise questions about this conclusion. For example, Ilies et al. (2007) reported that leader–member exchange (which is an individually focused variable) was more strongly related to individually focused citizenship behaviors ($r_c = .38$) than to organizationally focused OCBs ($r_c = .31$); and Halbesleben and Bowler (2007) reported that emotional exhaustion was positively related to OCBI and negatively related to OCBO in two studies, regardless of whether the OCB measures were obtained from self, supervisory, or peer ratings. Similarly, Van Dyne and her colleagues (Graham & Van Dyne, 2006; LePine & Van Dyne, 2001; Stamper & Van Dyne, 2001) have reported that employee personality traits (e.g., agreeableness and self-esteem) and perceptions (e.g., justice beliefs and perceptions of bureaucratic organizational culture) have different relationships with helping behaviors (a form of OCBI) than they do to voice behaviors (a form of OCBO). Taken together, these results suggest that OCBOs and OCBI might have differential relationships with at least some antecedents of OCBs.

However, we are not aware of any research that has attempted to examine whether OCBI and OCBO are differentially related to individual-level outcomes such as managerial evaluations or reward allocation decisions, even though there may be some reason to believe such differences do exist. For example, managers

might pay more attention to OCBOs than to OCBI in making performance evaluations and reward allocation decisions, because behaviors that are directed at the organization are likely to impact more people (i.e., have more leverage) than behaviors aimed at helping specific individuals. Thus, an employee who makes suggestions on how to improve the organization or takes the initiative to make the necessary changes to solve an organizational bottleneck has the potential to help the manager (and the organization) more than an employee who helps a coworker with a specific problem he or she is facing. Although we do not provide any specific hypotheses regarding these differences, we do examine the potential moderating effects of OCB target (OCBI vs. OCBO) on the relationships between OCB and individual-level outcomes in our study.

Effects of OCB at the Unit and/or Organizational Level

In addition to the effects that OCBs are expected to have on individual-level outcomes, these forms of behavior are expected to have effects on unit or organizational outcomes as well. In this section, we focus on hypotheses regarding three main types of outcomes that have been examined in the literature: (a) organizational effectiveness; (b) customer satisfaction; and (c) group- or unit-level turnover.

OCBs and group- or unit-level effectiveness. Several researchers (Borman & Motowidlo, 1993; Organ, 1988; Podsakoff et al., 1997; Podsakoff & MacKenzie, 1997) have provided reasons why OCBs might enhance unit- or organizational-level measures of effectiveness. For example, experienced employees who exhibit OCBs may enhance the productivity of less experienced peers by showing them the ropes and/or teaching them best practices. Similarly, employees who engage in civic virtue (or voice behavior) may offer their manager useful suggestions that improve unit effectiveness, reduce costs, or free up the manager to spend time on more productive tasks such as strategic planning. Finally, OCBs may also enhance team spirit, morale, and cohesiveness, thereby reducing the amount of time and energy spent on team maintenance functions and enhancing the organization’s ability to attract and retain the best people. Consistent with this reasoning, a growing number of studies (Dunlop & Lee, 2004; Koys, 2001; Podsakoff et al., 1997; Podsakoff & MacKenzie, 1994; Walz & Niehoff, 2000) have shown that OCBs are positively related to a variety of unit or organizational effectiveness measures, including production quantity, efficiency, profitability, and the reduction of costs. Therefore, we hypothesize the following:

Hypothesis 6: OCBs are positively related to a variety of unit and/or organizational effectiveness measures, including unit productivity, efficiency, profitability, and the reduction of costs.

OCBs and customer satisfaction. Yen and Niehoff (2004) have noted that in addition to the effects they may have on internal organizational effectiveness measures, OCBs may also influence external effectiveness measures, such as customer satisfaction. More specifically, they argue that employees who exhibit altruism should encourage teamwork and cooperation among coworkers and that this enhanced cooperation should allow the group to deliver their goods or services more effectively, and subsequently

increase customer satisfaction. In addition, they note that more conscientious and courteous employees should increase customer satisfaction because these employees will stay more informed and up-to-date about the products and services the company offers. Finally, Yen and Niehoff argue that employees who exhibit civic virtue or voice behavior by providing ideas on how to improve customer service should also increase customer satisfaction. We would add that employees who help the team deal effectively with conflicts (peacekeeping) and avoid making petty complaints (sportsmanship) should also help the team focus its energies on customer-service-related activities and subsequently increase customer satisfaction. Consistent with these arguments, Yen and Niehoff have reported that OCBs were related to customer satisfaction in a study of 26 branches of a retail bank located in Taiwan. Thus, we expect the following:

Hypothesis 7: OCBs are positively related to customer satisfaction.

OCBs and group or unit turnover. Many of the OCBs that occur in organizational settings are directed at helping or providing support to coworkers or peers. For example, employees who come to the aid of a coworker who is having difficulty in his or her job or who has fallen behind because of an illness are helping or providing support. Similarly, employees who step in to alleviate disagreements or conflicts between coworkers are helping them to deal with their conflicts more effectively. Such behavior would be expected to build stronger relationships (cohesiveness) among the group members and subsequently reduce the likelihood that they will leave the group. Indeed, there is a substantial amount of evidence (cf. George & Bettenhausen, 1990; Kidwell, Mossholder, & Bennett, 1997; Podsakoff et al., 1996) that OCBs are related to group cohesiveness and that group cohesiveness is related to employee turnover. Although these relationships are generally assumed to be indicative of the fact that group cohesiveness is likely to lead to OCBs, almost all of this research has been conducted using cross-sectional designs, and we believe that it also may provide support for the reverse causal ordering. That is, groups that exhibit OCBs should enhance group members' cohesiveness and their desire to maintain membership in the organization. This line of reasoning is consistent with X.-P. Chen et al.'s (1998) argument:

We may expect that groups (or organizations) that have higher levels of OCB will have lower levels of turnover because interactions among employees who exhibit high levels of OCB are likely to foster group attractiveness and cohesiveness and subsequently to decrease voluntary turnover. (p. 928)

It is also consistent with preliminary empirical evidence (Richardson & Vandenberg, 2005; Sun, Aryee, & Law, 2007), which shows that unit-level OCBs are negatively related to unit-level turnover. Thus, we expect the following:

Hypothesis 8: OCBs are negatively related to group- and/or unit-level turnover.

Potential Moderators of Unit-Level OCBs

There are a number of potential moderators of the relationships between OCBs and their unit-level outcomes that we felt could

prove interesting to examine, including the target of the citizenship behavior, the nature of the organizational compensation system being used, and the type of industry. However, given the difficulty associated with conducting unit-level research, it is not surprising that there are much fewer studies reported in this domain, which precluded us from examining these moderators. Nevertheless, we were able to examine one important potential moderator of this relationship: the nature of the research design.

Research design as a potential moderator. Although there are good theoretical reasons (Borman & Motowidlo, 1993; Organ, 1988; Podsakoff & MacKenzie, 1997) to believe that the correlation between OCB and unit-level performance is a reflection of the fact that OCBs result in increased unit performance, it is possible that this correlation reflects a reverse causal ordering. Units that perform at higher levels might describe themselves as exhibiting more OCBs than units that perform at lower levels. For example, Bachrach et al. (2001) provided evidence that groups that were told that their performance was high rated themselves as exhibiting more OCBs than groups that were told that their performance was low, even though the feedback was unrelated to the groups' actual performance. These findings raise questions about the nature of the causal relationship between OCBs and unit-level performance. Therefore, in order to explore whether there was any evidence for a causal relationship between OCB and unit-level performance, we separated those studies in our data set in which the measures of OCB and unit-level performance were obtained during the same period of time (cross-sectional studies) from those studies in which the OCB measures were obtained before the measures of performance (lagged studies), and then compared the correlation coefficients between these two subgroups.

Method

Literature Search

Studies included in our meta-analysis were identified using a variety of methods. First, we conducted a computerized search of the PsycINFO, ABI/INFORM, and ERIC databases using the key words *organizational citizenship behavior*, *organizational citizenship performance*, *extra-role behavior*, *contextual performance*, *organizational spontaneity*, *prosocial organizational behavior*, *altruism*, *helping*, *voice*, and *civic virtue*. Second, we used these terms to search the ProQuest dissertation abstracts database to identify unpublished dissertations examining OCB–outcome relationships. Third, we conducted a manual search of the Academy of Management and the Society for Industrial and Organizational Psychology conference programs for the previous 3 years (2005–2007) and contacted authors of papers that might report relationships between OCBs and their consequences. Fourth, we conducted a manual search of each issue from January 1983 through October 2007 of several relevant academic journals (i.e., *Academy of Management Journal*, *Administrative Science Quarterly*, *Human Performance*, *Journal of Applied Psychology*, *Journal of Management*, *Journal of Occupational and Organizational Psychology*, *Journal of Organizational Behavior*, *Journal of Vocational Behavior*, *Organizational Behavior and Human Decision Processes*, and *Personnel Psychology*) to obtain as many published articles as possible that might contain correlations between OCB and individual- and organizational-level outcomes. The year 1983

was chosen to begin the search because Bateman and Organ's (1983) and Smith et al.'s (1983) original articles on OCB were published during that year. Finally, we examined all of the published articles included in reviews of the OCB literature conducted by Organ and Ryan (1995), Podsakoff et al. (2000), LePine et al. (2002), Dalal (2005), and Organ, Podsakoff, and MacKenzie (2006).

For a study to be included in the meta-analysis, it had to report a Pearson product-moment correlation coefficient (or a phi matrix) between a measure of OCB and an individual or unit-level criterion variable. These decision rules omitted articles that reported only the psychometric properties of the OCB scales, analysis of variance results, and/or parameter estimates from structural equation or regression models. Our search yielded 168 independent samples ($N = 51,235$ individuals) for individual-level outcomes and 38 independent samples ($N = 3,611$ units) for unit-level outcomes.

Coding of Relevant Information

Each of the studies identified were coded on seven criteria: (1) the type(s) of OCB; (2) the nature of the criterion variables (e.g., individual or organizational level); (3) study characteristics (e.g., cross-sectional or lagged design); (4) sample size; (5) construct reliabilities; (6) effect sizes; and (7) whether the OCBs and performance evaluations were obtained from the same or different sources. After we developed the coding scheme, two of the authors independently coded half of the studies to assess the level of agreement. Intercoder agreement on Criteria 1 and 2 was 100%, whereas intercoder agreement on Criteria 3, 4, 5, 6, and 7 was 97%, 88%, 93%, 95%, and 99%, respectively.¹ All discrepancies among the coders were discussed by the first three authors until consensus was reached for the final coding. The coding for the remaining articles was conducted by one of the authors involved in the original coding task. When a coding question arose, this author would consult with two of the other authors to resolve the question. The sample size (N) for each study was recorded as the number of observations used to compute the correlation coefficient. In the case of individual-level relationships, N represents the number of respondents who participated in the study; in the case of organizational-level relationships, N represents the number of groups or units included in the analysis. Finally, when more than one study reported data from the same sample, only correlations that were *not* reported in the study that appeared first in the literature were included as data from the second study.

Meta-Analytic Procedures

We used the meta-analytic procedures recommended by Hunter and Schmidt (1990) to calculate the average, sample-weighted correlations between OCBs and individual- and unit-level criteria. The statistical significance of these correlations was judged using a 90% confidence interval (Whitener, 1990). To provide the most accurate point estimates, the weighted mean correlations were corrected for measurement and sampling error. In those studies in which there were multiple indicators of a focal construct, we created linear composites of correlations. Linear composites are generally considered superior to averaging techniques because they provide a more construct-valid estimate of the true correlation

and avoid over- or underestimating the sampling error, thus improving the precision of a meta-analysis (Hunter & Schmidt, 1990).

In addition to reporting estimates of the mean corrected correlations, it is also important to describe variability in the meta-analytic correlations. Accordingly, we report the standard deviation of the corrected correlation (SDr_c), which provides an index of the variation in study results for a given relationship, as well as the Q statistic, which captures the variation between studies and is used as evidence that potential moderators of a given relationship may be present.

Results

Relationships Among the OCBs

Before turning our attention to the relationships between OCBs and the individual-level outcomes, we examined the relationships between OCBI, OCBO, and task performance. Table 1 reports the meta-analytic estimates for the relationships between these constructs. This table indicates that (a) the OCBI and OCBO dimensions are relatively independent of the task performance measures ($r_c = .47$ for OCBI; $r_c = .54$ for OCBO) and (b) although the OCBI and OCBO dimensions are relatively strongly correlated ($r_c = .75$), they still share less than 57% of their variance. Thus, it appears that ratings of OCBO and OCBI are fairly distinguishable from each other and from ratings of task performance.

Relationships Between OCBs and Individual Outcomes

Table 2 summarizes the meta-analytic relationships between OCBs and their individual-level consequences. In addition, because we wanted to provide a comparison of the relationships between OCBs and performance ratings relative to the relationships between task performance and this criterion variable, we also reported this later relationship from the studies that we coded.

OCBs and job performance ratings. Consistent with Hypothesis 1, the results in Table 2 show that overall OCBs are positively related to job performance ratings ($r_c = .60$).² The table also indicates that this relationship is somewhat stronger than the relationship between task performance and job performance ratings ($r_c = .52$). Thus, these findings indicate that overall OCBs are at least as strongly correlated with job performance evaluations as is task performance.

OCBs and reward allocation decisions. The results in Table 2 indicate that OCBs also have relatively strong, positive relationships with reward allocation decisions ($r_c = .57$), although a

¹ The initial interrater agreement figure for sample size was somewhat lower than for the other criteria primarily because many of the dissertations and conference presentations reported different N values in their text, tables, and figures. Generally, this resulted from authors of these manuscripts not employing listwise deletion, conducting multiple analyses with different sample sizes, and/or not specifying the final sample size. Therefore, we rechecked all the studies in our meta-analysis and coded the most conservative (lowest) sample size reported in each study to ensure consistency.

² To avoid repetition in our discussion of the results, we note that all of the meta-analytic relationships are significant (90% confidence intervals exclude zero) unless otherwise noted in the text.

Table 1
Relationships Among the OCB Dimensions and Task Performance

Relationship	<i>k</i>	<i>N</i>	<i>r</i>	90% confidence interval		<i>r_c</i>	<i>SDr_c</i>	<i>Q</i>
				Lower	Upper			
OCBI and OCBO	37	12,649	.56	.55	.57	.75	.14	69.96**
OCBI and task performance	24	7,947	.39	.37	.40	.47	.28	233.60**
OCBO and task performance	22	6,018	.40	.39	.42	.54	.30	125.44**

Note. *k* = number of independent samples; *N* = sample size; *r* = average correlation coefficient; *r_c* = average correlation coefficient corrected for measurement and sampling error; *SDr_c* = standard deviation of the corrected correlation coefficient; *Q* = *Q* statistic; OCBI = organizational citizenship behavior (OCB) directed toward other individuals; OCBO = OCB directed toward the organization.

** *p* < .01.

breakdown of these findings suggests that OCBs had a stronger relationship with reward recommendations (*r_c* = .77) than they did with actual rewards (*r_c* = .26). Because the confidence intervals for these latter relationships did not overlap, these findings suggest that even though OCBs have a substantial impact on reward recommendations, these recommendations do not always translate into the actual administration of rewards. However, the correlations for each of these relationships were significant, thereby providing support for Hypothesis 2.

OCBs and employee withdrawal criteria. Consistent with Hypotheses 3a and 3b, the results reported in Table 2 show that overall OCBs were negatively related to both turnover intentions (*r_c* = -.22) and actual turnover (*r_c* = -.14). The results also provide support for Hypothesis 4, in that there was a negative relationship (*r_c* = -.16) between OCBs and employee absenteeism. Thus, employees who exhibit higher levels of OCB are less likely than employees who exhibit lower levels of these behaviors to think about leaving the organization, to actually leave it, or to be absent from work.

Table 2
Relationships Between OCBs and Individual-Level Outcomes

Relationship	<i>k</i>	<i>N</i>	<i>r</i>	90% confidence interval		<i>r_c</i>	<i>SDr_c</i>	<i>Q</i>
				Lower	Upper			
Performance ratings and rewards								
OCB–job performance ratings	72	21,881	.49	.48	.50	.60	.26	648.36**
OCBI–job performance ratings	43	15,860	.46	.45	.47	.55	.25	529.55**
OCBO–job performance ratings	38	12,745	.46	.45	.48	.63	.26	166.89**
Task performance–job performance ratings	27	8,065	.46	.44	.47	.52	.23	191.42**
OCB–reward allocation decision	16	5,971	.46	.44	.47	.57	.24	67.27**
OCBI–reward allocation decision	11	5,144	.46	.44	.48	.54	.26	106.79**
OCBO–reward allocation decision	8	4,579	.44	.42	.46	.55	.19	36.21**
OCB–actual rewards	8	2,631	.21	.18	.24	.26	.11	22.28**
OCBI–actual rewards	6	1,779	.14	.11	.18	.17	.00	5.98
OCBO–actual rewards	5	1,527	.22	.18	.26	.28	.06	7.15
OCB–reward recommendations	10	4,330	.58	.56	.60	.77	.00	4.54
OCBI–reward recommendations	6	3,683	.59	.57	.61	.73	.00	5.28
OCBO–reward recommendations	4	3,370	.52	.50	.54	.72	.00	2.52
Withdrawal behaviors								
OCB–turnover intentions	90	26,510	-.17	-.18	-.16	-.22	.17	513.22**
OCBI–turnover intentions	40	10,337	-.09	-.11	-.08	-.11	.10	106.31**
OCBO–turnover intentions	37	9,672	-.16	-.17	-.14	-.20	.14	153.27**
OCB–turnover	12	3,917	-.13	-.16	-.11	-.14	.08	31.61**
OCBI–turnover	5	1,429	-.10	-.15	-.06	-.11	.05	8.49
OCBO–turnover	4	1,253	-.14	-.18	-.09	-.18	.03	4.62
OCB–absenteeism	15	4,037	-.13	-.16	-.11	-.16	.07	28.17**
OCBI–absenteeism	6	1,870	-.11	-.15	-.07	-.13	.00	2.06
OCBO–absenteeism	4	1,518	-.11	-.15	-.07	-.14	.00	3.20

Note. Subgroup *k* values may not add up to overall *k* because of the use of linear composites, which eliminate double-counting data from the same study. *k* = number of independent samples; *N* = sample size; *r* = average correlation coefficient; *r_c* = average correlation coefficient corrected for measurement and sampling error; *SDr_c* = standard deviation of the corrected correlation coefficient; *Q* = *Q* statistic; OCBI = organizational citizenship behavior (OCB) directed toward other individuals; OCBO = OCB directed toward the organization.

** *p* < .01.

Tests of Individual-Level Moderators

To test the potential moderating effects of OCB target on the relationships between OCBs and individual-level outcomes, we examined the overlap between the 90% confidence intervals. When the confidence intervals of the correlation coefficients did not overlap, the differences were considered significant.

Moderating effects of rating source. To test whether the relationship between OCB ratings and job performance depends on the ratings source (Hypothesis 5), we separated those studies that obtained the OCB and performance evaluations from the same source from those studies that obtained these ratings from different sources, and conducted subgroup meta-analyses. As a point of comparison, we also used the same procedure to examine the potential impact of same-source biases on the relationships between task performance and overall job performance ratings and between OCBO and OCBI and this criterion. The results of these analyses are reported in Table 3.

Consistent with Hypothesis 5, the overall OCB–job performance ratings relationship reported in this table were significantly stronger when the measures of these constructs were taken from the same source ($r_c = .62$) than when they were obtained from different sources ($r_c = .32$). This difference was also reflected for the relationships between both OCBI ($r_c = .61$ for same source vs. $r_c = .28$ for different sources) and OCBO ($r_c = .68$ for same source vs. $r_c = .36$ for different sources) and this criterion. This suggests that the OCB and job performance ratings share about three to four times more variance when they were obtained from the same source (36%–48%) than when they were obtained from different sources (8%–13%). Finally, the findings reported in Table 3 show that even though task performance measures shared significantly more variance with performance evaluations when they were taken from the same source than from different sources (32% vs. 16%), the differences were somewhat less pronounced than in the case of the OCB–job performance relationships.

Moderating effects of OCB target. A comparison of the confidence intervals reported in Table 2 indicates that (a) with the exception of reward recommendations, no differences were found in the relationships between the target of the citizenship behaviors (OCBIs vs. OCBOs) and the job performance ratings or other reward variables (e.g., reward allocation decisions or actual rewards), and (b) with the exception of turnover intentions, no differences were found in the relationships with the withdrawal criteria (e.g., turnover or absenteeism). In addition, although the confidence intervals suggest that the difference between OCBIs and reward recommendations ($r = .59$) is different from the relationship between OCBOs and this criterion variable ($r = .52$), these differences disappear when the corrected correlations are compared with each other (r_c values = $.73$ and $.72$, respectively). Thus, there was little support for the moderating effects of the target of OCBs on the individual outcomes.

Supplementary Analysis

Effects of OCB relative to task performance. The results reported above are consistent with our hypotheses that OCBs tend to be positively related to managerial evaluations of employee performance, and that the OCB–job performance ratings relationship is stronger when these ratings are obtained from the same source as opposed to different sources. In addition, the findings show that the relationships between the OCBs and job performance ratings are, for the most part, quite comparable with the relationships between task performance and job performance ratings. However, these findings do not take into consideration the fact that the OCBs and task performance ratings are correlated with each other. As a result, it is not clear what the unique contribution of these behaviors is to overall performance ratings. Therefore, in order to develop a clearer picture of these relationships, we obtained meta-analytic estimates of the relationships between the OCB dimensions (OCBI and OCBO), task performance, and job performance

Table 3
Moderating Effects of Rating Source on OCB–Job Performance Rating Relationships

Relationship	<i>k</i>	<i>N</i>	<i>r</i>	90% confidence interval		r_c	SDr_c	<i>Q</i>
				Lower	Upper			
OCB–job performance ratings (same source)	58	18,712	.51	.50	.52	.62	.26	551.71**
OCB–job performance ratings (different source)	17	4,448	.27	.25	.30	.32	.21	139.79**
OCBI–job performance ratings (same source)	35	13,092	.51	.50	.52	.61	.23	400.07**
OCBI–job performance ratings (different source)	10	4,052	.22	.20	.25	.28	.15	42.03**
OCBO–job performance ratings (same source)	30	10,447	.51	.49	.52	.68	.22	97.54**
OCBO–job performance ratings (different source)	9	2,556	.28	.25	.31	.36	.25	57.92**
Task performance–job performance ratings (same source)	18	5,338	.50	.49	.52	.57	.26	254.80**
Task performance–job performance ratings (different source)	11	4,224	.33	.30	.35	.40	.19	49.02**

Note. Subgroup *k* values may not add up to overall *k* because of the use of linear composites, which eliminate double-counting data from the same study. *k* = number of independent samples; *N* = sample size; *r* = average correlation coefficient; r_c = average correlation coefficient corrected for measurement and sampling error; SDr_c = standard deviation of the corrected correlation coefficient; *Q* = *Q* statistic; OCBI = organizational citizenship behavior (OCB) directed toward other individuals; OCBO = OCB directed toward the organization.

** $p < .01$.

ratings from the studies we summarized and then conducted supplemental path analyses using the procedures described by Viswesvaran and Ones (1995). To obtain meta-analytic path model estimates, we input the correlation matrices into LISREL 8.52 (Jöreskog & Sörbom, 2002) using the harmonic mean of the appropriate studies as the sample size. Although LISREL provides goodness-of-fit indices for path analytic models, our models were completely saturated and therefore fit the data perfectly.

The results of this analysis are reported in Table 4. The first column reports the results for all of the studies included in our analysis; the second column reports the results for only those studies in which the ratings of task performance and OCBs were obtained from the same source as the job performance ratings; and the third column reports the results for only those studies in which ratings of task performance and OCBs were obtained from a different source than the job performance ratings.

There are several interesting patterns of relationships that are worth noting in this table. First, regardless of whether the analysis included data from the same or different sources, the combination of OCBs and task performance accounted for substantial amounts of variance in job performance ratings. Second, as expected, the amount of variance accounted for in the overall job performance ratings by task performance and OCBs when these measures were taken from the same source ($R^2 = .50$) was substantially higher than when these measures were taken from a different source than the job performance ratings ($R^2 = .25$). Third, the relative impacts of task performance, OCBO, and OCBI depended on whether the ratings were taken from the same source or different sources. For example, when the OCBs and task performance ratings were taken from the same source as the job performance evaluations, OCBOs had the strongest impact on the job performance evaluations ($\beta = .41, p < .01$), followed by OCBI ($\beta = .20, p < .01$) and then task performance ($\beta = .17, p < .01$). However, when the OCB ratings and task performance ratings were taken from a different source than the job performance ratings, task performance had the strongest impact on job performance ratings ($\beta = .33, p < .01$), followed by OCBO ($\beta = .25, p < .01$) and then OCBI ($\beta = .09, p < .01$). Thus, it appears that OCBOs generally had a stronger effect on job performance evaluations than did OCBI but that the effect of OCBOs relative to task performance was somewhat dependent on the source from which the ratings were obtained.

Table 4
Completely Standardized Parameter Estimates for the Effects of Task Performance and OCBs on Job Performance Ratings

Predictor variable	Overall ratings of performance	Same-source ratings of performance	Different-source ratings of performance
Task performance	.25**	.17**	.33**
OCBI	.18**	.20**	.09**
OCBO	.37**	.41**	.25**
R^2	.46	.50	.25

Note. Significance tests were based on the harmonic mean of the sample sizes of the individual studies used in each regression; the harmonic means for the overall, same-source, and different-source models were 9,770, 6,868, and 2,669, respectively. OCBI = organizational citizenship behavior (OCB) directed toward other individuals; OCBO = OCB directed toward the organization.

** $p < .01$.

Are the OCB → turnover relationships spurious? There is a substantial amount of meta-analytic evidence that job satisfaction is related both to OCBs (Organ & Ryan, 1995; Podsakoff et al., 1996) and to turnover and turnover intentions (Griffeth, Hom, & Gaertner, 2000; Hom, Caranikas-Walker, Prussia, & Griffeth, 1992). These findings suggest that the relationships we reported between OCBs and turnover and turnover intentions may be spurious, because all of these variables are related to job satisfaction. To examine this possibility, we analyzed one meta-analytic path model (Viswesvaran & Ones, 1995) using OCBs and job satisfaction to predict turnover intentions and another to predict actual turnover. The results of these analyses are reported in Table 5. As indicated in this table, both job satisfaction ($\beta = -.57, p < .01$) and OCBs ($\beta = -.09, p < .01$) had a significant negative relationship with turnover intentions, and together these variables accounted for 37% of the variance in this criterion variable. Similarly, Table 5 indicates that job satisfaction and OCBs both had significant negative relationships with actual turnover ($\beta_s = -.16$ and $-.14$, respectively, $ps < .01$), and these variables accounted for 5% of the variance in this criterion variable. Thus, taken together, these findings suggest that the relationship between OCBs and these withdrawal criteria cannot be totally attributed to a spurious relationship caused by job satisfaction.

Relationships Between OCBs and Organizational Outcomes

We now turn our attention to the tests of the hypothesized relationships between the OCBs and unit-level or organizational-level outcomes. The results for these analyses are reported in Table 6. In those cases where enough data existed between the specific OCB dimensions and criterion variables, we conducted subgroup analyses.

OCBs and unit-level outcomes. We expected (Hypothesis 6) that unit-level OCBs would be positively related to a variety of organizational performance measures. Consistent with this expectation, Table 6 indicates that overall unit-level OCBs were positively related to unit-level performance ($r_c = .43$). In addition, the table indicates that this relationship was significantly stronger when unit-level performance was measured subjectively ($r_c = .47$) than when it was measured objectively ($r_c = .37$), although both of these estimates excluded zero. A finer grained analysis of the objective unit-level measures shows that overall OCBs were significantly related to all but one of them (productivity, $r_c = .37$; efficiency, $r_c = .40$; costs, $r_c = -.52$; and profitability, $r_c = .15$); the confidence interval for the overall OCB and profitability relationship included zero.

OCBs and customer satisfaction. Consistent with Hypothesis 7, results in Table 6 indicate that overall OCBs were positively related to measures of customer satisfaction ($r_c = .23$). Thus, these results suggest that organizational units that are characterized by higher levels of OCBs generally have more satisfied customers than do units characterized by lower levels of OCBs.

OCBs and unit-level turnover. The final row in Table 6 provides support for Hypothesis 8, in that OCBs were negatively related to unit-level turnover ($r_c = -.22$). This is consistent with our expectation that organizational units that have higher levels of OCBs experience lower levels of turnover.

Table 5
Completely Standardized Parameter Estimates for the Effects of OCBs and Job Satisfaction on Turnover Intentions and Actual Turnover

Predictor variable	Turnover intentions	Actual turnover
OCB	-.09**	-.14**
Job satisfaction	-.57**	-.16**
R ²	.37	.05

Note. Significance tests were based on the harmonic mean of the sample sizes of the individual studies used in each regression; the harmonic means for the turnover intentions and actual turnover models were 13,975 and 2,799, respectively. OCB = organizational citizenship behavior.

** $p < .01$.

Unit-Level Moderators

The results of our examination of the potential moderating effects of research design on the unit-level relationships are reported in Table 7. As indicated in this table, the corrected correlation between OCBs and unit-level performance in the time-lagged studies ($r_c = .56$) is significantly stronger than the correlation between these variables in the cross-sectional studies ($r_c = .37$). These findings provide some evidence that OCBs are causal determinants of unit-level performance.

Discussion

Generally speaking, at the individual level we found that OCBs were positively related to ratings of employee performance and to reward allocation decisions and negatively related to employee turnover intentions, actual turnover, and absenteeism, whereas at the unit level, OCBs were positively related to a variety of organizational effectiveness measures (e.g., productivity, efficiency, and profitability) and customer satisfaction and negatively related to costs and unit-level turnover. In addition, we found that the

source of the ratings moderated the relationship between OCBs and performance ratings, such that the correlation between OCBs and these ratings was stronger when the ratings were obtained from the same source than from a different source. Finally, we found some evidence that OCBs at the unit level of analysis are causal determinants of performance. We think that these findings shed light on a number of important issues in the field.

For example, the finding that OCBs are positively related to performance evaluations and managerial reward allocation decisions is important for several reasons. First, this finding is consistent with the work of several researchers (Borman & Motowidlo, 1993; MacKenzie et al., 1993; Podsakoff et al., 2000; Rotundo & Sackett, 2002) who have argued that managers consider OCB-like behaviors to be an important part of an expanded employee job performance domain. Second, our findings seem to run contrary to the recent conclusions of Bergeron (2007), who argued that task performance has stronger effects on performance evaluations than do OCBs. More specifically, our results indicate that OCBs account for at least as much variance in managerial evaluations of performance as task performance, regardless of whether these measures are taken from the same or different sources. However, the difference in our findings may be a result of the fact that (a) Bergeron's review of the literature was restricted to a relatively small subset of the samples included in our study and (b) she did not provide a meta-analytic summary of her findings. Thus, although additional research clearly needs to be conducted on this issue, we believe that our findings are important because they suggest that managers consider OCBs to be an important part of an employee's overall contribution to the organization.

Of course, it is important to recognize that there may be other important types of behavior that managers consider in their evaluations of employee performance. For example, Rotundo and Sackett (2002) have demonstrated that in addition to task performance (TP) and OCBs, managers also include counterproductive work behaviors (CWB) in their evaluations. More specifically, these authors reported that although the raters in their study included TP, OCBs, and CWBs in their ratings of overall employee

Table 6
Relationships Between OCBs and Organizational-Level Outcomes

Relationship	<i>k</i>	<i>N</i>	<i>r</i>	90% confidence interval		<i>r_c</i>	<i>SDr_c</i>	<i>Q</i>
				Lower	Upper			
Unit OCB–overall unit performance	33	2,750	.35	.32	.37	.43	.20	94.88**
Unit OCB–overall unit performance, subjective measures	19	1,249	.41	.37	.45	.47	.28	118.10**
Unit OCB–overall unit performance, objective measures	17	1,598	.29	.25	.33	.37	.11	26.70**
Unit OCB–unit productivity	7	718	.34	.28	.39	.37	.03	7.83
Unit OCB–unit efficiency	3	102	.32	.17	.47	.40	.00	0.05
Unit OCB–unit costs	2	54	-.42	-.61	-.24	-.52	.00	0.06
Unit OCB–unit profitability	5	143	.13	.00	.27	.15	.27	12.77**
Unit OCB–customer satisfaction	8	478	.19	.11	.26	.23	.00	6.24
Unit OCB–unit turnover	6	936	-.17	-.23	-.12	-.22	.11	12.84*

Note. Subgroup *k* values may not add up to overall *k* because of the use of linear composites, which eliminated double-counting data from the same study. *k* = number of independent samples; *N* = sample size; *r* = average correlation coefficient; *r_c* = average correlation coefficient corrected for measurement and sampling error; *SDr_c* = standard deviation of the corrected correlation coefficient; *Q* = *Q* statistic. OCB = organizational citizenship behavior.

* $p < .05$. ** $p < .01$.

Table 7
Nature of Research Design (Cross-Sectional Versus Time Lagged) as a Moderator of OCB–Unit Performance Relationships

Relationship	<i>k</i>	<i>N</i>	<i>r</i>	90% confidence interval		<i>r_c</i>	<i>SDr_c</i>	<i>Q</i>
				Lower	Upper			
Unit OCB–overall unit performance (time lagged)	5	453	.44	.38	.50	.56	.00	2.29
Unit OCB–overall unit performance (cross-sectional)	28	2,578	.30	.27	.33	.37	.22	100.03**

Note. *k* = number of independent samples; *N* = sample size; *r* = average correlation coefficient; *r_c* = average correlation coefficient corrected for measurement and sampling error; *SDr_c* = standard deviation of the corrected correlation coefficient; *Q* = *Q* statistic; OCB = organizational citizenship behavior.

** *p* < .01.

performance, they tended to give more weight to TP and CWBs than to OCBs. Although there are a number of differences between the methods used by Rotundo and Sackett in their study and the vast majority of the studies summarized in our review (e.g., their study was a within-subject, policy-capturing study using paper people stimuli) that may help account for the differences in our findings, we believe the biggest differences may be that counterproductive behaviors are negative by nature and tend to have a relatively low base rate. The reason this is important is that there is a substantial amount of evidence (Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001; Taylor, 1991) that negative events and rarely occurring or distinctive events (DeNisi, Cafferty, & Meglino, 1984) are encoded differently, are recalled from memory more easily, and result in stronger attitudinal and behavioral effects than positive events. Therefore, we are not completely surprised that CWBs were found to have stronger effects than OCBs in their study. Nevertheless, their finding that task performance had stronger effects than OCBs is contradictory to ours and suggests that additional research needs to examine the effects of TP, OCBs, and CWBs on performance ratings. In addition, at a more general level Campbell, Gasser, and Oswald (1996) have argued that there are a variety of other job components that need to be taken into account to adequately measure job performance. Thus, even though our findings provide evidence that OCBs are an important part of the job performance domain, additional work needs to be done to determine their effects, relative to other behaviors, on performance evaluations.

Our finding that OCBs are related to a variety of different measures of organizational performance is also important, for at least two reasons. First, it provides fairly compelling support for Organ's (1988) contention that citizenship behaviors are, in the aggregate, related to measures of organizational effectiveness. Thus, it appears that one concrete way for managers to enhance organizational performance is by encouraging employees to exhibit OCBs. However, it is probably worth noting that the relationships between OCBs and unit profitability were substantially lower than those with the other objective measures of unit performance. In retrospect, these findings may not be too surprising, as productivity, efficiency, and (reducing) costs are more proximal outcomes of employee citizenship behaviors than is profitability. Profitability is influenced not only by employee behaviors but also by market and economic factors beyond the employee's control. Therefore, researchers may need to recognize that the proximal

versus distal nature of their organizational performance measures may have an effect on the relationships they observe between OCBs and organizational effectiveness.

Second, the fact that the effects of OCBs on unit-level outcomes are homologous to those at the individual level, in that relationships are generally positive at both of these levels, raises questions about the suggestion (e.g., Bolino, 1999; Schnake, 1991) that employees may exhibit OCBs for the purposes of impression management and subsequently reduce individual and organizational effectiveness. According to Bolino (1999), "When individuals undertake actions based on impression management concerns, they are less able to devote their full attention to the task at hand. Consequently . . . this concern frequently impairs their performance" (p. 90). If Bolino is correct, then it suggests that (a) a positive relationship between OCBs and performance evaluations might be accompanied by (b) a negative relationship between OCBs and task performance and (c) a negative or nonsignificant relationship between OCBs and organizational performance. However, that is not what we found in this study. Indeed, our results show that OCBs have generally functional effects not only for the individual who exhibits them (e.g., receiving higher performance evaluations and more rewards) but also for the organization as well (e.g., increased levels of productivity and efficiency and reduced costs and turnover). In addition, we found that those employees who tended to be rated high on OCBs also tended to be rated high on task performance. Thus, even though some employees may exhibit OCBs for reasons other than to help their coworkers and/or the organization, it appears that this fact does not outweigh the generally positive effects these behaviors have on individual and organizational performance.

In contrast to some recent studies (Graham & Van Dyne, 2006; Halbesleben & Bowler, 2007; Ilies et al., 2007; LePine & Van Dyne, 2001; Stamper & Van Dyne, 2001) but consistent with the findings LePine et al. (2002), we found little support for differential relationships between OCBOs and OCBIs and individual-level outcome variables. This would seem to suggest that the target of OCBs has little impact on the nature of the relationships between OCBs and their outcomes. However, we believe that this conclusion should be made cautiously for several reasons. First, it is important to note that only a few studies have been conducted that were specifically designed to test the differences between OCBOs and OCBIs, and therefore our comparisons are based on post hoc categorizations that may include some constructs that are not

easily identified as either OCBOs or OCBIs. For example, even though we followed LePine et al. (2002) and Hoffman et al. (2007) by including sportsmanship as an exemplar of OCBO, it is not clear whether this form of citizenship primarily benefits the organization or the supervisor of the employee exhibiting this behavior. Related to this, none of the studies that we have reviewed included a full range of the OCBI and OCBO constructs in them, and to our knowledge, no one has developed a scale specifically designed to measure a full complement of these constructs. Finally, it is possible that the key distinction between OCB dimensions is not based on whether they are targeted toward the organization or other individuals, but rather whether they are affiliative versus challenging in nature (Van Dyne et al., 1995). Indeed, many of the studies that have shown differences between the predictors of OCBIs and OCBOs are ones in which the OCBIs were affiliative in nature (helping behaviors) whereas the OCBOs were challenging in nature (e.g., voice behaviors). Therefore, even though we did not find support for the differential effects of the target of OCBs in our study, we think it is premature at this time to conclude that OCBOs and OCBIs have the same effects, and we would encourage researchers to continue examining the effects of the target of OCBs on the nature of the relationships between the antecedents and consequences of these behaviors.

Implications for Future Research

In addition to the points made above, we believe that there are several other avenues that should be addressed in future research. First, we need to develop a much better understanding of the mechanisms that OCBs work through to influence individual-level outcomes, such as managerial evaluations, reward allocation decisions, and employee turnover. As noted earlier, although there have been a fair number of studies that have examined the relationships between employee OCBs and managerial evaluations, little research has been conducted to identify the potential mediators of these relationships. One exception is the study reported by Allen and Rush (1998). These authors found that supervisor liking and perceptions of employee organizational commitment mediated the relationship between employee OCB and supervisors' performance evaluations of their employees. Although these findings are encouraging, a number of other potential mediators of this relationship have been identified in the literature (Podsakoff et al., 1993, 2000) and should be tested in future research.

We also need to direct more attention at the potential mediators and moderators of the effects of OCBs on organizational effectiveness. Several researchers (Bolino, Turnley, & Bloodgood, 2002; Borman & Motowidlo, 1993; Ehrhart & Naumann, 2004; Organ, 1988; Podsakoff & MacKenzie, 1994, 1997) have identified a number of reasons why OCBs may be related to organizational-level outcomes. Despite this, we know surprisingly little about which of these variables might serve as mediators or moderators of the OCB-unit performance relationship. Of course, one obvious reason for our lack of understanding of these mechanisms may have to do with the difficulty researchers have in gathering organizational-level data.

However, a recent study by Bachrach, Powell, Collins, and Richey (2006) investigating the impact of task interdependence on the relationship between OCB and group effectiveness suggests

that it may be possible to examine the influence of OCBs on group-level effectiveness measures in laboratory settings. Bachrach et al. demonstrated that task interdependence tended to interact with helping behavior to influence group performance. Thus, in addition to identifying task interdependence as a potentially important moderator of the relationships between OCBs and group effectiveness, this study also suggests that laboratory research may provide an avenue for examining the effects of OCBs on group-level phenomena for researchers who do not have ready access to organizational settings, or for variables that are not easily manipulated in field settings. Another potentially fruitful area is to look at other outcomes at both the individual and unit levels of analysis. At the individual level, some particular outcomes that might prove interesting are the effects that OCBs have on (a) employee opportunities for advanced (or remedial) training; (b) who gets laid off in times of reduction in forces; and (c) the amount of latitude or autonomy that employees are offered in deciding how they perform their work. For example, holding task performance constant, we expect that employees who exhibit higher levels of OCBs are more likely to be recommended for advanced training opportunities, to be given more autonomy in their job, and to be retained in a time of reduction in force, but will be less likely to be recommended for remedial training. At the group or unit level, additional consequences might include customer retention, creativity, safety-related outcomes, and quality metrics (e.g., defective parts).

Given that our findings show that OCBs have functional effects on objective measures of organizational effectiveness, we also believe that there is a need to develop better methods for selecting employees who have a propensity to exhibit OCBs. Although there have been a few studies that have examined this issue (e.g., Allen, Fecteau, & Fecteau, 2004; Latham & Skarlicki, 1995), given the potential benefits that may accrue from this type of research, we feel that much more attention needs to be given to this important topic.

Finally, although there is a growing recognition of the importance of studying behavioral phenomena in the context of a global economy (cf. X.-P. Chen, 2005; X.-P. Chen et al., 1998; Z. X. Chen, Tsui, & Farh, 2002; Farh et al., 1997; Lam et al., 1999; Paine & Organ, 2000; Ployhart, Wiechmann, Schmitt, Sacco, & Rogg, 2003), we believe that additional research should also be focused on the potential impact that cross-cultural contexts have on the relationships between OCBs and their consequences. Preliminary research by Lam et al. (1999) in this domain is encouraging, in that it shows that the factor structure of the OCB conceptual domain is relatively invariant across a variety of cultural contexts. However, Ployhart and his colleagues (2003) have noted that this does not mean that supervisors in different cultures weigh the components of job performance the same when they make evaluations. This is obviously an important issue, because global companies may assume that the performance appraisal measures they use in one country may be equally applicable to other countries, even when this is not true. For example, it is possible that supervisors in collectivistic cultures may weight OCBs more heavily in their evaluations of employee job performance than supervisors in individualistic cultures. Thus, future research is needed to determine the potential effects that culture may have on the OCB-outcome variable relationships.

Implications for Practitioners

Perhaps the most important finding of our study for practicing managers is that OCBs appear to have important relationships with some organizational measures of “bottom line” effectiveness. The obvious implication of this is that managers should try to motivate employees to exhibit these types of behaviors. Previous research (cf. Organ, Podsakoff, & MacKenzie, 2006) indicates that some of the best determinants of OCBs are employee perceptions of fairness, transformational leadership behaviors, employee attitudes (e.g., job satisfaction and organizational commitment), and to a lesser extent personality traits such as conscientiousness (Borman et al., 2001; Organ & Ryan, 1995). This would suggest that managers should try to focus on selecting employees with a propensity to engage in OCBs, and to create a work environment that encourages employees to exhibit these behaviors.

However, it is important to note that our findings suggest that OCBs have a stronger relationship with more proximal measures of organizational performance such as unit productivity and cost reduction as opposed to distal indicators such as unit profitability. This would suggest that managers may have more success influencing organizational effectiveness measures that are more proximal to employee citizenship behaviors than measures that are not as directly linked in the organization’s value chain. In addition, although our findings demonstrate a clear relationship between OCBs and customer satisfaction, it is important to note that these findings may be restricted to service contexts in which the employees have direct contact with the customers. Therefore, it may be important for managers to take the nature of the employee–customer relationship into account when considering the potential effect that increased levels of OCBs may have on customer satisfaction.

Furthermore, our results indicate that the practice most managers have of weighting OCBs in their individual evaluations is an appropriate and functional one, as these behaviors do relate to objective measures of organizational performance. This would suggest that the impact of OCBs on appraisal ratings is not simply error variance to be eliminated but rather represents a desirable source of variance in appraisals that should relate in a meaningful way to unit effectiveness.

Limitations

Like any other study, there are some limitations to ours that should be recognized. First, Guzzo, Jackson, and Katzell (1987) have noted that the conclusions derived from every meta-analysis are subject to a variety of judgment calls made by the researchers. Thus, it is possible that some of the decisions we made regarding the aggregation of the relationships may have had an influence on our findings. Second, it is worthwhile to note that the number of studies for some of the relationships we examined (particularly in the case of some of the organization-level outcomes) is relatively small. Therefore, in these cases, additional data will need to be gathered before we can feel confident that the estimates we have reported in this article are accurate representations of the population correlations. Finally, although the majority of the studies in our meta-analyses were conducted using cross-sectional, correlational designs, there are two important points worth noting about this potential limitation. The first point is that the few studies

(Allen & Rush, 1998; Werner, 1994) that have examined the potential causal effects of OCBs on managerial evaluations have shown OCBs to affect managerial evaluations. Second, those studies (Ahearne, 2000; George & Bettenhausen, 1990; Koys, 2001; Pearce & Ensley, 2004; Podsakoff et al., 1997) that have included a temporal separation between the measurement of the OCBs and the measure of unit-level effectiveness have actually reported stronger relationships between these variables than what has been reported in studies using cross-sectional designs. Therefore, even though additional research needs to be conducted on the causal relationships before any definitive conclusions can be made, it does appear either that OCBs tend to lead to increases in managers’ evaluations and unit effectiveness or that these variables may be reciprocally related.

Conclusions

Notwithstanding these limitations, the results of our meta-analysis indicate that OCBs have significant relationships with a variety of individual- and organizational-level outcomes. Generally speaking, these results confirm the importance of these behaviors to scholars and managers alike and suggest that future research should be aimed at increasing our understanding of the theoretical mechanisms that explain these relationships. This is consistent with Organ (1997), who noted the following over a decade ago:

A few studies have looked at the group or organizational level, but virtually entirely so in a straightforward aggregative and descriptive style. We are left with a “black box” of “process” Although we have some reassuring data in support of the connection between OCB and systemic performance, little if any analysis has dealt with the means by which OCB has these effects. (p. 95)

Thus, we would encourage that future research focus more attention on the reasons why OCBs have the effects that they do on individual- and organizational-level outcomes.

References

- References marked with an asterisk indicate studies included in the meta-analysis.
- *Adcock, B. P. (1999). *The role of organizational citizenship behavior in the linkage of employee and customer satisfaction*. Unpublished doctoral dissertation, University of South Florida.
 - *Ahearne, M. J. (2000). *An examination of the effects of leadership empowerment behaviors and organizational citizenship behaviors on sales team performance*. Unpublished doctoral dissertation, Indiana University.
 - *Allen, T. D. (2006). Rewarding good citizens: The relationship between citizenship behavior, gender, and organizational rewards. *Journal of Applied Social Psychology, 36*, 120–143.
 - Allen, T. D., Fecteau, J. D., & Fecteau, C. L. (2004). Structured interviewing for OCB: Construct validity, faking, and the effects of question type. *Human Performance, 17*, 1–24.
 - *Allen, T. D., & Rush, M. C. (1998). The effects of organizational citizenship behavior on performance judgments: A field study and a laboratory experiment. *Journal of Applied Psychology, 83*, 247–260.
 - *Allen, T. D., & Rush, M. C. (2001). The influence of rater gender on ratings of organizational citizenship behavior. *Journal of Applied Social Psychology, 31*, 2561–2587.
 - *Allen, T. D., Smith, M. A., Mael, F. A., & O’Shea, P. G. (2007, April). *Mentoring relationships and organizational performance within substance*

- abuse centers*. Paper presented at the 22nd annual conference of the Society for Industrial and Organizational Psychology, New York.
- *Ang, S., & Slaughter, S. A. (2001). Work outcomes and job design for contract versus permanent information systems professionals on software development teams. *MIS Quarterly*, 25, 321–350.
- *Ang, S., Van Dyne, L., & Begley, T. M. (2003). The employment of foreign workers versus local employees: A field study of organizational justice, job satisfaction, performance, and OCB. *Journal of Organizational Behavior*, 24, 561–583.
- *Aquino, K., & Bommer, W. H. (2003). Preferential mistreatment: How victim status moderates the relationship between organizational citizenship behavior and workplace victimization. *Organization Science*, 14, 374–385.
- *Aronson, Z. H., & Lechler, T. G. (2005, August). *Project morale: A multifaceted construct and its link to project success*. Paper presented at the 65th annual conference of the Academy of Management, Honolulu, HI.
- *Aryee, S., Budhwar, P. S., & Chen, Z. X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23, 267–285.
- *Aryee, S., & Chay, Y. W. (2001). Workplace justice, citizenship behavior, and turnover intentions in a union context: Examining the mediating role of perceived union support and union instrumentality. *Journal of Applied Psychology*, 86, 154–160.
- *Aube, C., & Rousseau, V. (2005). Team goal commitment and team effectiveness: The role of task interdependence and supportive behaviors. *Group Dynamics: Theory, Research, and Practice*, 9, 189–204.
- *Avila, R. A., Fern, E. F., & Mann, O. K. (1988). Unraveling criteria for assessing the performance of sales people: A causal analysis. *Journal of Personal Selling and Sales Management*, 8, 45–54.
- *Avis, J. M., Kudisch, J. D., & Fortunato, V. J. (2002). Examining the incremental validity and adverse impact of cognitive ability and conscientiousness on job performance. *Journal of Business and Psychology*, 17, 87–105.
- *Bacha, R. R. (2003). *Specifying personality and self-monitoring effects on overall, task, and contextual job performance*. Unpublished doctoral dissertation, Kent State University.
- Bachrach, D. G., Bendoly, E., & Podsakoff, P. M. (2001). Attributions of the “causes” of group performance as an alternative explanation of the relationship between organizational citizenship behavior and organizational performance. *Journal of Applied Psychology*, 86, 1285–1293.
- *Bachrach, D. G., Powell, B. C., Collins, B. J., & Richey, R. G. (2006). Effects of task interdependence on the relationship between helping behavior and group performance. *Journal of Applied Psychology*, 91, 1396–1405.
- *Bagozzi, R. P., Verbeke, W., & Gavino, J. C. J. (2003). Culture moderates the self-regulation of shame and its effects on performance: The case of salespersons in the Netherlands and the Philippines. *Journal of Applied Psychology*, 88, 219–233.
- *Barksdale, K., & Werner, J. M. (2001). Managerial ratings of in-role behaviors, organizational citizenship behaviors, and overall performance: Testing different models of their relationship. *Journal of Business Research*, 51, 145–155.
- *Baruch, Y., O’Creevy, M. F., Hind, P., & Vigoda-Gadot, E. (2004). Prosocial behavior and job performance: Does the need for control and the need for achievement make a difference? *Social Behavior and Personality*, 32, 399–412.
- Bateman, T. S., & Organ, D. W. (1983). Job satisfaction and the good soldier: The relationship between affect and employee “citizenship.” *Academy of Management Journal*, 26, 587–595.
- Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, 5, 323–370.
- *Beatty, S. C. (1998). *Academic background characteristics and prediction of job performance*. Unpublished doctoral dissertation, San Jose State University.
- *Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35, 232–244.
- *Beehr, T. A., Ivanitskaya, L., Hansen, C. P., Erofeev, D., & Gudanowski, D. M. (2001). Evaluation of 360-degree feedback ratings: Relationships with each other and with performance and selection predictors. *Journal of Organizational Behavior*, 22, 775–788.
- *Begley, T. M., Lee, C., & Hui, C. (2006). Organizational level as a moderator of the relationship between justice perceptions and work-related reactions. *Journal of Organizational Behavior*, 27, 705–721.
- *Bell, S. J., & Menguc, B. (2002). The employee–organization relationship, organizational citizenship behaviors, and superior service quality. *Journal of Retailing*, 78, 131–146.
- Bergeron, D. M. (2007). The potential paradox of organizational citizenship behavior: Good citizens at what cost? *Academy of Management Review*, 32, 1078–1095.
- *Bergman, M. E. (2001). *Contingency of work as a psychological construct*. Unpublished doctoral dissertation, University of Illinois at Urbana–Champaign.
- *Berman, L. M. (1997). *When flexibility “works” and when it “fails”: An in-depth analysis of alternatives to the nine-to-five work week*. Unpublished doctoral dissertation, University of Maryland, College Park.
- *Bettencourt, L. A., & Brown, S. W. (1997). Contact employees: Relationships among workplace fairness, job satisfaction and prosocial service behaviors. *Journal of Retailing*, 73, 39–61.
- *Bilgrami, S. R., Raja, U., & Johns, G. (2007, August). *Felt violations: Who reacts more strongly when expectations are not met?* Paper presented at the 67th annual conference of the Academy of Management, Philadelphia.
- *Bishop, J. W., Scott, K. D., & Burroughs, S. M. (2000). Support, commitment, and employee outcomes in a team environment. *Journal of Management*, 26, 1113–1132.
- Blau, G. (1964). *Exchange and power in social life*. New York: Wiley.
- Bolino, M. C. (1999). Citizenship and impression management: Good soldiers or good actors? *Academy of Management Review*, 24, 82–98.
- Bolino, M. C., & Turnley, W. H. (2005). The personal costs of citizenship behavior: The relationship between individual initiative and role overload, job stress, and work–family conflict. *Journal of Applied Psychology*, 90, 740–748.
- Bolino, M. C., Turnley, W. H., & Bloodgood, J. M. (2002). Citizenship behavior and the creation of social capital in organizations. *Academy of Management Review*, 27, 505–522.
- *Bolino, M. C., Varela, J. A., Bande, B., & Turnley, W. H. (2006). The impact of impression-management tactics on supervisor ratings of organizational citizenship behavior. *Journal of Organizational Behavior*, 27, 281–297.
- *Bommer, W. H. (1995). *Contextual influences on transformational leader behavior’s effectiveness: Transformational leader behavior in a substitutes for leadership framework*. Unpublished doctoral dissertation, Indiana University.
- Borman, W. C. (2004). The concept of organizational citizenship. *Current Directions in Psychological Science*, 13, 238–241.
- Borman, W. C., & Motowidlo, S. J. (1993). Expanding the criterion domain to include elements of contextual performance. In N. Schmitt, W. C. Borman, & Associates (Eds.), *Personnel selection in organizations* (pp. 71–98). San Francisco: Jossey-Bass.
- Borman, W. C., & Motowidlo, S. J. (1997). Task performance and contextual performance: The meaning for personnel selection research. *Human Performance*, 10, 99–109.
- Borman, W. C., Penner, L. A., Allen, T. D., & Motowidlo, S. J. (2001). Personality predictors of citizenship performance. *International Journal of Selection and Assessment*, 9, 52–69.
- *Borman, W. C., White, L. A., & Dorsey, D. W. (1995). Effects of ratee

- task-performance and interpersonal factors on supervisor and peer performance ratings. *Journal of Applied Psychology*, 80, 168–177.
- *Brennan, A., & Skarlicki, D. P. (2004). Personality and perceived justice as predictors of survivors' reactions following downsizing. *Journal of Applied Social Psychology*, 34, 1306–1328.
- Brief, A. P., & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, 11, 710–725.
- *Bright, J. L. (2001). *Commitment of board members of nonprofit organizations*. Unpublished doctoral dissertation, Claremont Graduate University.
- *Byrne, Z. S. (2001). *Effects of perceptions of organizational justice, identification, and support on outcomes within work teams*. Unpublished doctoral dissertation, Colorado State University.
- *Byrne, Z. S. (2005). Fairness reduces the negative effects of organizational politics on turnover intentions, citizenship behavior, and job performance. *Journal of Business and Psychology*, 20, 175–200.
- Campbell, J. P., Gasser, M. B., & Oswald, F. L. (1996). The substantive nature of job performance variability. In K. R. Murphy (Ed.), *Individual differences and behavior in organizations* (pp. 258–299). San Francisco: Jossey-Bass.
- *Chan, D., & Schmitt, N. (2002). Situational judgment and job performance. *Human Performance*, 15, 233–254.
- *Chawla, A. S. (2005). *Retention vs. turnover: Opposite sides of the same coin? Comparing employees' motivation to stay with their turnover intentions*. Unpublished doctoral dissertation, University of Guelph, Guelph, Ontario, Canada.
- *Chen, X.-P. (2005). Organizational citizenship behavior: A predictor of employee voluntary turnover. In D. L. Turnipseed (Ed.), *Handbook of organizational citizenship behavior* (pp. 435–454). New York: Nova Science.
- *Chen, X.-P., Hui, C., & Sego, D. J. (1998). The role of organizational citizenship behavior in turnover: Conceptualization and preliminary tests of key hypotheses. *Journal of Applied Psychology*, 83, 922–931.
- *Chen, Z. X., Tsui, A. S., & Farh, J. L. (2002). Loyalty to supervisor vs. organizational commitment: Relationships to employee performance in China. *Journal of Occupational and Organizational Psychology*, 75, 339–356.
- *Cohen, A. (1999). The relation between commitment forms and work outcomes in Jewish and Arab culture. *Journal of Vocational Behavior*, 54, 371–391.
- Coleman, V. I., & Borman, W. C. (2000). Investigating the underlying structure of the citizenship performance domain. *Human Resource Management Review*, 10, 25–44.
- *Conway, N., & Briner, R. B. (2002). Full-time versus part-time employees: Understanding the links between work status, the psychological contract, and attitudes. *Journal of Vocational Behavior*, 61, 279–301.
- *Coole, D. R. (2007). *Expansion and validation of the Political Skill Inventory (PSI): An examination of the link between charisma, political skill, and performance*. Unpublished doctoral dissertation, University of South Florida.
- *Cracraft, M. L., Ferro, G., Dorsey, D., & Nelson, J. (2007, April). *Linking individual-level technical, contextual, and adaptive performance to team processes*. Paper presented at the 22nd annual conference of the Society for Industrial and Organizational Psychology, New York.
- *Crede, M. (2005). *Job attitudes: Tests of utility and position*. Unpublished doctoral dissertation, University of Illinois at Urbana-Champaign.
- *Cropanzano, R., Howes, J. C., Grandey, A. A., & Toth, P. (1997). The relationship of organizational politics and support to work behaviors, attitudes, and stress. *Journal of Organizational Behavior*, 18, 159–180.
- *Cropanzano, R., Rupp, D. E., & Byrne, Z. S. (2003). The relationship of emotional exhaustion to work attitudes, job performance, and organizational citizenship behaviors. *Journal of Applied Psychology*, 88, 160–169.
- Dalal, R. S. (2005). A meta-analysis of the relationship between organizational citizenship behavior and counterproductive work behavior. *Journal of Applied Psychology*, 90, 1241–1255.
- *Dalal, R., Weiss, H., Lam, H., & Welch, E. (2006, May). *Momentary versus retrospective reports of mood, behavior, and performance*. Paper presented at the 21st annual conference of the Society for Industrial and Organizational Psychology, Dallas, TX.
- *Deckop, J. R., Merriman, K. K., & Blau, G. (2004). Impact of variable risk preferences on the effectiveness of control by pay. *Journal of Occupational and Organizational Psychology*, 77, 63–80.
- *DeGroot, T., & Brownlee, A. L. (2006). Effect of department structure on the organizational citizenship behavior–department effectiveness relationship. *Journal of Business Research*, 59, 1116–1123.
- *Demerouti, E., Verbeke, W., & Bakker, A. B. (2005). Exploring the relationship between multidimensional and multifaceted burnout concept in self-rated performance. *Journal of Management*, 31, 186–209.
- *Demuth, R. L. F. (2006). *Antecedents and consequences of value expression in the workplace*. Unpublished doctoral dissertation, Northern Illinois University.
- DeNisi, A. S., Cafferty, T. P., & Meglino, B. M. (1984). A cognitive view of the performance appraisal process: A model and research propositions. *Organizational Behavior and Human Performance*, 33, 360–396.
- *DiPaola, M. F., & Hoy, W. K. (2005). Organizational citizenship of faculty and achievement of high school students. *High School Journal*, 88, 35–44.
- *Donovan, D. T. (1999). *Antecedents and consequences of the contact employee's service orientation: From personality traits to service behaviors*. Unpublished dissertation, Oklahoma State University.
- *Dulebohn, J. H., Shore, L. M., Kunze, M., & Dookeran, D. (2005). The differential impact of OCBs and influence tactics on leader reward behavior and performance ratings over time. *Organizational Analysis*, 13, 73–90.
- *Duncan, K. A. B. (1994). *Behavioral indicators of staff nurses' organizational and professional commitment*. Unpublished doctoral dissertation, University of Nebraska—Lincoln.
- *Dunford, B. B., Boss, A. D., & Boss, R. W. (2007, August). *Doing well by doing good: A trust perspective on corporate social responsibility*. Paper presented at the 67th annual conference of the Academy of Management, Philadelphia.
- *Dunlop, P. D., & Lee, K. (2004). Workplace deviance, organizational citizenship behavior, and business unit performance: The bad apples do spoil the whole barrel. *Journal of Organizational Behavior*, 25, 67–80.
- *Ehrhart, M. G., Bliese, P. D., & Thomas, J. L. (2006). Unit-level OCB and unit effectiveness: Examining the incremental effect of helping behavior. *Human Performance*, 19, 159–173.
- Ehrhart, M. G., & Naumann, S. E. (2004). Organizational citizenship behavior in work groups: A group norms approach. *Journal of Applied Psychology*, 89, 960–974.
- *Ellemers, N., de Gilder, D., & van den Heuvel, H. (1998). Career-oriented versus team-oriented commitment and behavior at work. *Journal of Applied Psychology*, 83, 717–730.
- *Erdogan, B. (2002). *Leader-member exchange differentiation fairness: Evidence for a new construct*. Unpublished doctoral dissertation, University of Illinois at Chicago.
- *Erez, A., LePine, J. A., & Elms, H. (2002). Effects of rotated leadership and peer evaluation on the functioning and effectiveness of self-managed teams: A quasi-experiment. *Personnel Psychology*, 55, 929–948.
- Farh, J. L., Earley, P. C., & Lin, S. C. (1997). Impetus for action: A cultural analysis of justice and organizational citizenship behavior in Chinese society. *Administrative Science Quarterly*, 42, 421–444.
- *Farh, J. L., Hackett, R. D., & Liang, J. (2007). Individual-level cultural values as moderators of perceived organizational support–employee outcome relationships in China: Comparing the effects of power distance and traditionality. *Academy of Management Journal*, 50, 715–729.
- Farh, J. L., Zhong, C. B., & Organ, D. W. (2004). Organizational citizenship behavior in the People's Republic of China. *Organization Science*, 15, 241–253.

- *Felfe, J., Yan, W., & Six, B. (2006, August). *The impact of cultural differences on commitment and its influence on OCB, turnover, and strain*. Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- *Ferris, G. R., Witt, L. A., & Hochwarter, W. A. (2001). Interaction of social skill and general mental ability on job performance and salary. *Journal of Applied Psychology, 86*, 1075–1082.
- *Findley, H. M., Giles, W. F., & Mossholder, K. W. (2000). Performance appraisal process and system facets: Relationships with contextual performance. *Journal of Applied Psychology, 85*, 634–640.
- *Fisher, C. D. (2002). Antecedents and consequences of real-time affective reactions at work. *Motivation and Emotion, 26*, 3–30.
- *Flynn, A. A. (2000). *Dimensions of faculty organizational commitment related to tenure, performance and turnover intention*. Unpublished doctoral dissertation, University of Illinois at Chicago.
- *Gavino, M. (2005). *Understanding the impact of HR practices on employee attitudinal and behavioral outcomes: The role of POS*. Unpublished doctoral dissertation, University of Illinois at Chicago.
- *Gellatly, I. R., Meyer, J. P., & Luchak, A. A. (2006). Combined effects of the three commitment components on focal and discretionary behaviors: A test of Meyer and Herscovitch's propositions. *Journal of Vocational Behavior, 69*, 331–345.
- George, J. M. (1990). Personality, affect, and behavior in groups. *Journal of Applied Psychology, 75*, 107–116.
- George, J. M. (1991). State or trait: Effects of positive mood on prosocial behavior at work. *Journal of Applied Psychology, 76*, 299–307.
- *George, J. M., & Bettenhausen, K. (1990). Understanding prosocial behavior, sales performance, and turnover: A group-level analysis in a service context. *Journal of Applied Psychology, 75*, 698–709.
- George, J. M., & Brief, A. P. (1992). Feeling good, doing good: A conceptual analysis of the mood at work–organizational spontaneity relationship. *Psychological Bulletin, 112*, 310–329.
- George, J. M., & Jones, G. R. (1997). Organizational spontaneity in context. *Human Performance, 10*, 153–170.
- *Gong, Y., Law, K. S., Chang, S., & Xin, K. R. (2006, August). *HRM and firm performance: Role of commitment, citizenship behaviors and job satisfaction*. Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- *Graf, I. (1999). *Perceived social support versus social embeddedness: Effects of employee and organizational outcomes*. Unpublished doctoral dissertation, University of Illinois at Chicago.
- Graham, J. W. (1989). *Organizational citizenship behavior: Construct redefinition, operationalization, and validation*. Unpublished working paper, Loyola University of Chicago.
- Graham, J. W. (1991). An essay on organizational citizenship behavior. *Employee Responsibilities and Rights Journal, 4*, 249–270.
- Graham, J. W., & Van Dyne, L. (2006). Gathering information and exercising influence: Two forms of civic virtue organizational citizenship behavior. *Employee Responsibilities and Rights Journal, 18*, 89–109.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management, 26*, 463–488.
- *Griffin, M. A., Neal, A., & Neale, M. (2000). The contribution of task performance and contextual performance to effectiveness: Investigating the role of situational constraints. *Applied Psychology: An International Review—Psychologie Appliquée: Revue Internationale, 49*, 517–533.
- Guzzo, R. A., Jackson, S. E., & Katzell, R. A. (1987). Meta-analysis analysis. *Research in Organizational Behavior, 9*, 407–442.
- Hackett, R. D., Farh, J. L., Song, J. L., & Lapierre, L. M. (2003). LMX and organizational citizenship behavior: Examining links within and across Western and Chinese samples. In G. B. Graen (Ed.), *Dealing with diversity* (pp. 219–264). Greenwich, CT: Information Age.
- Halbesleben, J. R. B., & Bowler, W. M. (2007). Emotional exhaustion and job performance: The mediating role of motivation. *Journal of Applied Psychology, 92*, 95–106.
- *Hanlon, S. C., Meyer, D. G., & Taylor, R. R. (1994). Consequences of gainsharing: A field experiment revisited. *Group & Organization Management, 19*, 87–111.
- *Hattrup, K., O'Connell, M. S., & Wingate, P. H. (1998). Prediction of multidimensional criteria: Distinguishing task and contextual performance. *Human Performance, 11*, 305–319.
- *Hepperlen, T. M. (2002). *Leader–member exchange (LMX) or fulfillment? The role of basic psychological needs in LMX relationships*. Unpublished doctoral dissertation, University of Nebraska—Lincoln.
- *Higgins, K. D. (2002). *How organizational citizenship behavior influences group effectiveness*. Unpublished doctoral dissertation, Northern Illinois University.
- *Hoffi-Hofstetter, H., & Mannheim, B. (1999). Managers' coping resources, perceived organizational patterns, and responses during organizational recovery from decline. *Journal of Organizational Behavior, 20*, 665–685.
- Hoffman, B. J., Blair, C. A., Meriac, J. P., & Woehr, D. J. (2007). Expanding the criterion domain? A quantitative review of the OCB literature. *Journal of Applied Psychology, 92*, 555–566.
- *Holtom, B. C. (1999). *Organizational attachment among core and contingent workers*. Unpublished doctoral dissertation, University of Washington.
- Hom, P. W., Caranikas-Walker, F., Prussia, G. E., & Griffeth, R. W. (1992). A meta-analytical structural equation analysis of a model of employee turnover. *Journal of Applied Psychology, 77*, 890–909.
- Homans, G. (1961). *Social behavior: Its elementary forms*. New York: Harcourt, Brace.
- *Howes, J. C. (1995). *Total quality teams: How multiple levels of social climate perceptions impact team member attitudes, behaviors, stress, and team performance*. Unpublished doctoral dissertation, Colorado State University.
- *Hui, C., Lam, S. S. K., & Law, K. K. S. (2000). Instrumental values of organizational citizenship behavior for promotion: A field quasi-experiment. *Journal of Applied Psychology, 85*, 822–828.
- Hui, C., Lee, C., & Rousseau, D. M. (2004). Psychological contract and organizational citizenship behavior in China: Investigating generalizability and instrumentality. *Journal of Applied Psychology, 89*, 311–321.
- Hunter, J. E., & Schmidt, F. L. (1990). *Methods of meta-analysis: Correcting error and bias in research findings*. Newbury Park, CA: Sage.
- Ilies, R., Nahrgang, J. D., & Morgeson, F. P. (2007). Leader–member exchange and citizenship behaviors: A meta-analysis. *Journal of Applied Psychology, 92*, 269–277.
- *Johnson, D. E., Erez, A., Kiker, D. S., & Motowidlo, S. J. (2002). Liking and attributions of motives as mediators of the relationships between individuals' reputations, helpful behaviors, and raters' reward decisions. *Journal of Applied Psychology, 87*, 808–815.
- *Johnson, R. E., Groff, K. W., & Taing, M. U. (in press). Nature of the interactions among organizational commitments: Complementary, competitive, or synergistic? *British Journal of Management*.
- *Jones, D. A. (2007, August). *Corporate volunteer programs & employee responses: How serving the community also serves the company*. Paper presented at the 67th annual conference of the Academy of Management, Philadelphia.
- Jöreskog, K., & Sörbom, D. (2002). *LISREL 8.52*. Lincolnwood, IL: Scientific Software International.
- Judge, T. A., Thoreson, C. J., Bono, J. E., & Patton, G. K. (2001). The job satisfaction–job performance relationship: A qualitative and quantitative review. *Psychological Bulletin, 127*, 376–407.
- *Karambaya, R. (1990). *Contexts for organizational citizenship behavior: Do high performing and satisfying units have better 'citizens'?* Working paper, York University, Toronto, Ontario, Canada.
- *Kernodle, T. A. (2007). *Antecedents and consequences of organizational*

- citizenship behavior: A hierarchical linear modeling study.* Unpublished doctoral dissertation, Touro University International.
- *Ketchand, A. A. (1994). *Aspects of organizational commitment in accounting professionals.* Unpublished doctoral dissertation, University of Houston.
- *Kickul, J., Lester, S. W., & Finkl, J. (2002). Promise breaking during radical organizational change: Do justice interventions make a difference? *Journal of Organizational Behavior, 23*, 469–488.
- Kidwell, R. E., Jr., Mossholder, K. W., & Bennett, N. (1997). Cohesiveness and organizational citizenship behavior: A multilevel analysis using work groups and individuals. *Journal of Management, 23*, 775–793.
- *Koh, W. L., Steers, R. M., & Terborg, J. R. (1995). The effects of transformational leadership on teacher attitudes and student performance in Singapore. *Journal of Organizational Behavior, 16*, 319–333.
- Konovsky, M. A., & Organ, D. W. (1996). Dispositional and contextual determinants of organizational citizenship behavior. *Journal of Organizational Behavior, 17*, 253–266.
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal, 37*, 656–669.
- *Koys, D. J. (2001). The effects of employee satisfaction, organizational citizenship behavior, and turnover on organizational effectiveness: A unit-level, longitudinal study. *Personnel Psychology, 54*, 101–114.
- *Kraimer, M., Seibert, S., & Yuan, L. (2005, August). *Linking mentoring to employee loyalty: Empowerment and P-O fit as explanatory mechanisms.* Paper presented at the 65th annual conference of the Academy of Management, Honolulu, HI.
- *Ladebo, O. J. (2005). Relationship between citizenship behaviors and tendencies to withdraw among Nigerian agribusiness employees. *Swiss Journal of Psychology, 64*, 41–50.
- *Lai, Y. M., & Lam, S. (2006, August). *A multilevel examination of the impact of organizational citizenship behavior on rated performance.* Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- Lam, S. S., Hui, C., & Law, K. S. (1999). Organizational citizenship behavior: Comparing perspectives of supervisors and subordinates across four international samples. *Journal of Applied Psychology, 84*, 594–601.
- Latham, G. P., & Skarlicki, D. P. (1995). Criterion-related validity of the situational and patterned behavior description interviews with organizational citizenship behavior. *Human Performance, 8*, 67–80.
- *Lauver, K. J., & Kristof-Brown, A. (2001). Distinguishing between employees' perceptions of person–job and person–organization fit. *Journal of Vocational Behavior, 59*, 454–470.
- *Lawrence, A. D. (2004). *Screening for person–job fit: Incremental validity of a congruence based approach to assessment.* Unpublished doctoral dissertation, University of Akron.
- *Lee, T. W., Mitchell, T. R., Sablinski, C. J., Burton, J. P., & Holtom, B. C. (2004). The effects of job embeddedness on organizational citizenship, job performance, volitional absences, and voluntary turnover. *Academy of Management Journal, 47*, 711–722.
- Lefkowitz, J. (2000). The role of interpersonal affective regard in supervisory performance ratings: A literature review and proposed causal model. *Journal of Occupational and Organizational Psychology, 7*, 67–85.
- LePine, J. A., Erez, A., & Johnson, D. E. (2002). The nature and dimensionality of organizational citizenship behavior: A critical review and meta-analysis. *Journal of Applied Psychology, 87*, 52–65.
- LePine, J. A., & Van Dyne, L. (1998). Predicting voice behavior in work groups. *Journal of Applied Psychology, 83*, 853–868.
- LePine, J. A., & Van Dyne, L. (2001). Voice and cooperative behavior as contrasting forms of contextual performance: Evidence of differential relationships with Big Five personality characteristics and cognitive ability. *Journal of Applied Psychology, 86*, 326–336.
- *Liang, J. (2007, August). *Bring leader consideration back in: Examining a dual-path model.* Paper presented at the 67th annual conference of the Academy of Management, Philadelphia.
- *Lieberman, E. A. (2006). *What's fair is fair, or is it? The effects of merit-related managerial behaviors and organizational policies on organizational justice perceptions.* Unpublished doctoral dissertation, City University of New York.
- *Lindsay, D. R., & Baumann, M. R. (2007, April). *Turnover, OCB, and counterproductivity: Affective events theory and part-time employees.* Paper presented at the 22nd annual conference of the Society for Industrial and Organizational Psychology, New York.
- *Linnehan, F. X. (1995). *Examining the effectiveness of a career academy program using multiple measures of job attitudes and job performance.* Unpublished dissertation, Temple University.
- *Liu, Y. (2005). *Investigating turnover intention among emergency communication specialists.* Unpublished doctoral dissertation, University of South Florida.
- *Lo, S., & Aryee, S. (2003). Psychological contract breach in a Chinese context: An integrative approach. *Journal of Management Studies, 40*, 1005–1020.
- *Loughlin, C. A. (1998). *Toward a model of healthy work for full-time, part-time and contract employment.* Unpublished doctoral dissertation, Queen's University at Kingston, Kingston, Ontario, Canada.
- *Lovell, S. E., Kahn, A. S., Anton, J., Davidson, A., Dowling, E., Post, D., & Mason, C. (1999). Does gender affect the link between organizational citizenship behavior and performance evaluations? *Sex Roles, 41*, 469–478.
- *Lowery, C. M., & Krilowicz, T. J. (1994). Relationships among nontask behaviors, rated performance, and objective performance measures. *Psychological Reports, 74*, 571–578.
- *MacKenzie, S. B., Podsakoff, P. M., & Ahearne, M. (1998). Some possible antecedents and consequences of in-role and extra-role salesperson performance. *Journal of Marketing, 62*, 87–98.
- *MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1991). Organizational citizenship behavior and objective productivity as determinants of managerial evaluations of salesperson's performance. *Organizational Behavior and Human Decision Processes, 50*, 123–150.
- MacKenzie, S. B., Podsakoff, P. M., & Fetter, R. (1993). The impact of organizational citizenship behavior on evaluations of salesperson performance. *Journal of Marketing, 57*, 70–80.
- *MacKenzie, S. B., Podsakoff, P. M., & Paine, J. E. (1999). Do citizenship behaviors matter more for managers than for salespeople? *Journal of the Academy of Marketing Science, 27*, 396–410.
- *Malatesta, R. M. (1995). *Understanding the dynamics of organizational and supervisory commitment using a social exchange framework.* Unpublished doctoral dissertation, Wayne State University.
- *Marrs, M. E. M. (1999). *Antecedents and outcomes of verbal aggression in the workplace.* Unpublished doctoral dissertation, University of Missouri—Columbia.
- *Martinez, P. G., Randel, A., & Ramirez, R. R. (2005, August). *Ethnic citizenship behaviors, organizational citizenship behaviors, and ethnic identity.* Paper presented at the 65th annual conference of the Academy of Management, Honolulu, HI.
- *Maslyn, J. M., & Fedor, D. B. (1998). Perceptions of politics: Does measuring different foci matter? *Journal of Applied Psychology, 84*, 645–653.
- *Mason, C. M., & Griffin, M. A. (2005). Group task satisfaction. *Group & Organization Management, 30*, 625–652.
- *Masterson, S. S., Lewis, K., Goldman, B. M., & Taylor, M. S. (2000). Integrating justice and social exchange: The differing effects of fair procedures and treatment on work relationships. *Academy of Management Journal, 43*, 738–748.
- *Mayer, D. M., & Ehrhart, M. G. (2005, April). *OCB and service climate: Examining multilevel antecedents of customer satisfaction.* Paper presented at the 20th annual conference of the Society for Industrial and Organizational Psychology, Los Angeles.

- *Mayer, R. C., & Schoorman, F. D. (1992). Predicting participation and production outcomes through a two-dimensional model of organizational commitment. *Academy of Management Journal*, 35, 671–684.
- *Millette, V. (2005). *Designing volunteers' tasks to maximize motivation, satisfaction and performance: The impact of job characteristics on the outcomes of volunteer involvement*. Unpublished doctoral dissertation, Concordia University, Montreal, Quebec, Canada.
- *Mohammed, S., Mathieu, J. E., & Bartlett, A. L. (2002). Technical-administrative task performance, leadership task performance, and contextual performance: Considering the influence of team- and task-related composition variables. *Journal of Organizational Behavior*, 23, 795–814.
- *Moideenkutty, U., Blau, G., Kumar, R., & Nalakath, A. (2005). Relationship of organizational citizenship behavior and objective productivity to managerial evaluations of performance in India. *International Journal of Commerce & Management*, 15, 221–229.
- *Mondore, S., Vandenberg, J. R., & Wallace, J. C. (2006, August). *High involvement management: An in-action group operationalization of high involvement work*. Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- Moorman, R. H. (1991). Relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology*, 76, 845–855.
- Morrison, E. W., & Phelps, C. C. (1999). Taking charge at work: Extrarole efforts to initiate workplace change. *Academy of Management Journal*, 42, 403–419.
- *Mossholder, K. W., Settoon, R. P., & Henagan, S. C. (2005). A relational perspective on turnover: Examining structural, attitudinal, and behavioral predictors. *Academy of Management Journal*, 48, 607–618.
- *Motowidlo, S. J., & Van Scotter, J. R. (1994). Evidence that task-performance should be distinguished from contextual performance. *Journal of Applied Psychology*, 79, 475–480.
- *Muse, L. A. (2002). *The implications of work-life benefits for employee work-family conflict and job attitudes and behaviors*. Unpublished doctoral dissertation, Auburn University.
- *Naumann, S. E., & Bennett, N. (2002). The effects of procedural justice climate on work group performance. *Small Group Research*, 33, 361–377.
- *Nelson, C., & Ryan, A. M. (2005, April). *Negative asymmetry and coworker relations*. Paper presented at the 20th annual conference of the Society for Industrial and Organizational Psychology, Los Angeles, CA.
- *Ng, K. Y., & Van Dyne, L. (2005). Antecedents and performance consequences of helping behavior in work groups: A multilevel analysis. *Group & Organization Management*, 30, 514–540.
- Niehoff, B. P., & Moorman, R. H. (1993). Justice as a mediator of the relationship between methods of monitoring and organizational citizenship behavior. *Academy of Management Journal*, 36, 527–556.
- *Niles-Jolly, K. A. (2003). *Organizational citizenship behavior and customer service quality: A group-level study*. Unpublished doctoral dissertation, University of Maryland, College Park.
- *Olkkonen, M.-E., & Lipponen, J. (2006). Relationships between organizational justice, identification with organization and work unit, and group-related outcomes. *Organizational Behavior and Human Decision Processes*, 100, 202–215.
- Organ, D. W. (1988). *Organizational citizenship behavior: The good soldier syndrome*. Lexington, MA: Lexington Books.
- Organ, D. W. (1990). The motivational basis of organizational citizenship behavior. In B. M. Staw & L. L. Cummings (Eds.), *Research in organizational behavior* (Vol. 12, pp. 43–72). Greenwich, CT: JAI Press.
- Organ, D. W. (1997). Organizational citizenship behavior: It's construct cleanup time. *Human Performance*, 10, 85–97.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior: Its nature, antecedents and consequences*. Thousand Oaks, CA: Sage.
- Organ, D. W., & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 775–802.
- Paine, J. B., & Organ, D. W. (2000). The cultural matrix of organizational citizenship behavior: Some preliminary conceptual and empirical observations. *Human Resource Management Review*, 10, 45–59.
- *Pearce, C. L., & Ensley, M. D. (2004). A reciprocal and longitudinal investigation of the innovation process: The central role of shared vision in product and process innovation teams (PPITs). *Journal of Organizational Behavior*, 25, 259–278.
- *Perry, E. L., Kulik, C. T., & Zhou, J. (1999). A closer look at the effects of subordinate-supervisor age differences. *Journal of Organizational Behavior*, 20, 341–357.
- Piccolo, R. F., & Colquitt, J. A. (2006). Transformational leadership and job behaviors: The mediating role of core job characteristics. *Academy of Management Journal*, 49, 327–340.
- *Piercy, N. F., Cravens, D. W., Lane, N., & Vorhies, D. W. (2006). Driving organizational citizenship behaviors and salesperson in-role behavior performance: The role of management control and perceived organizational support. *Journal of the Academy of Marketing Science*, 34, 244–262.
- Pillai, R., Schriesheim, C. A., & Williams, E. S. (1999). Fairness perceptions and trust as mediators for transformational and transactional leadership: A two-sample study. *Journal of Management*, 25, 897–933.
- Ployhart, R. E., Wiechmann, D., Schmitt, N., Sacco, J. M., & Rogg, K. (2003). The cross-cultural equivalence of job performance ratings. *Human Performance*, 16, 49–79.
- *Podsakoff, P. M., Ahearne, M., & MacKenzie, S. B. (1997). Organizational citizenship behavior and the quantity and quality of work group performance. *Journal of Applied Psychology*, 82, 262–270.
- *Podsakoff, P. M., & MacKenzie, S. B. (1994). Organizational citizenship behaviors and sales unit effectiveness. *Journal of Marketing Research*, 3, 351–363.
- Podsakoff, P. M., & MacKenzie, S. B. (1997). Impact of organizational citizenship behavior on organizational performance: A review and suggestions for future research. *Human Performance*, 10, 133–151.
- Podsakoff, P. M., MacKenzie, S. B., & Bommer, W. H. (1996). A meta-analysis of the relationships between Kerr and Jermier's substitutes for leadership and employee job attitudes, role perceptions, and performance. *Journal of Applied Psychology*, 81, 380–399.
- Podsakoff, P. M., MacKenzie, S. B., & Hui, C. (1993). Organizational citizenship behaviors and managerial evaluations of employee performance: A review and suggestions for future research. In G. R. Ferris & K. M. Rowland (Eds.), *Research in personnel and human resources management* (Vol. 11, pp. 1–40). Greenwich, CT: JAI Press.
- Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: A critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88, 879–903.
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *Leadership Quarterly*, 1, 107–142.
- Podsakoff, P. M., MacKenzie, S. B., Paine, J. B., & Bachrach, D. G. (2000). Organizational citizenship behaviors: A critical review of the theoretical and empirical literature and suggestions for future research. *Journal of Management*, 26, 513–563.
- Podsakoff, P. M., & Organ, D. W. (1986). Self reports in organizational research: Problems and prospects. *Journal of Management*, 12, 531–544.
- *Potisaratana, K. (2000). *Managers' perception of employee commitment in Thai organizations*. Unpublished doctoral dissertation, Nova Southeastern University.
- *Quintela, J. (2002). *The effects of motivational fit on employee job performance, work attitudes and intent to leave*. Unpublished doctoral dissertation, Ohio State University.
- *Radwinsky, R. L. (1999). *The effect of psychological contracts on the*

- performance of temporary employees.* Unpublished doctoral dissertation, University of Tulsa.
- *Rafferty, A. E., & Griffin, M. A. (2004). Dimensions of transformational leadership: Conceptual and empirical extensions. *Leadership Quarterly*, *15*, 329–354.
- *Randall, M. L., Cropanzano, R., Bormann, C. A., & Birjulin, A. (1999). Organizational politics and organizational support as predictors of work attitudes, job performance, and organizational citizenship behavior. *Journal of Organizational Behavior*, *20*, 159–174.
- *Raver, J. L., & Gelfand, M. J. (2005). Beyond the individual victim: Linking sexual harassment, team processes, and team performance. *Academy of Management Journal*, *48*, 387–400.
- *Redman, T., & Snape, E. (2005). Unpacking commitment: Multiple loyalties and employee behaviour. *Journal of Management Studies*, *42*, 301–328.
- *Rever-Moriyama, S. D. (1996). *Antecedents of organizational citizenship and job search behaviours in university professors.* Unpublished doctoral dissertation, University of Calgary, Calgary, Alberta, Canada.
- *Richardson, H. A., & Vandenberg, R. J. (2005). Integrating managerial perceptions and transformational leadership into a work-unit level model of employee involvement. *Journal of Organizational Behavior*, *26*, 561–589.
- *Rogg, K. L. (1997). *Organizational commitment in the post-loyalty era: Perceived organizational support, multiple commitments, and other antecedents' effects on turnover intentions and job performance.* Unpublished doctoral dissertation, Kansas State University.
- Rotundo, M., & Sackett, P. R. (2002). The relative importance of task, citizenship, and counterproductive performance to global ratings of job performance: A policy-capturing approach. *Journal of Applied Psychology*, *87*, 66–80.
- *Salvaggio, A. N. (2003). *To help or to leave: Person–group fit as a correlate of aggregate organizational citizenship behavior and turnover.* Unpublished doctoral dissertation, University of Maryland, College Park.
- *Sammons, G. E. (1994). *A study of the relationship between service orientation, organizational citizenship behavior and service performance in hotels.* Unpublished doctoral dissertation, Pennsylvania State University.
- *Sanchez, R. J. (2002). *The role of trust, leader–member exchange, and organizational justice in employee attitudes and behaviors: A laboratory and field investigation.* Unpublished doctoral dissertation, Portland State University.
- *Schaubroeck, J., & Fink, L. S. (1998). Facilitating and inhibiting effects of job control and social support on stress outcomes and role behavior: A contingency model. *Journal of Organizational Behavior*, *19*, 167–195.
- Schnake, M. (1991). Organizational citizenship: A review, proposed model, and research agenda. *Human Relations*, *44*, 735–759.
- *Scholl, R. W., Cooper, E. A., & McKenna, J. F. (1987). Referent selection in determining equity perceptions: Differential effects on behavioral and attitudinal outcomes. *Personnel Psychology*, *40*, 113–124.
- *Seibert, S. E., Kraimer, M. L., & Crant, J. M. (2001). What do proactive people do? A longitudinal model linking proactive personality and career success. *Personnel Psychology*, *54*, 845–874.
- *Sepulveda-Martinez, C. J. (2001). *Relationship of organizational citizenship behaviors and customer orientation to service quality and customer satisfaction.* Unpublished doctoral dissertation, Tulane University.
- *Shaw, J. D., Delery, J. E., & Abdulla, M. H. A. (2003). Organizational commitment and performance among guest workers and citizens of an Arab country. *Journal of Business Research*, *56*, 1021–1030.
- *Shoenfelt, E. L., & Battista, L. (2004). A laboratory study of satisfaction effects on mood state, withdrawal intentions, and organizational citizenship behavior. *Psychological Reports*, *95*, 803–820.
- *Shore, L. M., Barksdale, K., & Shore, T. H. (1995). Managerial perceptions of employee commitment to the organization. *Academy of Management Journal*, *38*, 1593–1615.
- *Shore, L. M., Tetrick, L. E., Lynch, P., & Barksdale, K. (2006). Social and economic exchange: Construct development and validation. *Journal of Applied Social Psychology*, *36*, 837–867.
- *Shore, L. M., Tetrick, L. E., Shore, T. H., & Barksdale, K. (2000). Construct validity of measures of Becker's side bet theory. *Journal of Vocational Behavior*, *57*, 428–444.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology*, *68*, 655–663.
- *Snape, E., Chan, A. W., & Redman, T. (2006). Multiple commitments in the Chinese context: Testing compatibility, cultural, and moderating hypotheses. *Journal of Vocational Behavior*, *69*, 302–314.
- Stamper, C. L., & Van Dyne, L. (2001). Work status and organizational citizenship behavior: A field study of restaurant employees. *Journal of Organizational Behavior*, *22*, 517–536.
- *Sun, L.-Y., Aryee, S., & Law, K. S. (2007). High-performance human resource practices, citizenship behavior, and organizational performance: A relational perspective. *Academy of Management Journal*, *50*, 558–577.
- Taylor, S. E. (1991). Asymmetrical effects of positive and negative events: The mobilization minimization hypothesis. *Psychological Bulletin*, *110*, 67–85.
- *Thompson, K. J. (2000). *Charismatic leadership and its effects on team cognitions, behaviors, and performance.* Unpublished doctoral dissertation, State University of New York at Buffalo.
- *Tiedemann, K. F. (2004). *Integrity in military service: A leadership impact study.* Unpublished doctoral dissertation, University of Phoenix.
- *Tourigny, L., Baba, V. V., & Wang, X. (2006, August). *Burnout and OCB among airline employees in China: Proactive personality and absence as moderators.* Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- *Tremblay, M., & Wils, T. (2007). *Influence of career-plateau on attitudes and behaviors and the moderating role of self-plateauing.* Manuscript submitted for publication.
- *Turnipseed, D. L., & Rassuli, A. (2005). Performance perceptions of organizational citizenship behaviours at work: A bi-level study among managers and employees. *British Journal of Management*, *16*, 231–244.
- *Turnley, W. H., & Feldman, D. C. (2000). Re-examining the effects of psychological contract violations: Unmet expectations and job dissatisfaction as mediators. *Journal of Organizational Behavior*, *21*, 25–42.
- Van Dyne, L., Ang, S., & Botero, I. C. (2003). Conceptualizing employee silence and employee voice as multidimensional constructs. *Journal of Management Studies*, *40*, 1359–1392.
- Van Dyne, L., Cummings, L. L., & Parks, J. M. (1995). Extra-role behaviors: In pursuit of construct and definitional clarity (A bridge over muddied waters). In L. L. Cummings & B. M. Staw (Eds.), *Research in organizational behavior* (Vol. 17, pp. 215–285). Greenwich, CT: JAI Press.
- Van Dyne, L., Graham, J. W., & Dienesch, R. M. (1994). Organizational citizenship behavior: Construct redefinition, measurement, and validation. *Academy of Management Journal*, *37*, 765–802.
- *Van Dyne, L., & LePine, J. A. (1998). Helping and voice extra-role behaviors: Evidence of construct and predictive validity. *Academy of Management Journal*, *41*, 108–119.
- *Van Dyne, L., & Pierce, J. L. (2004). Psychological ownership and feelings of possession: Three field studies predicting employee attitudes and organizational citizenship behavior. *Journal of Organizational Behavior*, *25*, 439–459.
- *Van Scotter, J. R. (2000). Relationships of task performance and contextual performance with turnover, job satisfaction, and affective commitment. *Human Resource Management Review*, *10*, 79–95.
- *Van Scotter, J. R., & Motowidlo, S. J. (1996). Interpersonal facilitation

- and job dedication as separate facets of contextual performance. *Journal of Applied Psychology*, 81, 525–531.
- *Van Scotter, J. R., Motowidlo, S. J., & Cross, T. C. (2000). Effects of task performance and contextual performance on systemic rewards. *Journal of Applied Psychology*, 85, 526–535.
- Viswesvaran, C., & Ones, D. S. (1995). Theory testing: Combining psychometric meta-analysis and structural equations modeling. *Personnel Psychology*, 48, 865–885.
- *Walz, S. M., & Niehoff, B. P. (2000). Organizational citizenship behaviors: Their relationship to organizational effectiveness. *Journal of Hospitality & Tourism Research*, 24, 301–319.
- *Wayne, S. J., Shore, L. M., & Liden, R. C. (1997). Perceived organizational support and leader–member exchange: A social exchange perspective. *Academy of Management Journal*, 40, 82–111.
- Werner, J. M. (1994). Dimensions that make a difference: Examining the impact of in-role and extra-role behaviors on supervisory ratings. *Journal of Applied Psychology*, 79, 98–107.
- *West, A. D. (2006). *The impact of commitment to supervisor on organizational justice, citizenship, and intentions to leave*. Unpublished doctoral dissertation, Alliant International University, San Diego.
- *Whelley, D. C. (1995). *Nurses' perceptions of pay equity: A fairness reaction model*. Unpublished doctoral dissertation, University of Guelph, Guelph, Ontario, Canada.
- Whitener, E. M. (1990). Confusion of confidence intervals and credibility intervals in meta-analysis. *Journal of Applied Psychology*, 75, 315–321.
- *Wilkinson, L. (2005). *Gender stereotypes of citizenship performance and their influence on organizational rewards*. Unpublished doctoral dissertation, University of South Florida.
- *Williams, E. A. (1999). *A field experimental investigation of relationship-based mentoring training in team settings and team characteristics: Effects on employee attitudes and work outcomes*. Unpublished doctoral dissertation, University of Miami.
- Williams, L. J., & Anderson, S. E. (1991). Job satisfaction and organizational commitment as predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601–617.
- *Wittwer, W., & Wilson-Evered, E. (2006, August). *Climate and personality as predictors of employee satisfaction, commitment, performance and turnover*. Paper presented at the 66th annual conference of the Academy of Management, Atlanta, GA.
- *Yen, H. R., & Niehoff, B. P. (2004). Organizational citizenship behaviors and organizational effectiveness: Examining relationships in Taiwanese banks. *Journal of Applied Social Psychology*, 34, 1617–1637.
- *Yoon, M. H., & Suh, J. (2003). Organizational citizenship behaviors and service quality as external effectiveness of contact employees. *Journal of Business Research*, 56, 597–611.
- *Yun, S., Takeuchi, R., & Liu, W. (2007). Employee self-enhancement motives and job performance behaviors: Investigating the moderating effects of employee role ambiguity and managerial perceptions of employee commitment. *Journal of Applied Psychology*, 92, 745–755.

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