Disentangling Role Perceptions: How Perceived Role Breadth, Discretion, Instrumentality and Efficacy Relate to Helping and Taking Charge *

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Abstract

The objective of this study was to empirically disentangle OCB-related role perceptions that have been confounded in past research, investigate their unique relationships with both an affiliative (helping) and a challenging form of OCB (taking charge), and determine their relative importance in explaining these two forms of OCB. We also examine whether role discretion and role breadth independently moderate the procedural justice to OCB relationship. We surveyed 225 engineers in India, and their direct supervisors. Our results showed that three of the four facets of OCB role perception explain unique variance in either helping or taking charge, and that role breadth moderates the relationships between procedural justice and both helping and taking charge. We discuss implications of our findings for OCB theory and research, as well as for managerial practice.

KEYWORDS: OCB Role Definitions, Helping, Taking Charge
Research on organizational citizenship behavior (OCB) is well established and dates back to the early 1980s (Bateman & Organ, 1983; Smith, Organ and Near, 1983). Research relating OCB to OCB-related role perceptions, however, has emerged only in the last decade or so (Bachrach & Jex, 2000; Haworth & Levy, 2001; Lam, Hui, & Law, 1999; Morrison, 1994; Tepper, Lockhart, & Hoobler, 2001; Tepper & Taylor, 2003). The initial focus of research relating OCB to role perceptions was on testing taken-for-granted beliefs about the underlying nature of OCB, which has been defined as organizationally functional employee behavior that is discretionary, beyond the strict description of job requirements, and not directly rewarded (Organ, 1988; Organ, Podsakoff & MacKenzie, 2006). Yet studies indicating that employees frequently perceive presumed OCBs as role-prescribed, non-discretionary, and/or rewarded suggests that the commonly accepted definition does not accurately characterize how employees perceive OCB (Haworth & Levy, 2001; Hui, Lam & Law, 2000; Morrison, 1994; Tepper et al., 2001). As importantly, these studies have shown that employees’ beliefs about whether OCB is role-prescribed, discretionary, and/or rewarded affect the extent to which they perform OCB.¹

Given such evidence, it seems surprising that OCB role perceptions (i.e., how employees define and classify various OCBs) are not included in the dominant OCB theoretical frameworks (LePine, Erez & Johnson, 2002; Organ et al., 2006; Podsakoff, MacKenzie, Paine, & Bachrach, 2000). Yet we recognize that research relating these perceptions to OCB is still emerging, and that various issues have limited the potential for cumulative insight. For example, many studies have focused on just one type of role perception, leaving other aspects un-addressed (Organ et al., 2006; Podsakoff et al., 2000). Other studies have measured OCB role perceptions broadly, combining facets that are likely distinct. For instance, several studies used scales that captured both (a) whether a given behavior is seen as part of the job, and (b) whether that behavior is seen...
as rewarded or punished (Kamdar, McAllister, & Turban, 2006; Tepper et al., 2001; Zellars, Tepper & Duffy, 2002). Yet we know that behavior exceeding job requirements can be rewarded (Hui et al., 2000) and that behavior considered part of one’s job may not be directly rewarded.

Issues such as these have made it difficult to integrate findings from different studies, to conclude which role-related perceptions predict OCB, or to determine which role-related perceptions have the strongest predictive power. These issues have also led to calls for more research. For example, Tepper and colleagues (2001: 795) stated that their measure “… which presumes some homogeneity among the concepts of ‘job requirements,’ ‘rewardable behaviors,’ and ‘punishable behaviors,’ might be inappropriate to the extent that employees regard OCBs as fulfilling only one or two of the criteria. Additional research is needed to determine whether employees report high agreement among these concepts and if not to assess their relative importance.” Organ and colleagues (2006: 143) observed that “people may feel that certain behaviors are ‘expected’ as part of the job even though they may believe that the behaviors are discretionary and not formally rewarded.” Accordingly, they called for research to tease apart the effects of different role perceptions, and argued that such work should precede any attempts to draw firm conclusions from existing findings (Organ et al., 2006; Podsakoff et al., 2000).

Thus, the objective of this study was to disentangle OCB-related role perceptions that were either confounded in past research or studied individually, demonstrate their conceptual and empirical distinctiveness, and investigate their unique relationships with two forms of OCB. We also explored their relative importance in explaining OCB. Building on existing research, we hypothesize direct relationships between specific OCB-related role perceptions and OCB, as well as interactive effects between specific role perceptions and procedural justice on OCB. Our goal is to expand theoretical understanding of the relationship between role perceptions and OCB.
Four Types of OCB Role Perceptions

Four distinct types of OCB role perception have received attention in past research: perceived role breadth, perceived instrumentality, perceived role efficacy, and perceived role discretion. The dimension most studied is perceived role breadth, which refers to whether one regards behaviors associated with a particular class of OCB as part of one’s job (Bachrach & Jex, 2000; Morrison, 1994). Perceived OCB role breadth is greater when behaviors from a particular OCB category are considered in-role rather than extra-role (Bachrach & Jex, 2000; Coyle-Shapiro, Kessler & Purcell, 2004; Hofmann, Morgeson & Gerras, 2003; Morrison, 1994). The second role perception, perceived OCB instrumentality, refers to whether one perceives a relationship between performance of an OCB and outcomes such as rewards and punishment (Haworth & Levy, 2001; Hui et al., 2000; Reed & Kidder, 2005). Evidence suggests that instrumentality perceptions predict OCB (Haworth & Levy, 2001; Hui et al., 2000), although ambiguity remains because instrumentality perceptions have typically been combined with role breadth perceptions (Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002).

Building upon Parker’s (1998, 2000) work on role breadth self-efficacy, we assess a third role-related perception—OCB role efficacy—which refers to an individual’s perception of his or her competence in performing a given type of OCB (Bandura, 1986; Gist & Mitchell, 1992). In past research, scholars have found self-efficacy to be associated with a number of OCB-related behaviors such as issue selling (Ashford, Rothbard, Piderit & Dutton, 1998) and proactive behavior that supports work unit functioning (Parker, 2000, Parker, Williams & Turner, 2006).

The fourth role perception we examine, OCB role discretion, refers to the extent to which an individual perceives choice with respect to performing a particular class of OCB (Organ et al., 2006). This idea of perceived choice is central to social exchange theory (Blau, 1964; Lawler,
1992), upon which OCB theory has been built. While perceived discretion has been confounded with role breadth in past research (Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002), these are actually different constructs. In-role behavior can entail high discretion (Hackman & Oldham, 1980; Stewart, 1982; Spreitzer, 1995), and extra-role behavior may not necessarily be discretionary (Organ et al., 2006). For example, an employee may view a behavior as “not my job” but still see little choice in whether to perform it (e.g., if there are strong social pressures to perform such behaviors). Thus, we agree with Podsakoff et al. (2000) and Organ et al. (2006) that it is important to separate out these conceptually distinct role-related perceptions.

Helping and Taking Charge

In an integrative review of the literature on OCB and related behaviors often regarded as extra-role, Van Dyne and colleagues (1995) distinguished organizationally functional behaviors that are affiliative from those that are challenging. Affiliative behaviors are interpersonal, cooperative and non-controversial; they strengthen relationships. Helping behavior, an exemplar of affiliative OCB (Van Dyne & Le Pine, 1998), is one of the most frequently studied forms of OCB, and a strong predictor of group and organizational performance (Podsakoff et al., 2000).

Challenging behaviors, on the other hand, are change-oriented and focus on ideas and issues (Morrison & Phelps, 1999; Van Dyne et al, 1995). Because they emphasize constructive challenge to the status quo, they can create conflict and damage relationships (Van Dyne & LePine, 1998). One example of such behavior is taking charge, defined as “voluntary and constructive efforts, by individual employees, to effect organizationally functional change with respect to how work is executed” (Morrison & Phelps, 1999). Another example is voice, defined as “expression of constructive challenge with an intent to improve rather than merely criticize” (Van Dyne & Le Pine, 1998: 109). While taking charge and voice are both change-focused,
taking charge has a more behavioral focus, emphasizing not only making suggestions for change but also trying to bring it about. Challenging OCB has been studied far less frequently than affiliative OCB, yet scholars have argued that researchers should broaden the OCB domain to include behaviors oriented towards problem correction and/or system improvement (Frese, Fay, Hillburger, Leng & Tag, 1997; Morrison & Phelps, 1999; Van Dyne & LePine, 1998). Importantly, research on challenging behaviors is needed to gain a more complete picture of the innovative and spontaneous behaviors that organizations need to survive (Katz, 1964).

In this study, we investigate interpersonal helping as an example of affiliative OCB and taking charge as an example of challenging OCB. In selecting these specific dimensions, we were mindful of the need to focus on distinct forms of OCB rather than OCB in general (Podsakoff, et al., 2000), and the importance of being guided by theory (Moorman & Blakely, 1995). Inclusion of interpersonal helping, one of the most frequently studied forms of OCB, permits us to build on the existing tradition of research on affiliative OCB. Inclusion of taking charge allows us to focus attention on a facet of OCB that has been under-studied, and to test claims concerning the distinctive dynamics of challenging forms of OCB (Morrison & Phelps, 1999; Van Dyne & LePine, 1998). Because such behavior questions existing ways of doing things, scholars have claimed it may have different predictors than more cooperative forms of OCB (Morrison & Phelps, 1999), although research is needed to test such assertions.

Main Effects of Role Perceptions on OCB

Role Breadth Perceptions

Morrison (1994) was the first to argue that some employees view their jobs more broadly than others do, and that this has relevance for our understanding of OCB. Morrison had employees categorize behaviors from existing measures of OCB as either “an expected part of your job”
or “above and beyond what is expected for your job” (Morrison, 1994: 1549), and found that those employees defining more OCBs as in-role (i.e., greater role-breadth) were rated by their supervisors as performing more OCB. She argued that, all else equal, employees feel more obligated and motivated to perform behaviors that they define as in-role.

Findings from subsequent studies have confirmed that employees do not uniformly view their jobs in narrow terms with OCB considered extra-role. For example, employees who view their psychological contract as relational rather than transactional see OCB as in-role behavior—as an obligation they owe their organizations (Gakovic & Tetrick, 2003; Robinson, Kraatz & Rousseau, 1994; Shore & Barksdale, 1998). Similar to Morrison (1994), findings from a number of studies show that perceived OCB role breadth directly predicts behavior (Coyle-Shapiro et al., 2004; Hofmann et al., 2003; Kamdar et al., 2006; Tepper & Taylor, 2003). Consistent with this body of research, we predict that role breadth perceptions with respect to helping activities will be related to the display of helping behavior, and that role breadth perceptions with respect to taking charge behaviors will relate to taking charge behavior.

H1: Perceived role breadth of interpersonal helping and taking charge will be positively related to interpersonal helping behavior and taking charge behavior, respectively.

Instrumentality Perceptions

Although presumably OCB is not directly rewarded (Organ et al., 2006), evidence indicates that supervisors factor in OCB when evaluating and rewarding performance (MacKenzie, Podsakoff, & Fetter, 1991, 1993). Findings also show that many employees recognize a link between OCB and valued outcomes such as promotions and pay increases (Haworth & Levy, 2001; Hui et al., 2000; Schnake & Dumler, 1997), and that most employees believe that OCB should be rewarded in some way (Reed & Kidder, 2005). Given these findings, it is perhaps not
surprising that employees are more likely to perform OCB when they perceive it to be linked to outcomes that they value (Haworth & Levy, 2001; Hui et al., 2000).

Haworth and Levy (2001) used the term “instrumentality beliefs” to describe the perceived link between OCB and valued outcomes. They argued that, because OCBs are generally more volitional than task behaviors, they vary as a function of the employee’s cognitive appraisal of costs and benefits. In other words, OCB has a “deliberate controlled character” and is affected by “perceived environmental contingencies” (Haworth & Levy, 2001). Based on these ideas, we propose that employees are more likely to perform helping and taking charge when they perceive those types of OCB as instrumental to the attainment of valued outcomes.

Although past research has shown a relationship between instrumentality perceptions and OCB (Haworth & Levy, 2001; Hui et al., 2000), these findings may be spurious because instrumentality perceptions are likely correlated with other role-related perceptions. In other words, role breadth or another facet of OCB role perception might better explain the observed effect. We hypothesize, however, that the relationships of perceived instrumentality with both helping and taking charge exist even when considering the effects of other role perceptions.

H2: Perceived instrumentality of interpersonal helping and taking charge will be positively related to interpersonal helping and taking charge behavior, respectively.

**Efficacy Perceptions**

Researchers have not directly addressed the effects of OCB role efficacy beliefs on OCB, but both conceptual and empirical work on related forms of behavior confirm their importance. For instance, role breadth self-efficacy, defined as employee beliefs about their capabilities to carry out a broader and more proactive role (Parker, 1998), positively predicts proactive behavior at work (Crant, 2000; Parker, et al., 2006). Empirical findings also show that efficacy beliefs
about issue selling predict issue-selling intentions (Ashford et al., 1998) and creative self-efficacy predicts creative behavior at work (Tierney & Farmer, 2002, 2004). Employees with task-specific self-efficacy generally perform those tasks better (Barling & Beattie, 1983) and persevere when problems arise (Lent, Brown & Larkin, 1987).

We propose that employees develop efficacy beliefs pertaining to various types of OCB, including interpersonal helping and taking charge. While role-breadth self-efficacy (Parker, 1998; 2000) captures felt competence in performing a broader set of role-related behaviors that support work unit effectiveness, helping efficacy and taking charge efficacy capture feelings of competence in helping others and initiating change. Consistent with how specific efficacy beliefs predict associated behaviors (Ashford et al., 1998; Crant, 2000; Parker et al., 2006; Tierney & Farmer, 2002, 2004), we maintain that perceived efficacy with respect to helping and taking charge will relate to helping and taking charge behaviors, respectively.

H3: Perceived efficacy of interpersonal helping and taking charge will be positively related to interpersonal helping and taking charge behavior, respectively.

Role Discretion Perceptions

From its early conceptualization, OCB has been understood as discretionary behavior that employees can choose whether or not to proffer (Organ, 1990). Nevertheless, scholars have argued that employees may differ in the extent to which they actually perceive OCB as being discretionary (Morrison, 1994; Tepper et al., 2001). Surprisingly, the extent to which employees perceive that they have freedom to choose whether or not to make citizenship-type contributions has never been empirically examined separately from the issue of whether OCB is perceived as in-role or extra-role. As argued above, however, perceived role discretion and perceived role breadth are not the same. Further, there is reason to expect that perceptions of discretion will
have effects on OCB that are distinct from the effects of role breadth on OCB.

Scholars have argued that felt autonomy leads to higher internalized motivation (Ryan & Deci, 2000; Sheldon, Turban, Brown, Barrick, & Judge, 2003). Consistent with this idea, studies have shown that perceived job autonomy and self-determination are positively associated with OCB (Agle, Ballinger, Tangirala & Oakley, 2006; Bell & Menguc, 2002; Cappelli & Rogovsky, 1998; Farh, Podsakoff & Organ, 1990; Niehoff, Moorman, Blakely & Fuller, 2001). As well, felt control has been shown to lead to more personal initiative (Frese et al., 1997), a construct closely related to taking charge. To the extent that perceived role discretion reflects feelings of autonomy and control over work behaviors, we should likewise expect a positive relationship between perceived discretion and both helping and taking charge.

H4: Perceived discretion of interpersonal helping and of taking charge will be positively related to interpersonal helping and taking charge behavior, respectively.

Relative Importance of the Four Role Perceptions

To summarize, we have argued that perceptions of role breadth, instrumentality, efficacy and discretion are conceptually and empirically distinct and have independent main effect relationships with helping and taking charge. Since this is the first study to investigate these role perceptions together, we have little basis for developing hypotheses about their relative predictive strength. We agree with Tepper et al. (2001), however, that it is important to investigate their relative importance in predicting OCB behavior. Thus, we investigate the following research question: Relative to one another, how important are each of the four role-related perceptions in predicting helping behavior and taking charge?

Interactive Effects of Role Perceptions and Procedural Justice

Whereas initial work relating OCB role perceptions to behavior was focused on main
effects (e.g. Morrison, 1994), scholars have proposed more recently that role definitions interact with procedural justice to influence OCB (Kamdar et al., 2006; Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002). The relationship between procedural justice and OCB is well established in the literature, and is viewed as a process of social exchange (Konovsky & Pugh, 1994; Moorman, 1991; Organ & Moorman, 1993; Tepper et al., 2001). Employees reciprocate fair treatment through citizenship contributions, and reduce their citizenship contributions when they feel unfairly treated (Organ, 1988, 1990). Scholars have argued, however, that OCB role perceptions moderate this relationship (Kamdar et al., 2006; Tepper et al., 2001).

Interaction of Role Discretion and Procedural Justice

Tepper and colleagues proposed that employees modify their OCB upward in response to favorable treatment and downward in response to unfavorable treatment only when they perceive OCB to be discretionary (Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002). They referred to this as a role discretion effect. More specifically, their logic implies that the relationship between procedural justice and OCB is stronger when perceived role discretion is high rather than low, and that OCB is greatest when both perceived role discretion and procedural justice are high (i.e., employees have discretion to perform high levels of OCB to reciprocate the high level of fairness) and least when perceived role discretion is high and procedural justice low (i.e., employees have discretion to withhold OCB in response to the perceived unfairness).

While Tepper and colleagues did find interactions between procedural justice and OCB role definitions (Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al., 2002), the form of these interactions was not fully consistent with what their arguments implied. Employees did appear to withhold OCB when they had high role discretion and procedural justice was low, but did not contribute greater OCB when procedural justice was high and role discretion was high.
than when procedural justice was high and role discretion was low. Additionally, it is difficult to determine which aspect of role perception accounts for the observed results. Although the authors used the term “discretion effect” they did not in fact measure discretion, and their chosen measure captured perceptions of both role breadth and instrumentality. Given these issues, we believe it is important to test whether, as the logic underlying the role discretion effect suggests, perceptions of discretion moderate the relationship between procedural justice and OCB.

H5: Perceived discretion will moderate the relationships between procedural justice and both helping behavior and taking charge, such that these relationships will be stronger when perceived discretion is high.

Interaction Between Role Breadth and Procedural Justice

Kamdar and colleagues (2006) also recently examined the interactive relationship of role perceptions and procedural justice on OCB. Although their framework was similar to the one offered by Tepper et al. (2001), they focused explicit attention on role breadth rather than discretion. They also offered a different logic. Building upon both Morrison’s (1994) work as well as insights from role-identity theory, they argued that OCB becomes role-defined as beliefs about role identity expand to include citizenship behaviors, and that seeing OCB as part of one’s role identity provides strong impetus for performing those behaviors (Kidder, 2002; Penner, Midili, & Kegelmeyer, 1997; Penner, 2002). Thus, they hypothesized that even under conditions of unfair treatment, employees display OCB if they define that behavior as in-role. In contrast, those who perceive OCB as extra-role are more sensitive to external cues, engaging in OCB if treatment fairness is high, but reducing OCB if treatment fairness is low.

Following this reasoning, Kamdar et al. (2006) argued that the relationship between procedural justice and OCB should be stronger when perceived role breadth is low (i.e., when OCB
is seen as extra-role) rather than high, and that OCB would be withheld only under conditions of narrow role definition and low procedural justice. Their results were consistent with this prediction. A problem with these findings, however, is that, like in previous research (Tepper et al., 2001) the measure of role perceptions combined role breadth with role instrumentality perceptions. It is possible, therefore, that the results are attributable to the latter rather than the former. In our analyses, we tease these apart, and provide the first clear test of whether perceived role breadth (disentangled from instrumentality) moderates the effect of procedural justice on OCB.

We also consider the implications of differences between affiliative and challenging forms of behavior for the way in which procedural justice and role breadth interact.

For helping behavior, we concur with Kamdar et al. (2006) that the relationship between procedural justice and helping should be stronger when role breadth is low. We hypothesize that role breadth will also affect the strength of the relationship between procedural justice and taking charge, but expect a different pattern of interaction. Specifically, we predict that the relationship will be stronger when role breadth is high rather than low, and that taking charge will occur most frequently when perceived role breadth and procedural justice are both high.

Our differential predictions reflect the fundamental difference between helping and taking charge. Helping behavior, an affiliative form of OCB, is generally appreciated by others—although it may take time and effort, the social costs are usually low and the social rewards high. Consequently, we suggest that employees will be inclined to engage in helping behavior unless they feel unfairly treated and see the behavior as outside their job role (Kamdar et al., 2006). In contrast, taking charge, a challenging form of OCB, often involves risk because colleagues and supervisors may resist attempts to change the status quo (Morrison & Phelps, 1999). Given these costs, employees may be reluctant to take charge when they are unsure if the behavior is legiti-
mate in-role behavior. When employees view taking charge as within the bounds of their roles (i.e., perceived role breadth is high), they are likely to perceive it as less risky. Therefore, they should be more likely to perform taking charge in exchange for fair treatment.

H6: Perceived role breadth will moderate the relationship between procedural justice and helping such that this relationship will be stronger when perceived role breadth is low.

H7: Perceived role breadth will moderate the relationship between procedural justice and taking charge such that this relationship will be stronger when perceived role breadth is high.

Method

Sample and Procedure

A sample of 225 engineers and their immediate supervisors from an oil refinery of a Fortune 500 company located in India participated in this study (85% response rate). All subjects spoke fluent English, the working language in the division. Most participants (95%) were male with at least an undergraduate university degree (73%). The mean age was 31 years (SD = 6.10).

We used two survey instruments: one for employees and one for supervisors. Employee surveys included measures of OCB-related role definitions and procedural justice. Employees completed forms in groups of four to eight, during their working hours, in a room on company premises. They were assured that responses would be kept confidential and that their individual responses would not be seen by anyone in the company. Supervisor surveys included measures of each employee’s interpersonal helping and taking charge behaviors. Supervisors completed forms in a room on company premises during regular work hours. Supervisory span of control ranged from 4 to 10 people; on average, supervisors provided assessments of 7.5 employees.

Measures

Helping and taking charge. We used Moorman and Blakely’s (1995) 5-item measure of
interpersonal helping and Morrison and Phelps’ (1999) 10-item measure of taking charge. Inter-
personal helping is assessed with items such as “This employee voluntarily helps new employees settle into the job.” Taking charge is assessed with items such as “This employee often tries to bring about improved procedures for the work unit or department.” Responses were on 7-point agree/disagree scales. Reliability estimates ($\alpha$) were .93 for helping and .88 for taking charge.

**Role definitions.** The same items used to assess interpersonal helping and taking charge behavior were used to measure role definitions for interpersonal helping and taking charge. For each facet of role definition (perceived breadth, instrumentality, efficacy and discretion), employees were given the list of items and directed to focus on one aspect of role definition at a time. Like Morrison (1994), we measure role breadth with direct appraisals of whether OCB items were seen as in-role. Respondents indicated their level of agreement with the statement “This behavior is an expected part of my job.” We adapted Haworth and Levy’s (2001) measure of instrumentality beliefs by focusing assessments on the instrumentality of specific OCBs as follows: “I see a direct connection between whether I engage in this behavior and my outcomes at work.” Consistent with the idea that efficacy beliefs reflect felt competence with respect to specific behaviors (Bandura, 1986), we measured helping efficacy and taking charge efficacy with the statement, “I am completely confident in my capabilities when engaging in this behav-
ior.” Given the centrality of “perceived freedom of choice” to the discretion construct (Lawler, 1992), we assessed role discretion with the prompt “I have complete freedom to choose whether or not I engage in this behavior.” Responses were on 7-point agree/disagree scales.

Employees thus provided four separate role definition assessments for each of the inter-
personal helping and each of the taking charge items. Items were averaged to create eight scales. For helping, reliability estimates ($\alpha$) were .89 for role breadth, .88 for role instrumentality, .91
for role efficacy, and .90 for role discretion. For taking charge, reliability estimates ($\alpha$) were .76 for role breadth, .77 for role instrumentality, .85 for role efficacy, and .93 for role discretion.

Procedural justice. We measured procedural justice using a 4-item scale ($\alpha = .89$) that was used by Rupp and Cropanzano (2002). A sample item is, “Where I work, my supervisor’s procedures and guidelines are very fair.” Responses were on 7-point agree/disagree scales.

Results

Table 1 presents descriptive statistics, correlations, and reliability estimates for the study variables. As shown, the role perception measures were only moderately correlated among themselves—.32 to .36 for helping role perceptions, and .25 to .46 for taking charge role perceptions. The size of these correlations suggests that the four role perceptions are empirically distinct from one another. As well, role perceptions concerning helping correlated more strongly with appraised helping behavior than taking charge, and role perceptions concerning taking charge were correlated more strongly with appraised taking charge behavior than helping.

We used confirmatory factor analysis to evaluate the discriminant and convergent properties of our measures. We first examined a model with 11 factors (one for each construct) and found that it fit the observed covariance matrix reasonably well ($\chi^2 = 2418.96$, df = 1887; $\chi^2/df = 1.28$; $CFI = .94$; $TLI = .93$; $RMSEA = .04$). As reported in Table 2, we compared this theorized model with four more parsimonious nested models. The 11-factor model provided a significantly better fit to the data. To further establish discriminant validity, we examined whether the average variance extracted (AVE) that each construct accounts for in its own indicators was greater than the shared variance among construct pairs (i.e., squared construct intercorrelations) (Fornell & Larcker, 1981; MacKenzie, Podsakoff & Paine, 1999), and found that this was always the case. Fornell and Larcker (1981) proposed that the AVE statistic also serves as an index of convergent
validity or reliability, with AVE statistics of .50 and above considered adequate. With only two exceptions, computed AVE statistics exceeded .50 (the range was from .42 to .78). Although AVE statistics for taking charge role breadth (.42) and instrumentality (.46) were lower than the suggested standard, Cronbach alphas for these scales were above .70. Taken together, the findings provide support for the discriminant validity and reliability of our measures.

Because supervisors provided assessments of multiple employees, we checked for evidence of rater effects. A one-way analysis-of-variance showed no differences in mean helping or taking charge assessments across supervisors. In addition, ICC(1) scores, which index the amount of variance explained by supervisor-level effects, never exceeded .04. Finally, ICC(2) scores, which index the extent to which a given supervisor’s assessment of one employee would be substitutable for his or her assessment of another employee, were also extremely low (< .24), much lower than the suggested benchmark for aggregation of .70 (Klein et al., 2000). Together, these findings provide robust support for treating supervisor assessments as independent.

As shown in Table 1, the four helping-related role perceptions were significantly correlated with supervisor ratings of helping behavior, and the four taking charge related role perceptions were significantly correlated with supervisor ratings of taking charge behavior. These findings provide preliminary support for our main-effect predictions. However, to assess the hypothesized unique contributions of the specific role perceptions, we used multiple regression analysis. To test Hypotheses 1-3, we regressed helping behavior and taking charge behavior on their respective role perceptions. In light of established findings of a strong link between procedural justice and OCB (Cohen-Charash & Spector, 2001; Colquitt, Conlon, Wesson, Porter & Ng, 2001; Hauenstein et al., 2001), we included procedural justice as a control variable. The inclusion of procedural justice afforded a more rigorous test of Hypotheses 1-3. To test Hypothe-
ses 4-6, we added the hypothesized interaction terms (step 2). Following Cohen, Cohen, West and Aiken (2003), we centered the main-effect variables prior to computing interaction terms.

We examined the relative contributions of the predictor variables using dominance analysis (Johnson & LeBreton, 2004; Budescu, 1993). Dominance analysis addresses the relative importance of different predictors, where relative importance reflects the contribution (both uniquely and combined with the other variables) a specific variable makes in explaining variance in a dependent variable (Johnson, 2000; Ondersma, Chaffin, Mullins & LeBreton, 2005).

**Main-Effects**

Regression analysis results are presented in Table 3. Hypothesis 1 predicted an effect of perceived role breadth on both forms of OCB. In support of this hypothesis, perceived role breadth was positively related to both helping ($\beta = .31$, $p<.05$) and taking charge ($\beta = .13$, $p<.05$). Hypothesis 2 predicted an effect of perceived instrumentality on the two forms of OCB. In support of this hypothesis, perceived instrumentality was positively related to both helping ($\beta = .12$, $p<.05$) and taking charge ($\beta = .15$, $p<.01$). Perceived efficacy was positively related to taking charge ($\beta = .15$, $p<.05$) but not to helping ($\beta = .04$, $p=ns$), providing only partial support for Hypothesis 3, which predicted that perceived efficacy would relate to both dependent variables. Hypothesis 4 predicted a positive effect of discretion. This hypothesis was not supported. Discretion did not have a significant unique effect on either form of OCB.

Dominance analyses results are presented in Table 4. The general dominance coefficients reflect the amount of variance attributable to each specific predictor variable, and the relative weight coefficients reflect the percentage of total explained variance attributable to each specific predictor. As reflected in the aggregate relative weights, the four role perceptions accounted for over 50% of the explained variance in both dependent variables. For helping behavior, perceived
role breadth accounted for the most explained variance (33.2%), followed by instrumentality (11.5%). Perceived efficacy and discretion explained much less of the variance. For taking charge, explained variance was distributed more evenly across the four role perceptions—differences in relative weight were minor, with efficacy accounting for the most variance (14.4%), followed by role breadth (13.3%), instrumentality (12.6%), and discretion (11.4%).

Interaction Effects.

Hypothesis 5 predicted that perceived discretion would positively moderate the effect of procedural justice on both dependent variables. As shown in Table 3, the interaction between discretion and procedural justice was significant for helping behavior ($\beta = -0.13, p<0.05$) but not for taking charge ($\beta = 0.02, p>0.05$). The dominance analysis results, reported in Table 4, show that this interaction uniquely accounts for 7.3% of the total explained variance in helping.

We show the form of the interaction for helping behavior in Figure 1. This figure shows the relationship between procedural justice and helping when role discretion is high (+1 SD) and low (-1 SD). Contrary to our hypothesis (H5), procedural justice was more strongly related to helping behavior when employees perceived low rather than high discretion. Hence, we conclude that hypothesis 5 was not supported for either interpersonal helping or taking charge.

The final two hypotheses specified that role breadth would moderate the relationships of procedural justice with helping (H6) and taking charge (H7). Specifically, the effect of procedural justice on helping would be stronger when perceived role breadth is low (i.e. helping perceived as extra-role), and the effect of procedural justice on taking charge would be stronger when perceived role breadth is high (i.e., taking charge perceived as in-role). As shown in Table 3, the interaction terms were significant for both helping ($\beta = -0.15, p<0.05$) and taking charge ($\beta = 0.20, p<0.001$). The dominance analysis results show that the interactions uniquely account for
5.1% of the total explained variance in helping behavior, and 8.3% of the total explained variance in taking charge behavior.

Consistent with Hypothesis 6, Figure 2 shows that the relationship between procedural justice and helping was stronger when role breadth was low. Helping was high when either role breadth or procedural justice was high. Helping was lowest when both procedural justice and role breadth were low (i.e., employees felt that they were treated poorly and that helping behavior was not a part of their job). As shown in Figure 3, the relationship between procedural justice and taking charge was stronger when role breadth was high. This shows support for H7. Taking charge was highest when procedural justice and perceived role breadth were both high. Taking charge was low when procedural justice was low, regardless of perceived role breadth.

Discussion

It is becoming increasingly clear that OCB is explained not just by employee dispositions and attitudes, but also by how employees perceive their roles (Morrison, 1994; Tepper et al., 2001; Kamdar et al., 2006). Yet, there is confusion about which types of role-related perceptions are most important for understanding OCB. Given this confusion, our objectives were to empirically disentangle role-related perceptions confounded in past research, investigate their unique relationships with both an affiliative and a challenging form of OCB, and determine their relative importance in explaining these two OCB forms. We also extended research by examining whether and how role discretion and role breadth moderate the relationship between procedural justice and the two OCB forms. Our findings demonstrate the multidimensional nature of OCB role perceptions, and suggest new directions for OCB scholarship.

Distinctiveness of the Four OCB Role Perceptions

Our findings provide the first direct evidence that whether a particular form of OCB is
seen as in-role or extra-role is not the same as whether it is seen as discretionary or non-discretionary or whether it is perceived to be instrumentally associated with personal outcomes. In other words, “people may feel that certain behaviors are ‘expected’ as part of the job even though they may believe that the behaviors are discretionary and not formally rewarded by the organization” (Organ et al., 2006: 143). We found that perceived role breadth, instrumentality, efficacy, and discretion are empirically separable and only moderately correlated constructs. Furthermore, they have independent effects on and explained unique variance in OCB. These results highlight the importance of precision in how we conceptualize and measure OCB role perceptions. Because the four perceptions are conceptually and empirically distinct and have independent effects, it is important for researchers to specify clearly which facets of role perception they are investigating and avoid measures that confound them.

Effects of the Four Role Perceptions on OCB

Our findings also show the unique predictive effects of the four types of OCB role perception. Notably, role breadth and instrumentality, either confounded in past research or examined in isolation, each explained unique variance in both helping and taking charge. The pattern of effects observed for role breadth was consistent with what Morrison (1994) predicted and found. Importantly our findings answer the question of whether this relationship would still be observed while controlling for other aspects of OCB role definitions (Podsakoff, et al., 2000; Organ et al., 2006). Similarly, the significant effects of instrumentality perceptions are consistent with past findings (Haworth & Levy, 2001; Hui et al., 2000), and remain when the other OCB role definitions are taken into account.

We found that perceived efficacy had a unique effect on taking charge but not helping. While not as predicted, this finding makes sense. Morrison and Phelps (1999) argued that taking
charge is more difficult than affiliative forms of OCB, and that such contributions are affected by efficacy beliefs. In general, felt efficacy is likely to be higher and less variable for helping behavior, and as a result, may have less impact. Our speculation here is supported by the finding that the mean for perceived efficacy was higher for helping than for taking charge ($t=5.54; p<.001$).

Also contrary to our predictions, when the effects of the other role perceptions were taken into account, perceived role discretion did not have a main effect on either form of OCB. This is an important finding, as ours is the first study to directly measure and test the effect of OCB-related discretion. One possible interpretation for this result is that employees are simply more attuned to role breadth and instrumentality concerns than to whether discretion is high or low. Another possible interpretation is that the effect of discretion is so highly dependent on perceptions of fair treatment, that merely knowing whether or not OCB is seen as discretionary does not enable us to predict whether it will be displayed or withheld. Organ (1990) argued that the discretionary quality of OCB allows employees to withhold it when they feel unfairly treated. That line of reasoning implies that perceived role discretion could cause employees either to contribute or to withhold OCB depending upon their attitudes toward their organization.

Although role perceptions collectively accounted for over 50% of the explained variance in helping and taking charge, their relative importance varied depending on the type of OCB. Role breadth was the strongest predictor of helping behavior, while efficacy was the strongest predictor of taking charge. Although such results need to be replicated, they suggest different underlying processes for these two very different forms of behavior (Morrison & Phelps, 1999).

*Role Breadth and Discretion Moderating Justice Effects*

Although past studies have found that role perceptions interact with procedural justice in predicting OCB (Kamdar et al., 2006; Tepper et al., 2001; Tepper & Taylor, 2003; Zellars et al.,
there has been confusion about which specific role perception accounts for this effect. We showed that, when separated from perceived instrumentality and discretion, perceived role breadth did indeed interact with procedural justice in predicting both helping and taking charge. Consistent with past research (Kamdar et al., 2006; Tepper et al., 2001), employees perceiving fair treatment tended to engage in helping behaviors irrespective of whether they regarded doing so as in-role or extra-role. Employees feeling unfairly treated, however, only engaged in helping behavior if they regarded it as in-role. Although we cannot draw firm conclusions about causality, these results suggest that employees who feel unfairly treated withhold helping behavior when they feel that it is legitimate to do so (i.e., when the behavior is extra-role).

Notably, we found a different form of interaction for taking charge. Specifically, procedural justice had a stronger relationship with taking charge when employees defined the behavior as in-role rather than extra-role. Taking charge occurred most when procedural justice was high and taking charge was defined as in-role, presumably because the potential risks associated with taking charge are reduced when employees perceive that behavior as within the boundaries of their job role. This finding provides corroboration for the claim that change-oriented citizenship behavior may not be driven by the same conditions as other forms of OCB because of the risk inherent in questioning the status quo (Ashford et al., 1998; Frese, et al., 1997; Morrison & Phelps, 1999; VanDyne & LePine, 1998).

We also found that discretion moderated the relationship of procedural justice with helping, but not in the manner suggested by past research (Tepper, 2001; Tepper & Taylor, 2003; Zellars et al., 2002). We found stronger effects of procedural justice on helping when perceived discretion was low, not high. When procedural justice was high, helping was high regardless of discretion level. However, when procedural justice was low, helping was more frequent when
discretion was high. The finding that discretion matters little as long as procedural justice is high seems straightforward. Apparently, the effects of justice trump those of discretion. Less clear, however, is why employees who perceive high discretion would be more likely to help others when procedural justice is low. Organ proposed that, given the discretionary nature of OCB, that employees would respond to unfair treatment with “calculated, discriminating withholding” (Organ, 1988: 533), and Tepper and colleagues developed their ‘discretion effect’ hypothesis based, at least in part, on this understanding. Yet our results suggest something different.

One plausible explanation is that employees perceiving unfair treatment from management are more motivated to “stick together” and help each other—horizontal cooperation emerges as a response to vertical threat (Fox, 1974; Wintrobe & Breton, 1986). Hence, employees who perceive that they have discretion will use it to help others in the face of unfairness. Another possibility is that discretion is motivating, and this effect overpowers the feelings of unfairness. Scholars have argued that felt autonomy leads to higher internalized motivation (Ryan & Deci, 2000; Sheldon et al., 2003). It may be that employees perceiving high discretion felt more internally motivated than those perceiving less discretion, and this led them to display helping behavior even when they felt unfairly treated. These ideas, however, are speculative. Further research is needed to see whether felt discretion can in fact compensate for low procedural justice in predicting helping behavior.

Implications for Managerial Practice

Our results have important managerial implications. Since employees who see their jobs broadly are more likely to engage in organizationally desirable behaviors, managers might take steps to influence employees’ role perceptions. Selection and socialization processes are likely pivotal. For example, research linking OCB role perceptions to personality variables such as
proactivity, empathy, and reciprocation wariness (Kamdar et al., 2006; Parker et al., 2006) suggests that individuals with certain personality profiles can be selected for jobs where it is especially valuable for employees to have greater perceived role breadth or efficacy with respect to OCB. As well, Jones (1986) found that individualized socialization tactics lead to broader and more innovative orientations toward work roles, suggesting that the way that newcomers are “taught the ropes” can shape their OCB role perceptions.

Job design might also be used to shape role perceptions, and hence bring about higher levels of organizationally desirable behaviors. Parker, Wall and Jackson (1997) showed that job enrichment leads to the development of broader role orientations, suggesting a link between job design and employee role perceptions. Giving employees greater variety, autonomy, and so forth may encourage them to view their role responsibilities more broadly, and may also enhance perceived OCB role discretion and competence.

Limitations and Directions for Future Research

Despite its contributions, this study has some limitations that must be kept in mind. First, as we used a cross-sectional design, we cannot make definitive conclusions about causality. Although we built upon past theorizing that has argued for the causal precedence of role perceptions, it is possible that behavioral commitment through acts of helping and taking charge affect subsequent role definitions (Salancik, 1977). Clearly, there is a need for longitudinal research, not only to address issues of causality but also to explore how role perceptions evolve over time.

A second potential limitation is that our sample was from a single organization in India, and was relatively homogeneous (primarily male, highly educated). It is reassuring that several of our findings are consistent with past research conducted in more diverse contexts. Nonetheless, some of our findings are new and we do not know whether they will generalize to different
settings. For example, the results may not fully generalize to other cultural contexts. India is a higher power distance culture than the United States, where much of the previous research was conducted. Although evidence suggests that role perceptions do not vary as a function of cultural differences such as power distance (Lam et al., 1999; Paine & Organ, 2000), it is possible that their effects on behavior vary across cultures. Thus, future research is needed, using diverse samples from various cultures, to establish the generalizability of our results.

In this study, we measured four OCB-related role perceptions that, based on past research, seemed most relevant to understanding OCB performance. However, there may be other role-related perceptions worth considering. For example, role-identity theory suggests that employees are more likely to engage in certain prosocial behaviors when such behaviors are central to their self-identity (Penner, 2002; Penner et al., 1997). Thus, there might be value in examining the extent to which aspects of OCB are central to how people define themselves, and how these perceptions relate to OCB performance.

Conclusion

This study has helped to clarify the importance of role perceptions for understanding OCB by showing that different role perceptions have unique and, in some cases, disparate effects on behavior. We applaud Organ, Podsakoff and colleagues (Organ et al., 2006; Podsakoff, et al., 2000) for encouraging efforts to broaden the scope of inquiry concerning OCB role perceptions, and Tepper and colleagues (2001) for calling for more fine-grained analyses of role perception effects. The next step is to extend our results by incorporating role perceptions into the dominant theoretical frameworks used to explain various forms of citizenship behavior.
References


Endnotes

1 Consistent with the studies cited, we use the term OCB (here and throughout the paper) to describe behaviors commonly assumed to be OCB and captured in established OCB measures.

2 We thank an anonymous reviewer for this suggestion.
Table 1

Correlations and Descriptive Statistics (N = 225) \textsuperscript{a, b}

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<td>.36</td>
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\textsuperscript{a} Correlations greater than .20 are significant at the p<.01 level. Correlations greater than .15 are significant at the p<.05 level.

\textsuperscript{b} Inter-item reliability estimates (Cronbach alpha) are in parentheses and appear in the diagonal.
Table 2
Confirmatory Factor Analysis of Nested Models (n = 225)

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<th>Model</th>
<th>Description</th>
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<th>Df</th>
<th>CFI</th>
<th>TLI</th>
<th>RMSEA</th>
<th>$\Delta \chi^2$</th>
<th>$\Delta df$</th>
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<td>11 factor model $^a$</td>
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<td>.93</td>
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<td>Model 2</td>
<td>7 factor model $^b$</td>
<td>4030.57</td>
<td>1931</td>
<td>.75</td>
<td>.74</td>
<td>.07</td>
<td>1611.61***</td>
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<td>Model 3</td>
<td>5 factor model $^c$</td>
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<td>1942</td>
<td>.60</td>
<td>.58</td>
<td>.09</td>
<td>2854.51***</td>
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<td>Model 4</td>
<td>2 factor model $^d$</td>
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<td>.11</td>
<td>4344.68***</td>
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<td>1 factor model</td>
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<td>.36</td>
<td>.34</td>
<td>.11</td>
<td>4818.69***</td>
<td>65</td>
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</table>

***p<.001

$^a$Hypothesized model.

$^b$Perceived role breadth for helping and taking charge combined, perceived role discretion for helping and taking charge combined, perceived instrumentality for helping and taking charge combined, and perceived efficacy for helping and taking charge combined.

$^c$All role perceptions for helping combined into one factor and all role perceptions for taking charge combined into one factor.

$^d$All employee assessments combined into 1 factor and all supervisor assessments combined into 1 factor.
Table 3

Regression Analysis Results Predicting Interpersonal Helping Behavior and Taking Charge (N = 225)\(^a\)

<table>
<thead>
<tr>
<th>Independent Variables</th>
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<th>Taking Charge</th>
<th></th>
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<td></td>
<td>Step 1</td>
<td>Step 2</td>
<td>Step 1</td>
<td>Step 2</td>
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<tr>
<td>Procedural Justice</td>
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<td>.36***</td>
<td>.42***</td>
<td>.41***</td>
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<tr>
<td>Perceived Role Breadth</td>
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<td>.24***</td>
<td>.13*</td>
<td>.15*</td>
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<td>.11*</td>
<td>.15**</td>
<td>.14*</td>
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<td>.15**</td>
<td>.14**</td>
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<td>Perceived Discretion</td>
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<td>.11</td>
<td>.08</td>
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<tr>
<td>Discretion x Procedural Justice</td>
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<td>.02</td>
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<td>Role Breadth x Procedural Justice</td>
<td>-.15*</td>
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<td>.20***</td>
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\(\Delta R^2\)  \( .04*** \)  \( .04** \)
\(R^2\)  \( .41 \)  \( .45 \)  \( .43 \)  \( .47 \)
Adjusted \(R^2\)  \( .39 \)  \( .44 \)  \( .42 \)  \( .46 \)

\(^a\)Standardized coefficients (betas) are reported.

\(***\ p < .001\)
\(**\ p < .01\)
\(\ast\ p < .05\)
Table 4

Dominance Analysis: Importance of Factors Predicting Helping and Taking Charge

<table>
<thead>
<tr>
<th>Independent Variables</th>
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<th>Taking Charge Behavior</th>
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<td>Dominance</td>
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<td>0.032</td>
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<td>.45</td>
<td>.43</td>
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*a General Dominance coefficients reflect the average contribution to R2 that a predictor makes across all possible subset regressions (Budescu, 1993). Relative Weight coefficients restate this contribution as a percentage of the total R2 explained by predictor variables.

b Interaction terms consist of the residuals computed by regressing product terms on main effects. (e.g., procedural justice x role discretion was regressed on procedural justice and role discretion, and the residuals from that analysis were entered as predictors in the dominance analysis). We thank James LeBreton for suggesting this analytical approach.
*Figure 1.* Interactive Effects of Procedural Justice and Perceived Role Discretion on Interpersonal Helping Behavior
Figure 2. Interactive Effects of Procedural Justice and Perceived Role Breadth on Interpersonal Helping Behavior
Figure 3. Interactive Effects of Procedural Justice and Perceived Role Breadth on Taking Charge