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Running Head: VALUES AND OCB

Direct and Contextual Effects of Individual Values on
Organizational Citizenship Behavior in Teams

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Abstract

We utilize Schwartz's values theory as an integrative framework for testing the relationship between individual values and peer-reported organizational citizenship behavior (OCB) in teams, controlling for sex, satisfaction, and personality traits. Utilizing hierarchical linear modeling in a sample of 582 students distributed across 135 class project teams, we find positive, direct effects for *achievement* on citizenship behaviors directed toward individuals (OCB-I), for *benevolence* on citizenship behaviors directed toward the group (OCB-O), and for *self-direction* on both OCB-I and OCB-O. Applying relational demography techniques to test for contextual effects, we find that group mean *power* scores negatively moderate the relationship between individual *power* and OCB-I, while group mean *self-direction* scores positively moderate the relationship between *self-direction* and both OCB-I and OCB-O.

Keywords: values, OCB, HLM

Direct and Contextual Effects of Individual Values on
Organizational Citizenship Behavior in Teams

Organizational citizenship behaviors (OCBs) are actions that are discretionary, not explicitly recognized by formal reward systems, and that in the aggregate improve the functioning of the organization (Organ, Podsakoff, & MacKenzie, 2006). They are similar to contextual performance in that they support and enhance the social and psychological context in which task performance occurs (Borman & Motowidlo, 1993; Organ, 1997). Examples of OCBs include being helpful to colleagues, taking on extra activities that are not technically part of the job, or tolerating minor inconveniences without complaint (Organ, 1988). Although OCBs are not generally enforced as part of one's official duties, they are nevertheless critical to organizational success (Bolino & Turnley, 2003; Koys, 2001; Podsakoff & MacKenzie, 1997; Walz & Niehoff, 2000). Researchers have therefore directed considerable effort toward determining the antecedents of citizenship behavior, to better understand how to foster its expression in the workplace.

Much of the existing evidence suggests that individuals engage in OCBs to reciprocate being treated well by their organizations (e.g., Moorman, 1991). As a result, the most commonly identified predictors of citizenship behavior include positive attitudinal constructs (e.g., job satisfaction, organizational commitment) or situational factors (e.g., supportive leadership, procedural justice) that lead to the development of positive member attitudes (Bolino, Turnley, & Niehoff, 2004; Organ & Ryan, 1995). Another research stream has examined whether individual differences such as personality traits predict significant variance in OCBs. The influence of personality traits tends to be strongest in "weak" or ambiguous situations, where there is a lack of uniform expectancies and an absence of strong performance incentives (Konovsky & Organ,

1996; Mischel, 1977). Yet, despite the fact that OCBs tend to be discretionary and are not directly compensated, only conscientiousness has demonstrated a consistent but weak relationship with OCBs across multiple studies (e.g., Borman, Penner, Allen, & Motowidlo, 2001; Dalal, 2005; Konovsky & Organ, 1996; Podsakoff, MacKenzie, Paine, & Bachrach, 2000).

More recently, researchers have applied a “functional behavior” (Snyder, 1993) approach to identifying the values, or motives, that prompt individuals to perform citizenship behaviors (Rioux & Penner, 2001). The prevailing logic is that because OCBs tend to be volitional in nature, we can learn much by examining the underlying motives for *why* people decide to engage in extra-role behaviors. Values differ from attitudes and personality traits in several key ways. Although both values and attitudes are expressions of an individual’s overall belief system, a value is a single, *general* belief regarding desirable end states or modes of conduct, while an attitude consists of a constellation of “relatively enduring beliefs around a *specific* object or situation, predisposing one to respond in some preferential manner” (Rokeach, 1968, p. 112). Attitudes are helpful in explaining the conditions under which (*when*) citizenship behaviors are likely to be performed, but cannot account for why some individuals perform more OCBs than others across different contexts. Likewise, both values and personality traits “contribute causally to the development of habits, attitudes, skills and other characteristic adaptations” (McCrae & Costa, 1995, p. 236). However, values consist of beliefs about how people ought to behave (Meglino & Ravlin, 1998), while personality traits comprise the underlying tendencies that create consistent patterns in people’s thoughts, feelings, and actions (McCrae & Costa, 1995). While personality traits helps to explain *which people* tend to exhibit OCBs on a regular basis, only values provide insight into the conscious thought or intentionality behind their actions (Bilsky & Schwartz, 1994, p. 165).

Most of the prior values-OCB research has focused on the prosocial (Penner, Midili, &

Kegelmeyer, 1997; Rioux & Penner, 2001) or other-oriented (Meglino & Korsgaard, 2004; Moorman & Blakely, 1995) nature of citizenship behavior, given its positive connotation as the “good soldier” syndrome. Others have pointed out that some people who engage in OCBs might more accurately be deemed “good actors” (Bolino, 1999), who perform apparently other-oriented deeds in the service of self-interest (Bolino, Varela, Bande, & Turnley, 2006). In fact, support has been found for both motives (Rioux & Penner, 2001), suggesting that people can have different reasons for engaging in the same citizenship behavior. Research also indicates that individuals can have more than one motive for engaging in a single action (Grant & Mayer, 2009).

Despite the intuitive appeal of a multiple motives approach to citizenship behavior, researchers have seldom examined more than one or two value types at a time. To address this shortcoming, we utilize Schwartz’s (1992, 1994) theory of universal human values as an integrative framework for testing relationships between OCB and each of the four major value dimensions – self-transcendence, self-enhancement, openness to experience, and conservation. Moreover, we specify distinct theoretical mechanisms that link each of the four value types to either OCBs directed toward individuals (OCB-I) and/or OCBs directed toward the group at large (OCB-O). This approach has several advantages. First, by matching motives with their intended targets, we provide a stronger test of the proposed theoretical mechanisms. Practically, there are times when one form of OCB might be more desirable than another, and organizations would benefit from knowing which values to support and develop among their members. In addition, Schwartz’s Values Survey is universal by design and has been validated internationally (Schwartz, 1992, 1994; Schwartz & Sagiv, 1995), which means that our findings can be cross-validated across a variety of organizational and national settings.

Our second major contribution is that we explicitly account for the interpersonal nature of the citizenship construct. The increasing use of multidisciplinary work groups (e.g., Cohen &

Bailey, 1997) for accomplishing critical organizational tasks (Parks & Cowlin, 1995) is a widely recognized trend in management scholarship. Yet we know of no prior work that has considered the potential influence of group context on the performance of OCBs by individuals. Pfeffer (1983) was among the first to argue that organizations are relational in nature, and that “organization members do not think, feel or behave in isolation” (Mowday & Sutton, 1993, p. 205). Banki (2010, p. 363) was even more direct, arguing that OCB “changes the reactions and consequences of interpersonal relationships” among everyone in the group, even if they are not the overt target of a given behavior.

Values may be particularly relevant to OCBs in group settings, given that they are cognitive expressions of the human response to the need for coordinated social interaction (Schwartz & Bilsky, 1990). Acknowledging this fundamental linkage between values, groups, and citizenship behavior, Dewett and Denisi (2007, p. 249) observed that “context and relationships influence the motivation for engaging OCBs.” Accordingly, we propose that individuals alter their tendency to engage in citizenship behaviors depending on the prevailing motivations of the group. When people are placed in the company of like-motivated others, the individual-level relationship between that value and OCB may either grow stronger (mutual reinforcement) or be attenuated, depending on the nature of the underlying motivation. We test our contextual hypotheses utilizing techniques developed by relational demographers. Our sample is comprised of 582 students distributed across 135 class project teams, with longitudinal data that includes multiple peer ratings of the individual’s citizenship behavior.

Theoretical Background

Building on Rokeach’s (1968) seminal research, Schwartz (1994, p. 20) defines values as: 1) beliefs, 2) pertaining to desirable end states or modes of conduct, that 3) transcend specific situations, and 4) *guide selection or evaluation of behavior*, people, and events

(emphasis added; Schwartz, 1992; Schwartz & Bilsky, 1987, 1990). Schwartz (1992, 1994) further proposes that values represent responses to the universal requirements of people living in society. He has identified ten motivational categories or value “types” organized around two underlying dimensions that are consistently represented across all human cultures. The first dimension captures the tension between self-enhancement versus self-transcendence values, addressing the degree to which people emphasize the pursuit of individual dominance and personal success versus equal acceptance of and concern for others. The second dimension opposes openness to experience with conservation values, highlighting differential preferences for independent thought and action, pleasure seeking, or excitement versus self-restraint, tradition and security. We provide a diagram of the resulting circumplex in Figure 1. Adjacent values tend to be positively correlated, while opposing values are negatively correlated.

According to Schwartz (1992, 1994, p. 23), the actions that people take in pursuit of each value type “have psychological, practical, and social consequences that may conflict or may be compatible with the pursuit of other value types.” This means that the ten values are continuous and interdependent in nature, and should be considered in relationship to one another. One of the challenges in operationalizing Schwartz’s theory, however, is that the values are (by definition) significantly intercorrelated, such that including all ten in statistical analyses results in unreliable regression coefficients (Schwartz, 2009). One generally accepted approach to dealing with this issue is to test a subset of values representative of the poles of the two underlying dimensions (e.g., Chui, Lloyd, & Kwok, 2002). We therefore develop theoretical arguments for five of Schwartz’s value types as predictors of OCB, sampling at least one value from each quadrant of the circumplex: *benevolence* (self-transcendence), *power* and *achievement* (self-enhancement), *self-direction* (openness to change), and *conformity* (conservation). We provide the definitions and survey items for these five value types in Table 1.

Insert Table 1 and Figure 1 about here

Values as Predictors of Individual OCB in Teams

We consider two forms of citizenship behavior which differ in their intended targets. OCB-I consists of helping behaviors directed toward specific individuals, whereas OCB-O is intended to benefit the organization or group as a whole (Williams & Anderson, 1991). Both constructs have been examined in prior studies of OCB in team settings (e.g., Bachrach, Bendoly, and Podsakoff, 2001; Podsakoff, Ahearne, & MacKenzie, 1997; Podsakoff & MacKenzie, 1994). Because of their different focal points, we anticipate differential relationships between specific values and these OCB dimensions.

Self-transcendence. Schwartz (1992, 1994) defines self-transcendence values such as *benevolence*¹ as reflecting a primary interest in enhancing the well-being of others. Similar “prosocial” constructs in the OCB literature include “other orientation” (Korsgaard, Lester, & Meglino, 1996, 1997) and collectivism at the individual level of analysis (Moorman & Blakely, 1995). Research has shown that two empirically derived dimensions of prosocial values – other-oriented empathy and helpfulness – are significantly correlated with OCB (Borman et al., 2001; Fecteau, Allen, Fecteau, Bordas, & Tears, 2000; Midili & Penner, 1995), which is frequently viewed as other-oriented behavior (e.g., Smith, Organ, & Near, 1983). In previous studies, prosocial values predicted significant and unique variance in OCB after controlling for the effects of known attitudinal predictors (Midili & Penner, 1995; Rioux & Penner, 2001).

We propose that prosocial behaviors satisfy a “value expressive” motive (Snyder, 1993) for people high in self-transcendence. According to Grant and Mayer (2009), individuals with

¹ We selected *benevolence* as the representative value type because of its emphasis on the welfare of *people with whom one is in frequent personal contact*, as opposed to *universalism*'s broader concern for the protection of all people and nature.

strong prosocial values like *benevolence* are likely to display higher levels of OCBs for at least three reasons. First, people high in prosocial values have an external as opposed to internal orientation (Meglino & Korsgaard, 2004), and are more likely to seek opportunities to serve their organizations. Second, individuals with prosocial values are more likely to feel personal responsibility for improving the welfare of their organization (e.g., Grant, 2007, 2008) and act on their convictions. Third, because of their concern for others, people high in prosocial values are more willing to subordinate their personal interests to those of the group (e.g., Bolino & Turnley, 2005; Moon, Kamdar, Mayer, & Takeuchi, 2008). As research indicates that individuals with prosocial values seek to improve the welfare of all in their local context without discrimination (Korsgaard et al., 1996, 1997; Lester, Meglino, & Korsgaard, 2008), we predict that *benevolence* values will predict OCBs directed toward the social organization at large.

Hypothesis 1: There will be a significant and positive association between the value of benevolence and an individual's OCB-O.

Self-enhancement. In contrast, Schwartz defines *power* values as the extent to which individuals seek “social status and prestige” and “control...over people and resources” (Schwartz, 1994, p. 22). Whereas people high in *benevolence* engage in OCBs as an expression of their concern for others, people with a strong *power* motive engage in similar behaviors for the purpose of their own self-enhancement. These are the so-called “good actors” (Bolino, 1999) who perform OCBs in order to advance their social standing, improve their performance ratings, and increase their odds of receiving important organizational rewards (e.g., Bolino, 1999; Bolino et al., 2006; Rioux & Penner, 2001). This strategy appears to be effective: even though OCBs are not technically part of the job description, research shows that supervisors take citizenship behavior into account when evaluating employee performance (Allen, Barnard, Rush, & Russell, 2000; Allen & Rush, 1998; Podsakoff & MacKenzie, 1994). Other studies indicate that

employees are most likely to engage in OCBs precisely when such actions are seen as instrumental to career success or are actively rewarded by supervisors (Haworth & Levy, 2001; Hui, Lam, & Law, 2000; Schnake & Dumler, 1997).

We therefore propose that OCBs serve as a means by which people high in *power* values engage in impression management to advance their personal goals. Impression management is broadly defined as attempts to influence how one is perceived by others (Bolino et al., 2006), and involves both enhancement and self-promotion behaviors (Barrick, Shaffer, & DeGrassi, 2009). Enhancement is related to the preservation (and embellishment) of one's public image (i.e., social status and prestige), while self-promotion is an expression of the degree to which an individual desires social power (i.e., control over power and resources). In support of this linkage, Rioux and Penner (2001) found that impression management motives were significantly related to sportsmanship OCBs, while others reported a link between OCBs and image enhancement (Bolino et al., 2006; Yun, Takeuchi, & Liu, 2007) and ingratiation (e.g., Bowler & Brass, 2006; Eastman, 1994). Social exchange is the implied mechanism, as people seek to impress others and gain greater influence over them in the expectation of some sort of future return (Konovsky & Pugh, 1994; Organ, 1990). Because of the desire for future reciprocity, we expect *power*-driven OCBs to be directed toward specific individuals (OCB-I) who are able to return the favor in some manner (e.g., Finkelstein, 2006; Finkelstein & Penner, 2004).

Hypothesis 2: There will be a significant and positive association between the value of power and an individual's OCB-I.

The value of *achievement* shares *power*'s emphasis on personal advancement but without the need for dominance over others. Rather, individuals high in *achievement* perform OCBs in order to "demonstrate competence according to social standards" (Schwartz, 1994, p. 22). Such OCBs likewise tend to be directed toward individuals (OCB-I) because competence must be

perceived by others in order to be rewarded (social exchange). However, as opposed to individuals with high *power* values who perform OCBs with the expectation that the favor will be returned in some instrumental way, individuals with high *achievement* values place a greater emphasis on the symbolic value (Molm, Schaefer, & Collett, 2007) of being viewed as “hard workers” by others in the organization. Further, we propose that individuals with high *achievement* values will also be motivated to engage in behaviors that maximize the likelihood of group success (OCB-O), insofar as personal achievement is dependent on the group’s overall performance. In other words, perceptions of individual competence may be enhanced by virtue of one’s association with a competent group.

Both of these linkages are supported by work ethic research. “Hard work” is one of the core dimensions of work ethic, as first identified by Max Weber (1958) and empirically tested by Miller and colleagues. Miller, Woehr, and Hudspeth (2001) performed a multi-dimensional analyses of the work ethic construct, and found that work ethic in general (and the hard work dimension in particular) was positively and significantly related to the need for achievement (Steers & Braunstein, 1976). Moreover, they argued that work-ethic related values should exert their behavioral effects on measures of contextual as opposed to task performance. In support, research relating work ethic and task performance has been inconclusive, while limited studies have confirmed the link between work ethic and nontask performance (Ryan, 2002).

Hypothesis 3: There will be a significant and positive association between the value of achievement and an individual’s (a) OCB-I and (b) OCB-O.

Openness to Change. We draw on role definition and role identity research to suggest a theoretical mechanism linking OCB to openness to change values (e.g., *self-direction*²). First,

² The other two values in the openness to change region – *hedonism* and *stimulation* – have to do with sensuous self-gratification and seeking excitement and novelty in life, respectively. We know of no existing theoretical arguments to link these value types to OCB.

individuals who espouse the value of *self-direction* seek freedom and independence in their lives (Schwartz, 1994). They prefer to set their own goals, identifying opportunities and acting on them, thereby expanding their role in the organization. Importantly, expanded role definition has been shown to be a causal factor in citizenship behaviors. Research suggests that employees who have positive job attitudes will be more likely to define their jobs to include extra-role behaviors (Tepper, Lockhart, & Hoobler, 2001; Tepper & Taylor, 2003), and that employees who define their roles more broadly tend to engage in more OCBs (Morrison, 1994). McAllister, Kamdar, Morrison, and Turban (2007) found that role breadth accounted for more explained variance in helping OCBs than other role perceptions such as discretion, instrumentality, and efficacy. Meanwhile, role identity theory suggests that individuals with high *self-direction* values are likely to develop a reputation for being self-motivated, thereby reinforcing their self-concept as someone who goes “above and beyond” the call of duty to find unique ways to help the group. This positive reinforcement should lead to positive attitudes toward the group, which in turn facilitate the demonstration of OCBs (Tepper et al., 2001; Tepper & Taylor, 2003). In support, Finkelstein found that citizenship role identity positively predicted OCBs directed toward both individuals and the organization (Finkelstein, 2006; Finkelstein & Penner, 2004).

Hypothesis 4: There will be a significant and positive association between the value of self-direction and an individual's (a) OCB-I and (b) OCB-O.

Conservation. Conservation values focus on maintaining the status quo and respecting tradition. Of the three value types that fall in this region, *conformity* expresses conservatism with respect to social settings, and is most closely related to OCB.³ Adjacent to *benevolence* in Schwartz's circumplex, *conformity* shares *benevolence's* emphasis on normative behavior that promotes relationships with others (Schwartz, 1994), yet elicits a markedly different response.

³ *Tradition* has to do with respect for customs and ideas whereas *security* values emphasize safety and stability.

Whereas *benevolence* calls for the active enhancement of the welfare of others, *conformity* calls for “submissive self-restriction” or “the restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms” (Schwartz, 1994, p. 22).

The concept of regulatory focus provides a potential explanation for the relationship between *conformity* values and OCB. Regulatory focus theory (Dewett & Denisi, 2007) proposes that individuals are guided by two self-regulatory systems, one emphasizing promotion and the other prevention. Someone with a promotion focus emphasizes growth and development needs, strives for ideal standards, and seeks positive outcomes; this is most consistent with proactive or change-oriented citizenship behaviors. People with a prevention focus, however, are more concerned with meeting their security needs, taking care of responsibilities, and avoiding negative outcomes. This is most consistent with so-called maintenance OCBs, which are more modest in nature and intended to preserve the status quo. Schwartz’s (1994) definition suggests that *conformity* values are related to “maintaining” both individual relationships (not upsetting others) as well as group dynamics (not violating social expectations), so we provide hypotheses with respect to both OCB dimensions.

Hypothesis 5: There will be a significant and positive association between the value of conformity and an individual’s (a) OCB-I and (b) OCB-O.

Effects of Group Composition on the Individual Value-OCB Relationship

We draw from the relational demography literature to develop our hypotheses regarding the contextual effects of individual values on the expression of OCBs in a group setting. Initial work in this area focused primarily on surface-level variables such as age, sex, race, or organizational tenure (Riordan & Shore, 1997). The major premise is that individuals assess their similarity to others in their social context (self-categorization [Turner, 1987]), influencing their attitudes and behavior in groups (Tsui, Egan, & O’Reilly, 1992; Tsui & O’Reilly, 1989). The

more similar that individuals perceive themselves to be to others in the group, the more they are attracted to other group members (Byrne, 1971), and the more likely they are to view the group as consistent with their self-identity (Turner, 1987). This mutual attraction fosters positive affective states, which in turn lead to positive behaviors. Empirically, similarity between individuals has been associated with a variety of beneficial outcomes including improved communication (Lincoln & Miller, 1979; Zenger & Lawrence, 1989), higher social integration (O'Reilly, Caldwell, & Barnett, 1989), organizational commitment (Tsui et al., 1992), and job satisfaction (Harrison, Price, & Bell, 1998). Many of these outcomes are known predictors of OCBs.

Fewer studies have examined the effects of deep-level diversity, including differences in attitudes, beliefs, and values (Harrison et al., 1998). Some researchers argue that deep-level characteristics such as values generate especially high levels of mutual affinity, resulting in an even stronger linkage between values and OCB in a group setting. According to this logic, people with similar values do not just share certain physical attributes but are likely to interpret and respond to environmental events in similar ways (Meglino & Ravlin, 1998). However, Banki (2010) points out that the similarity-attraction paradigm fails to take the motivational nature of values into account. Unlike demographic similarities, value congruence does not automatically lead to increased displays of citizenship behavior. Instead, reinforcement is a conscious decision made by an OCB receiver, who assigns different valences to OCBs based on their underlying motives. When the motive for an OCB is viewed as "other serving," receivers actively reinforce (social information processing [Salancik & Pfeffer, 1978]) and reward (social learning [Bandura, 1977]) that behavior, promoting its expression in groups (i.e., a positive moderator [covariant] effect). In contrast, when the motive for an OCB is seen as self-serving with no direct or indirect concern for others, receivers are likely to view the behavior negatively and withhold reciprocation and/or sanction the person (Rosenfeld, Giacalone, & Riordan, 1995). Such

responses are likely to result in decreased communication, increased conflict, and fewer OCBs between group members (i.e., a negative moderator [compensatory] effect).

Positive moderator (covariant) effects. We propose that *benevolence*, *achievement*, and *self-direction* may be viewed as “other-serving” values, either directly or indirectly. Placing an individual who scores highly on any one of these three value dimensions in the context of like-minded others should therefore reinforce (positively moderate) the relationship between the individual-level value and its associated OCBs. We retain the pairings between values and OCB dimensions as specified in the preceding hypotheses. Contextual effects should either amplify or mitigate the existing relationships, not alter the underlying theoretical mechanisms.⁴

Located in the self-transcendence region of Schwartz’s circumplex, *benevolence* is the most direct example of an other-serving motive, given its prosocial orientation. As argued previously, prosocial behaviors satisfy a “value expressive” motive (Snyder, 1993) for individuals high in *benevolence*, leading them to engage in OCBs beneficial to the group at large without regard for personal gain. Here, we suggest that such behavior is likely to be positively received and reinforced by group members who also have strong *benevolence* values. Members can express their own desire to help the group by encouraging others to engage in citizenship behaviors, creating a system of mutual reinforcement.

Hypothesis 6: When the team mean benevolence value score is high, the individual-level relationship between benevolence and OCB-O will be stronger.

We predict a similar effect for *achievement* values. “Hard work” may be reinforced by group members who are also high in *achievement*, for two reasons: 1) they may view hard work as inherently good (i.e., work ethic); and/or 2) they may recognize that this form of self-advancement serves the group as well as the individual. Regardless of whether a person high in

⁴ We do not provide hypotheses for *conformity*, which is based in self-restraint, as “nonactions” are not subject to the same social reinforcement processes.

achievement engages in OCBs to increase perceptions of their own competence directly or by advancing the competence of the group (i.e., indirectly), all group members benefit from the resulting increase in performance. Peers who are high in *achievement* values are likely to recognize and appreciate the individual's efforts, and reinforce the behavior accordingly.

Hypothesis 7: When the team mean achievement value score is high, the individual-level relationship between achievement and (a) OCB-I and (b) OCB-O will be stronger.

Likewise, putting people high in *self-direction* values together should result in a group where expanded role definitions are mutually respected. In this case, individuals are positively reinforced for "going above and beyond the call of duty" resulting in a group where everyone does "whatever it takes" to get the job done. Group members high in *self-direction* are likely to support peers who take on unscripted roles for two reasons: 1) they may view self-definition as a social good; and/or 2) they may recognize that OCBs motivated by *self-direction* have indirect benefits for others. Indeed, by encouraging individuals to define their roles broadly, group members gain increased freedom to take on additional responsibilities themselves.

Hypothesis 8: When the team mean self-direction value score is high, the individual-level relationship between self-direction and (a) OCB-I and (b) OCB-O will be stronger.

Negative moderator (compensatory) effects. In contrast, Banki (2010) suggests that OCBs driven by impression management may be particularly dysfunctional in groups. In support, Tepper, Duffy, Hoobler, and Ensely (2004) found that the relationship between job satisfaction and OCB was weaker when impression management was viewed as the underlying motive. Similarly, we propose that OCBs motivated by a desire to gain personal status or control over others will be recognized as such by *power*-driven peers, who will be: 1) less likely to reciprocate in kind; and/or 2) more likely to respond negatively. Whereas unsolicited favors might be appreciated in other contexts, they are likely to generate animosity in high *power* groups. The recipient may resent the fact that such aid makes him/her look less capable (decreased social

standing), while other group members (who are also seeking to acquire power) may resent the favor-doer's efforts to get ahead (Bolino et al., 2004). We therefore predict that the positive effects of individual *power* on OCB will be mitigated in groups with high mean *power* values.

Hypothesis 9: When the team mean power value score is high, the individual-level relationship between power and OCB-I will be weaker.

Methods

Sample

The subjects were students enrolled in a required, multi-section organizational behavior class at a large university located in the Midwestern United States. They received class credit for completing a series of five on-line questionnaires relating to values, attitudes, personality traits and other individual differences, and releasing course-related data for research use. We activated the surveys on a weekly basis starting in mid-September, and all responses were completed by mid-November, approximately one month prior to the end of the course. Participation was voluntary and students could satisfy the research requirement through alternative activities. The majority of subjects were male (57%), U.S. citizens of European descent (82%), and juniors in college (68%), with a mean age of 20.7 ($SD = 1.2$) years. After accounting for missing data, we had a final sample of 582 students distributed across 135 class project teams. Teams included in our final analyses had data for at least three members, meaning each individual's OCB was evaluated by at least two peers.⁵

The teaching staff assigned students to teams of 3 to 6 members with the goal of maximizing diversity across sex, ethnicity, and major (business versus nonbusiness). Team

⁵ We started with an initial sample of 777 students (164 teams) who completed at least one study survey. We were able to use approximately 75% of the initial cases after accounting for missing data, response sets, and the number of OCB ratings per team member. Statistical analysis showed no significant differences between the individuals retained versus those dropped from the sample with respect to personality traits, satisfaction, and three of the five value types. Dropped cases did differ significantly from retained cases with respect to power and conformity values. By omitting these people from our analysis, we likely restricted the range on these variables, making it more difficult to detect significant effects.

assignments were made during the first two weeks of the semester, and students were required to sit together with their teams for the remainder of the course. Significant class time was devoted to team development, including segments on team processes, Myers-Briggs personality type comparisons and conflict management techniques. Teamwork comprised approximately 35% of the course grade and encompassed several assignments across the span of the semester, including in-class exercises, team-based essay exams, and a case competition with presentations made in front of external judges. To summarize, the teams on which our analyses are based were stable over three months' duration, performed multiple tasks together, and were central to the students' overall performance in the course. Contact time was extensive and allowed the students to realistically evaluate their peers' behavior in the group setting.

Measures

Dependent variable. Students were asked to *rate the performance of individual team members* using an OCB scale (*team member OCB*) after the completion of all team activities. Peer ratings of OCB are relatively common and generally preferred in contexts where acts of citizenship are more easily observed by colleagues than supervisors and where individuals interact with colleagues more regularly than with supervisors (Allen et al., 2000; Van Dyne & Ang, 1998). Respondents were assured that the results would not be shared with other team members, and were asked to be as candid as possible. The questions were not identified as pertaining to citizenship behavior, and OCB was not covered as part of the course material. Results from the OCB questionnaire had no influence on grading for the course.

The OCB scale consisted of 7 questions covering OCBs directed toward individuals (OCB-I; $n = 4$), and OCBs directed toward the group at large (OCB-O; $n = 3$). Respondents rated items using a 7-point Likert scale ranging from 1 (strongly disagree) to 7 (strongly agree). These seven items were originally selected for studying citizenship behaviors in teams by Bachrach et

al. (2001) based on three criteria: 1) their conceptual grounding in the work of Organ (1988); 2) their empirical relationship to group performance in prior studies (Podsakoff et al., 1997; Podsakoff & MacKenzie, 1994); and 3) their observability in the student group context. Overall, the two dimensions displayed acceptable inter-rater and internal reliabilities (mean $r_{wg} = .86$ and $.83$, and $\alpha = .89$ and $.75$, for OCB-I and OCB-O, respectively).

Independent variables. We administered the Schwartz Value Survey (SVS) as part of the on-line questionnaires taken by students for their research requirement. Subjects were asked to rate the importance of the 56 items in the SVS as *guiding principles in your life* using a 7-point Likert scale ranging from 1 (not important at all) to 7 (of supreme importance).⁶ A confirmatory factor analysis demonstrated that all items loaded on their respective value types with acceptable model fit ($\chi^2 = 2088.26$ [1068], $p < .01$, GFI = .90, CFI = .91, RMSEA = .04). An eleven-factor model specifying the five value types, the big five personality dimensions, and university satisfaction as separate latent variables provided a better fit to the data than multiple alternative nine- and ten-factor models that were formulated by combining factors with correlations greater than .30 (results available from the first author).

We followed the recommendations contained in Schwartz's (2009) Draft Users Manual to prepare the data for subsequent analysis. We dropped subjects who met any one of the following criteria: 1) left 15 or more items blank; 2) used a particular scale anchor 35 or more times; or 3) omitted 30% or more of the items for a particular dimension score. We then utilized each individual's mean rating score (MRAT) across all items to center their item-level responses, to correct for differences in scale use. A fuller justification for viewing differences in MRAT across individuals as bias instead of value substance is provided by Schwartz (2009).

⁶ We utilized the same items, response anchors and spacing as Schwartz but recoded the numerical scale to maintain consistency with our other survey items. Mathematically, the two approaches are equivalent.

We used only the 45 items demonstrated to have near equivalence of meaning across cultures when calculating value dimension scores. We created *individual value scores* by averaging the mean centered item scores across the items for each value: *benevolence* ($\alpha = .76$, $n = 5$), *conformity* ($\alpha = .68$, $n = 4$), *achievement* ($\alpha = .73$, $n = 4$), *power* ($\alpha = .75$, $n = 4$), and *self-direction* ($\alpha = .72$, $n = 5$). We provide a list of items comprising each value scale in Table 1.

Control variables. Prior research indicates that job satisfaction is moderately correlated with OCB (Bolino et al., 2004; Organ & Ryan, 1995). While we could not control for job satisfaction in this sample, we modified the global job satisfaction scale developed by Quinn and Shepard (1974) to measure the degree to which students were satisfied with their university. While there are notable differences between being a student and being an employee (such as paying for services versus being paid for services), we wanted to account for potential attitudinal effects. A sample item was, *All things considered, how satisfied are you with your experience at this university?* We averaged scores across the five items (rated using a 3-point Likert scale) to create an overall index of student *university satisfaction* ($\alpha = .89$).

Conscientiousness ($\alpha = .69$) has demonstrated a significant and consistent relationship with OCB across multiple studies ($r = .22$ to $.32$; e.g., Borman et al., 2001; Dalal, 2005; Konovsky & Organ, 1996; Organ & Ryan, 1995). Results for the other Big Five personality dimensions have not been as strong (e.g., Borman et al., 2001; Konovsky & Organ, 1996; Raja & Johns, 2010), but we included *agreeableness* ($\alpha = .72$), *extraversion* ($\alpha = .81$), *emotional stability* ($\alpha = .70$) and *openness to experience* ($\alpha = .62$) to provide a conservative test of the relationship between values and OCB, beyond any effects of personality traits. We measured each personality dimension using five items from Goldberg's (1999) International Personality Item Pool, which has been validated against the NEO Five-Factor Inventory. Respondents were asked to rate how well five behavioral statements described them, using a Likert scale ranging from 1 (very

inaccurate) to 5 (very accurate). We averaged scores across all five items per each personality dimension to create a composite index.

We included *sex* (1 = female, 0 = male) as a demographic control variable. We did not control for ethnicity due to lack of variance (82% Caucasian).

Analyses

We utilized hierarchical linear modeling (HLM) with random intercepts (Raudenbush & Bryk, 2002) to test our direct effect hypotheses. This technique allowed us to examine the individual-level predictor variables in question while accounting for group-level variance in the dependent variable. We conducted a series of ANOVAs on the OCB dimensions (with group membership as the independent variable) to examine the HLM precondition that significant between-group variance was present (Hoffman, 1997). Results were as follows: OCB-I, $\tau_{00} = .19$, $df = 134$, $\chi^2 = 337.57$, $p < .01$ and OCB-O, $\tau_{00} = .11$, $df = 134$, $\chi^2 = 229.13$, $p < .01$. Further analyses of the interclass correlation coefficients (ICC[1]) indicated that between-group variance was 26% and 15% for OCB-I and OCB-O, respectively, further supporting the use of HLM. We used raw-metric data for our level-1 predictor models.

According to Riordan and Wayne (2008), team mean interaction terms are the preferred method for testing the effects of relational similarity. Team mean value scores are a cross-level, contextual (i.e., “individual-within-the-group”) variable calculated from individual-level value scores. Though they are entered as level-2 interaction terms (Riordan & Wayne, 2008), they do not represent a true group-level variable as is commonly seen in HLM. This technique allows one to examine the degree to which an individual’s similarity on an individual difference variable relative to other group members affects the individual-level relationship between the individual difference variable and the criterion. It has two main advantages over other techniques commonly used in relational demography research, such as Euclidean distances (D-scores). First,

it largely avoids the problems with skewness and violations of the assumption of monotonicity that typically plague D-scores (Edwards, 2001; Riordan & Wayne, 2008). More importantly, this technique is consistent with our hypothesized relationships, allowing us to test the moderating effects of the group mean on the individual's actual value score. Using D-scores would not have differentiated whether the individual's score was higher or lower than the group mean, and as a result would have made it impossible to test the effect of the group mean on the slope of the linear relationship between the individual's score and OCB.

We tested our moderation hypotheses utilizing a random-slopes-and-intercepts regression model (Davison, Kwak, Seok-Seo, & Choi, 2002; Riordan & Wayne, 2008). This allowed us to examine whether the mean team scores on each value dimension significantly predicted the relationship (slope) between an individual's value score and their performance of OCBs as perceived by team members. More specifically, we entered the team mean score on each of the values as a level-2 predictor of the slope associated with the corresponding level-1 value. We also entered all team mean values scores as level-2 predictors of the intercept, to control for spurious cross-level interactions (Kidwell, Mossholder, & Bennett, 1997). Following the recommendations of Raudenbush and Bryk (2002), we group-mean centered the level-1 variables, and grand-mean centered the level-2 variables, to reduce potential multicollinearity.⁷ Because this technique is designed to test the effects of the average difference (or similarity) of an individual relative to other individuals, and was not used to test the effects of a defined level-2 construct, we did not calculate any level-2 inter-rater reliability statistics, such as r_{wg} or ICC values.

⁷ Results of an alternative analysis that utilized grand mean centering for all level-1 variables yielded essentially the same results. Details are available from the first author.

Results

We provide the means, standard deviations, and intercorrelations of the study variables in Table 2. As expected, our OCB measures were significantly correlated with both university satisfaction (OCB-I, $r = .12, p < .01$; OCB-O, $r = .09, p < .05$) and conscientiousness (both $r = .19, p < .01$). Schwartz's (1994) value types were moderately intercorrelated with one another, with stronger, positive correlations between adjacent values and more negative relationships between opposing values on the circumplex.

Individual values as predictors of individual OCB in teams. Six of the eight direct effect hypotheses were supported (see Table 3). Individuals higher in *benevolence* ($\gamma = .19, p < .05$) displayed higher levels of OCB-O, supporting Hypothesis 1. Power was not a significant predictor of OCB-I, contrary to Hypothesis 2. In keeping with Hypotheses 3a and 3b, individuals higher in *achievement* values displayed higher levels of both OCB-I and OCB-O ($\gamma = .11$ and $\gamma = .16$, both $p < .05$). Similarly, individuals higher in *self-direction* displayed higher levels of both OCB-I ($\gamma = .13, p < .05$) and OCB-O ($\gamma = .22, p < .01$), providing support for Hypotheses 4a and 4b. Finally, *conformity* ($\gamma = .12, p < .05$) displayed a significant relationship with OCB-I, supporting Hypothesis 5a, but was not a significant predictor of OCB-O (Hypothesis 5b).

Moderating effects of individual similarity to the group. Three of our six moderator hypotheses were supported (see Table 4). Hypotheses 6 and 7a-7b, which focused on the contextual effects of *benevolence* and *achievement* values, were not supported. The team mean score on *self-direction* positively moderated the relationship between individual *self-direction* and OCB-I ($\gamma = .28, p < .01$) and OCB-O ($\gamma = .25, p < .05$), providing support for Hypotheses 8a and 8b. Thus, the individual-level relationship between *self-direction* and OCB was even stronger when that individual was placed in a team context where other team members were also high in *self-direction* values. Conversely, the team mean *power* score negatively moderated the

individual *power*-OCB-I relationship ($\gamma = -.07, p < .01$), supporting Hypothesis 9. When other group members placed a high valence on *power*, the relationship between individual *power* and OCB-I was weaker, and vice versa. Unexpectedly, similar moderation effects were also observed for group *power* values on the individual *power*-OCB-O relationship ($\gamma = -.07, p < .05$).

Graphical depictions of these interaction effects are shown in Figures 2 and 3.

Insert Tables 2-4 about here
Insert Figures 2 and 3 about here

Discussion

Research on individual differences as predictors of OCB has seldom considered values, despite a strong theoretical rationale for doing so. Moreover, the existing literature has not been solidly grounded in values theory, and thus has failed to consider the full range of human motivations. We utilized Schwartz's (1994) theory of universal human values to propose hypotheses relating values from each of the four major motivational areas (self-transcendence, self-enhancement, openness to change, and conservatism) to specific OCB dimensions. We also examined the contextual effects of team member values on the individual values-OCB relationship. Our results supported the premise that there are differential relationships between specific values and OCB dimensions, and that group context influences value expression.

Individual Values as Predictors of OCB

We found that *benevolence* predicted OCB-O, *conformity* predicted OCB-I, and *achievement* and *self-direction* predicted both OCB-I and OCB-O. No significant direct effects were found with respect to *power*, despite the fact that prior research has indicated that individuals who are motivated by impression management are more likely to engage in citizenship behaviors (e.g., Bolino et al., 2006; Rioux & Penner, 2001). Perhaps *power*'s effects

would be more likely expressed in traditional work environments where individuals are competing with peers for raises or promotions, and where extra effort is more likely to lead to the material or social rewards sought by those who value *power*. Another possible explanation is that the negative, contextual effects we observed for *power* may have neutralized the positive, direct effects, depending on how much *power* was valued by other group members. *Power* was also one of two values where we noted significant differences between omitted and retained cases, resulting in range restriction on this variable. Meanwhile, *self-direction* had direct and indirect effects on both OCB dimensions, which we also found interesting, given the relative lack of prior research on *self-direction* compared to other value types. In retrospect, it can be argued that *self-direction* values are a necessary precondition for the exhibition of OCBs. Individuals presumably have to be at least somewhat self-directed to choose to perform behaviors that are not mandated as part of one's job. This interpretation is consistent with research on volunteering, where Gagne (2003) found that autonomy orientation was strongly related to engagement in prosocial acts.

The facts that multiple values predicted citizenship behavior and that the strongest predictor (*self-direction*) was “neutral” in tone have important implications for how OCBs are regarded in organizations. From its inception, citizenship behavior has tended to have a positive connotation, performed voluntarily by “good soldiers” (Bateman & Organ, 1983; Organ, 1988). Early emphasis on altruism as a dimension of OCB (e.g., Organ, 1988; Smith et al., 1983) and related research into “prosocial behavior” (e.g., Brief & Motowidlo, 1986) have further underscored the “morality” of OCBs and the employees who perform them. In contrast, studies on impression management have emphasized the “selfish” side of citizenship (e.g., Bolino, 1999; Bolino et al., 2006; Rioux & Penner, 2001), where an individual pretends to look out for the good of the group but in reality seeks their own gain. Our study highlights another motive for OCB that is not necessarily prosocial or manipulative in nature. Rather, *self-directed* people

engage in citizenship behaviors because they are creative and independent in any life setting. At the same time, people low in *self-direction* might be very “good” people and yet not perform many OCBs. Thus, we would do well to exercise caution when making inferences about personal character based on an individual’s citizenship behavior (or lack thereof).

Effects of Group Composition on the Individual Value-OCB Relationship

Our study also suggests that context significantly influences the behavioral expression of individual values. We found that group-mean *self-direction* values positively moderated, while group mean *power* values negatively moderated, the relationship between the respective individual values and OCB dimensions. Thus, people’s natural tendency to engage in OCB may be either augmented or inhibited, depending on the value profiles of their group members. In the case of *self-direction*, placing a creative and independent individual in a group with like-motivated others had a positive feedback effect, resulting in a group where broad role definitions were either explicitly or implicitly encouraged. However, high *power* values served to increase individual levels of OCB-I only in a relative power vacuum (i.e., low *power* group mean), with high *power* individuals in high *power* groups performing the least amount of OCBs overall. Similarity in *benevolence* and *achievement* values appeared to have no net effect on the relationship between individual values and citizenship behavior, suggesting that some value types may be more sensitive to social influence than others.

These results have important implications for group design. We typically think of diversity in terms of demographic characteristics such as sex, age, and ethnicity, but group members may look quite similar on the surface but have radically different value profiles. One recent study (Amason, Lui, & Fu, 2009) demonstrated that value congruence on otherwise diverse teams was positively related to executive team performance, whereas diversity without value congruence led to both task and relationship conflict. Thus, leaders might do well to

consider internal as well as external characteristics when recruiting new group members. At the same time, it is important to keep in mind that value congruence alone does not ensure positive results. Attention must be paid to which values team members are matched on, as some are likely to be mutually reinforcing while others may repress desired behaviors.

Practical and Theoretical Implications

A deeper understanding of the motivational nature of OCBs provides managers with multiple avenues by which they can increase the overall level of OCBs in the workplace. For example, value profiles could potentially be used when establishing work teams to create combinations that facilitate the emergence of citizenship behaviors. Armed with the knowledge of which values lead to which forms of OCBs, managers should also be better equipped to create organizational climates where those target values and their associated behaviors are elicited, supported, and rewarded (i.e., social reinforcement). For example, people high in *achievement* should respond well to opportunities to develop new skills, while *self-directed* people should produce more OCBs under conditions of high autonomy. Despite the fact that the underlying values may be resistant to change, managers have direct control over the organizational processes, programs, and procedures that either elicit or inhibit their behavioral expression. A genetic analogy might be helpful here; humans enter the world with their genetic code pre-established (i.e., genotype), but the environment plays a significant role in determining which genes are expressed and to what degree (i.e., phenotype).

Theoretically, our study advances the values and OCB literatures in at least two significant ways. First, we demonstrate that Schwartz's (1992, 1994) values theory is a useful framework for integrating prior research on values as predictors of OCB, as shown in Table 5. Without an organizing theory, previous studies have examined the motivational basis of OCB using a variety of constructs and theories, without fully understanding how they were

interrelated. In developing our hypotheses, we used values as a basis for grouping related constructs as well as for specifying the theoretical mechanisms by which they affect various OCB dimensions. We found direct effects for values from all four motivational areas, demonstrating that individuals do indeed have multiple motivations for being “good” citizens.

Insert Table 5 about here

Our second major contribution was to apply theory and techniques from the field of relational demography to the study of the contextual effects of values on OCB in teams. While several scholars have examined the effects of demographic similarity on workplace attitudes and behaviors (e.g., Riordan & Shore, 1997), ours is one of the few studies to extend this approach to deep-level attributes (e.g., Harrison et al., 1998) such as values. In particular, we found that similarity in *self-direction* values had a particularly strong and positive effect on the expression of OCB in teams, presumably by reinforcing each individual’s tendency to define their role broadly. Perhaps our most unique contribution is that we hypothesized and found that similarity in values does not always engender positive affect and outcomes. As predicted, the contextual effects of *power* were negative, or compensatory, in nature. Thus, our results appear to support Banki’s (2010) premise that the motivational nature of values and their resulting behaviors must be taken into account, as not all OCBs are received or rewarded equally.

We would nevertheless note that not all of our value-OCB dimension pairings performed as hypothesized. Some of our hypotheses were not supported (e.g., no direct effects for *power* on OCB-I or conformity on OCB-O, and no indirect effects for *benevolence* [OCB-O] or *achievement* [OCB-I and OCB-O]). Meanwhile, other values (e.g., *power*) had broader effects than anticipated (indirect effects on OCB-O as well as OCB-I). This suggests that further refinement of the theory linking individual values to OCB dimensions is still necessary.

Limitations and Future Research

Our study has several limitations which should be addressed in future research. First, we utilized a sample of student groups working on class projects to assess values as predictors of OCB. The use of students has been both criticized and supported as a valid population for research purposes. Given our interest in understanding basic relationships among relatively common variables, there is no reason to suspect that the use of a student sample had any less validity than the use of any other subjects. Moreover, the team process was specifically designed to facilitate a genuine experience of working on multiple, challenging tasks, with diverse others, over a significant period of time, just like in work settings. Nevertheless, future studies should investigate the generalizability of our results to other samples and organizations.

Second, the teams in this study were structurally interdependent, meaning members had to rely on one another to carry out their work (Van der Vegt & Janssen, 2003). As noted by Bachrach, Powell, Collins, and Richey (2006), task interdependence has been theoretically and empirically linked to increased levels of OCB, presumably through its positive effects on felt responsibility (Pearce & Gregersen, 1991). Task interdependence has also been associated with increased communication between group members (Johnson, 1973), higher expectations of help (Thomas, 1957), and the formation of cooperative norms (Shaw, 1981). Thus, conditions were likely favorable for OCBs to emerge. However, structural dependencies do not necessarily translate into perceived or behavioral interdependence, which can vary within and across teams (Arthur, Edwards, Bell, Villado, & Bennett, 2005; Wageman, 2001).⁸ Because we did not explicitly measure students' perceptions of interdependence, we cannot draw firm conclusions regarding the influence of task interdependence in our study. Consequently, an interesting question for future research is whether (and to what degree) the values-OCB relationship is influenced by levels of

⁸ We are indebted to an anonymous reviewer for bringing this distinction to our attention.

both structural and perceived interdependence among group members.

With respect to measurement, we utilized abbreviated scales for personality traits and OCB out of concern for survey length. As a result, several scales had a limited number of items with reliabilities on the lower end of the acceptable range. As consensus grows surrounding which control variables are essential to understanding the values-OCB relationship, researchers will be able to include fewer variables with fuller scales and stronger psychometric properties. We conservatively included measures of all Big 5 personality dimensions, but some were clearly more relevant in this context than others.

Additionally, the Schwartz Values Survey is a normative, or rating-based, measure with distinct advantages as well as limitations. Because respondents rate each value independently, they can score high, low, or even the same on multiple value dimensions, permitting investigators to capture absolute differences in value scores both within and across individuals (Meglino & Ravlin, 1998). Rating scores can also be easily utilized in sophisticated statistical analyses such as HLM, as demonstrated by this study. While Schwartz (1994) and others advocate value ratings over rankings for methodological as well as conceptual reasons, their preference is not shared by all values researchers. In particular, ipsative measures are considered preferable whenever a researcher wants to capture the relative priority of values within an individual, as happens in choice situations (Meglino & Ravlin, 1998). Thus, depending on the nature of the research question, it would be informative to replicate our findings utilizing a ranked values measure to demonstrate their robustness across multiple methodologies.

Finally, our use of a student sample created a dilemma regarding how best to capture satisfaction, a known predictor of citizenship behavior in the workplace. We chose to adapt a validated, global job satisfaction measure (Quinn & Shepard, 1974) to measure student satisfaction with their university, as a way of controlling for attitudinal effects. Interestingly,

while university satisfaction was significantly intercorrelated with both OCB measures, the relationships were not as strong as those often found between job satisfaction and OCB. This suggests several possible interpretations. There may be some organizational settings, such as universities, where positive member attitudes are less important as determinants of OCB.

Alternatively, satisfaction with the job or task may be a better predictor of OCB than satisfaction with one's organization. Or, we may have misestimated the appropriate affiliative unit, and might have found stronger effects had we measured satisfaction with the group or class rather than the university as a whole. Because we utilized university satisfaction as a control as opposed to a main predictor variable, we do not believe this choice of measure significantly affected our results.

Conclusion

We utilized Schwartz's theory of universal human values to integrate prior studies of the values-OCB relationship, proposing hypotheses for each of Schwartz's four major motivational areas. Several methodological aspects of our study underscore the strength of our findings. First, we tested our hypotheses in a sample of 582 students distributed across 135 class project teams, a sample size large enough to permit inclusion of multiple control variables. Second, we utilized peer ratings of OCB by two or more team members, with the OCB data collected several weeks after individuals completed the values, personality trait, and attitudinal surveys. Not only was this the most theoretically appropriate approach to understanding OCBs in a team context, but it also constituted a conservative test of the relationship between an individual's values and their citizenship behavior as reported by peers. Thus, our study design significantly mitigated the threat of both common method and social desirability biases. Third, by utilizing HLM, we were able to examine the effects of value similarity between an individual and his or her teammates with greater accuracy than is possible with either OLS regression or traditional difference

measures. Our results clearly indicated that individual values have an effect on OCB above and beyond established predictors like personality traits and satisfaction. Moreover, we found that how an individual's values compare to those of his or her teammates may have either a positive or negative influence on the extent to which he/she is likely to engage in acts of citizenship.

References

- Allen, T., Barnard, S., Rush, M., & Russell, J. (2000). Ratings of organizational citizenship behavior: Does the source make a difference? *Human Resource Management Review, 10*, 97-114.
- 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.
- Amason, A. C., Lui, J., & Fu, P. (2009). *Demography, conflict, and effective decision making: The key role of value congruence in TMTs*. Paper presented at the National Academy of Management Meeting. Chicago, IL.
- Arthur, W. Jr., Edwards, B. D., Bell, S. T., Villado, A. J., & Bennett, W. Jr. (2005). Team task analysis: Identifying tasks and jobs that are team-based. *Human Factors, 47*, 654-669.
- 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*, 193-201.
- Bandura, A. (1977). *Social learning theory*. Englewood Cliffs, NJ: Prentice-Hall.
- Banki, S. (2010). Is a good deed constructive regardless of intent? Organization citizenship behavior, motive, and group outcomes. *Small Group Research, 41*, 354-375.
- Barrick, M. R., Shaffer, J. A., & DeGrassi, S. W. (2009). What you see may not be what you get: Relationships among self-presentation tactics and ratings of interview and job performance.

- Journal of Applied Psychology*, 94, 1394-1411.
- Bateman, T. S. & Organ, D. C. (1983). Job satisfaction and the good soldier: The relationship between affect and employee "citizenship." *Academy of Management Journal*, 26, 587-595.
- Bilsky, W. & Schwartz, S. H. (1994). Values and personality. *European Journal of Personality*, 8, 163-181.
- 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. (2003). Going the extra mile: Cultivating and managing citizenship behavior in organizations. *Academy of Management Executive*, 17, 60-71.
- 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., & Niehoff, B. P. (2004). The other side of the story: Re-examining prevailing assumptions about organizational citizenship behavior. *Human Resource Management Review*, 14, 229-246.
- 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.
- 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.
- Bowler, W. M., & Brass, D. J. (2006). Relational correlates of interpersonal citizenship behavior: A social network perspective. *Journal of Applied Psychology*, 91, 70-82.
- Brief, A. P. & Motowidlo, S. J. (1986). Prosocial organizational behaviors. *Academy of Management Review*, 11, 710-725

- Byrne, D. (1971). *The attraction paradigm*. New York: Academic Press.
- Chui, A. C. W., Lloyd, A. E., & Kwok, C. C. Y. (2002). The determination of capital structure: Is national culture a missing piece to the puzzle? *Journal of International Business*, *33*, 99-127.
- Cohen, S. G. & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of Management*, *23*, 239-290.
- 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.
- Dewett, T. & Denisi, A. S. (2007). What motivates organizational citizenship behaviors? Exploring the role of regulatory focus theory. *European Journal of Work and Organizational Psychology*, *16*, 241-260.
- Eastman, K. K. (1994). In the eyes of the beholder: An attributional approach to ingratiation and organizational citizenship behavior. *Academy of Management Journal*, *37*, 1379-1391.
- Edwards, J. R. (2001). Ten difference score myths. *Organizational Research Methods*, *4*, 265-287.
- Facteau, J., Allen, T. D., Facteau, C. L., Bordas, R. M., & Tears, R. S. (2000). *Structured interviews for OCBs: Construct validity, faking, and the effects of question type*. Paper presented at the 15th Annual Meeting of the Society for Industrial and Organizational Psychology. New Orleans, LA.
- Finkelstein, M. A. (2006). Dispositional predictors of organizational citizenship behavior: Motives, motive fulfillment, and role identity. *Social Behavior and Personality*, *34*, 602-616.
- Finkelstein, M. A. & Penner, L. A. (2004). Predicting organizational citizenship behavior: Integrating the functional and role identity approaches. *Social Behavior and Personality*, *32*, 383-398.

- Gagne, M. (2003). The role of autonomy support and autonomy orientation in prosocial behavior engagement. *Motivation and Emotion, 27*, 199-223.
- Goldberg, L. R. (1999). A broad-bandwidth, public domain, personality inventory measuring the lower-level facets of several five-factor models. In Mervielde & Deary (I Ed.) & De Fruyt & Ostendorf (F Ed.). *Personality Psychology in Europe*. Vol. 7. (pp. 7-28). Tilburg, The Netherlands: Tilburg University Press.
- Grant, A. M. (2007). Relational job design and the motivation to make a prosocial difference. *Academy of Management Review, 32*, 393-417.
- Grant, A. M. (2008). Does intrinsic motivation fuel the prosocial fire? Motivational synergy in predicting persistence, performance, and productivity. *Journal of Applied Psychology, 93*, 48-58.
- Grant, A. M., & Mayer, D. M. (2009). Good soldiers and good actors: Prosocial and impression management motives as interactive predictors of affiliative citizenship behaviors. *Journal of Applied Psychology, 94*, 900-912.
- Harrison, D. A., Price, K. H., Bell, M. P. (1998). Beyond relational demography: Time and effects of the surface and deep-level diversity on work group cohesion. *Academy of Management Journal, 41*, 96-107.
- Haworth, C. L. & Levy, P. E. (2001). The importance of instrumentality beliefs in the prediction of organizational citizenship behaviors. *Journal of Vocational Behavior, 59*, 64-75.
- Hofmann, D. A. (1997). An overview of the logic and rationale of hierarchical linear models. *Journal of Management, 23*, 723-744.
- Hui, C., Lam, S., & Law, K. (2000). Instrumental values of organizational citizenship behavior for promotion: A field quasi-experiment. *Journal of Applied Psychology, 85*, 822-828.
- Johnson, D. W. (1973). Communication in conflict situations: A critical review of the research.

- International Journal of Group Tensions*, 3, 46-67.
- Kidwell, R. E., 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.
- 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.
- Korsgaard, M. A., Lester, S. W., & Meglino, B. M. (1996). The effect of other-oriented values on decision making: A test of propositions of a theory of concern for others in organizations. *Organizational Behavior and Human Decision Processes*, 68, 234-245.
- Korsgaard, M. A., Lester, S. W., & Meglino, B. M. (1997). Beyond helping: Do other-oriented values have broader implications in organizations? *Journal of Applied Psychology*, 82, 160-177.
- 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.
- Lester, S. L., Meglino, B. M., & Korsgaard, M. A. (2008). The role of other orientation in organizational citizenship behavior. *Journal of Applied Psychology*, 92, 1200-1211.
- Lincoln, J. R. & Miller, J. (1979). Work and friendship ties in organizations: A comparative analysis of relational networks. *Administrative Science Quarterly*, 24, 181-199.
- McAllister, D. J., Kamdar, D., Morrison, E. W., & Turban, D. B. (2007). Disentangling role perceptions: How perceived role breadth, discretion, instrumentality, and efficacy relate to helping and taking charge. *Journal of Applied Psychology*, 92, 1200-1211.

- McCrae, R. R. & Costa, P. T. Jr. (1995). Trait explanations in personality psychology. *European Journal of Personality, 9*, 231-252.
- Meglino, B. M., & Korsgaard, M. A. (2004). Considering rational self-interest as a disposition: Organizational implications of other orientation. *Journal of Applied Psychology, 89*, 946-959.
- Meglino, B. M. & Ravlin, E. C. (1998). Individual values in organizations: Concepts, controversies, & research. *Journal of Applied Psychology, 60*, 125-127.
- Midili, A. R. & Penner, L. A. (1995). *Dispositional and environmental influences on Organizational Citizenship Behavior*. Paper presented at the 103rd Annual Convention of the American Psychological Association. New York, NY.
- Miller, M.J., Woehr, D.J., & Husdpeth, N. 2001. The meaning and measurement of work ethic: Construction and initial validation of a multidimensional inventory. *Journal of Vocational Behavior, 59*, 1-39.
- Mischel, W. (1977). The interaction of person and situation. In Magnusson, D. & Endler, N. S. (Eds.). *Personality at the crossroads: Current issues in interactional psychology*. Erlbaum, Hillsdale, NJ.
- Molm, L. D., Schaefer, D. R., & Collett, J. L. (2007). The value of reciprocity. *Social Psychology Quarterly, 70*, 199-217.
- Moon, H., Kamdar, D., Mayer, D. M., & Takeuchi, R. (2008). Me or we? The role of personality and justice as other-centered antecedents to innovative citizenship behaviors within organizations. *Journal of Applied Psychology, 93*, 84-94.
- Moorman, R. H. (1991). The relationship between organizational justice and organizational citizenship behaviors: Do fairness perceptions influence employee citizenship? *Journal of Applied Psychology, 76*, 845-855.

- Moorman, R. H. & Blakely, G. G. (1995). Individualism-collectivism as an individual difference predictor of organization citizenship behavior. *Journal of Organizational Behavior*, 16, 127-142.
- Morrison, E. W. (1994). Role definition and organizational citizenship behaviors: the importance of the employee's perspective. *Academy of Management Journal*, 37, 1543-1567.
- Mowday, R. T. & Sutton, R. I. (1993). Organizational behavior: Linking individuals and groups to organizational contexts. *Annual Review of Psychology*, 44, 195-229.
- O'Reilly, C. A. III, Caldwell, D. F., & Barnett, W. P. (1989). Work group demography, social integration, and turnover. *Administrative Science Quarterly*, 34, 21-37.
- 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. *Research in Organizational Behavior*, 12, 43-72.
- Organ, D. W., Podsakoff, P. M., & MacKenzie, S. B. (2006). *Organizational citizenship behavior*. Thousand Oaks, CA: Sage Publications.
- Organ, D. W. & Ryan, K. (1995). A meta-analytic review of attitudinal and dispositional predictors of organizational citizenship behavior. *Personnel Psychology*, 48, 775-802.
- Parks, C. D. & Cowlin, R. (1995). Group discussion as affected by number of alternatives and by time limit. *Organizational Behavior and Human Decision Processes*, 62, 167-275.
- Pearce, J. L. & Gregersen, H. B. (1991). Task interdependence and extra role behavior: A test of the mediating effects of felt responsibility. *Journal of Applied Psychology*, 76, 838-844.
- Penner, L.A., Midili, A.R., & Kegelmeyer, J. (1997). Beyond job attitudes: A personality and social psychology perspective on the causes of organizational citizenship behavior. *Human Performance*, 10, 111-131.

- Pfeffer, J. (1983). Organizational demography: Implications for management. *Research in Organizational Behavior*, 5, 299-357.
- 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*, 31, 351-363.
- Podsakoff, P. M. & MacKenzie, S. B. (1997). The 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., 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.
- Quinn, R. P. & Shephard, L. J. (1974). *The 1972-1973 quality of employment survey*. Ann Arbor: University of Michigan, Institute of Social Research.
- Raudenbush, S. W. & Bryk, A. S. (2002). *Hierarchical linear models: Applications and data analysis methods*. Thousand Oaks, CA: Sage Publications.
- Raja, U. & Johns, G. (2010). The joint effects of personality and job scope on in-role performance, citizenship behaviors, and creativity. *Human Relations*, 63, 981-1005.
- Riordan, C. M. & Shore, L. M. (1997). Demographic diversity and employee attitudes: An empirical examination of relational demography within work units. *Journal of Applied Psychology*, 82, 342-358.
- Riordan, C. M. & Wayne, J. H. (2008). A review and examination of demographic similarity measures used to assess relational demography within groups. *Organizational Research*

- Methods*, 11, 562-592.
- Rioux, S. M. & Penner, L. A. (2001). The causes of organizational citizenship behavior: A motivational analysis. *Journal of Applied Psychology*, 86, 1306-1314.
- Rokeach, M. (1968). *Beliefs, attitudes, and values: A theory of organization and change*. San Francisco: Jossey-Bass Inc.
- Rokeach, M. (1979). *Understanding human values: Individual and societal*. New York: Free Press.
- Rosenfeld, P., Giacalone, R. A., & Riordan, C. A. (1995). *Impression management in organizations*. London: Routledge.
- Ryan, J. J. (2002). Work values and organizational citizenship behaviors: Values that work for employees and organizations. *Journal of Business and Psychology*, 17, 123-132.
- Salancik, G. R. & Pfeffer, J. C. (1978). A social information processing approach to job attitudes and task design. *Administrative Science Quarterly*, 23, 224-253.
- Schnake, M. & Dumler, M. P. (1997). Identifying culture-specifics in the content and structure of values. *Journal of Managerial Issues*, 9, 216-229.
- Schwartz, S. H. (1992). Universals in the content and structure of values: Theoretical advances and empirical tests in 20 countries. *Advances in Experimental Social Psychology*, 25, 1-65.
- Schwartz, S. H. (1994). Are there universal aspects in the structure and contents of human values? *Journal of Social Issues*, 50, 19-45.
- Schwartz, S. H. (2009). *Draft users manual: Proper use of the Schwartz Value Survey (10th Ed.)*. Compiled by R. F. Littrell. Auckland, New Zealand: Centre for Cross Cultural Comparisons. Retrieved from <http://www.crossculturalcentre.homestead.com>.
- Schwartz, S. H. & Bilsky, W. (1987). Toward a universal psychological structure of human values. *Journal of Personality and Social Psychology*, 53, 550-562.

- Schwartz, S. H. & Bilsky, W. (1990). Toward a theory of the universal content and structure of values: Extensions and cross-cultural replications. *Journal of Personality and Social Psychology, 58*, 878-891.
- Schwartz, S. H. & Sagiv, L. (1995). Identifying culture-specifics in the content and structure of values. *Journal of Cross-Cultural Psychology, 26*, 92-116.
- Shaw, M. E. (1981). *Group dynamics: The psychology of small group behavior*. New York: Harper.
- Smith, C. A., Organ, D. W., & Near, J. P. (1983). Organizational citizenship behavior: Its nature and antecedents. *Journal of Applied Psychology, 68*, 653-663.
- Snyder, M. (1993). Basic research and practical problems: The promise of a “functional” personality and social psychology. *Personality and Social Psychology Bulletin, 19*, 251-264.
- Steers, R.M., & Braunstein, D.N. 1976. A behaviorally based measure of manifest needs in work settings. *Journal of Vocational Behavior, 9*, 251-266.
- Tepper, B. J., Duffy, M. K., Hoobler, J., & Ensely, M. D. (2004). Moderators of the relationship between coworkers’ organizational citizenship behavior and fellow employees’ attitudes. *Journal of Applied Psychology, 89*, 455-465.
- Tepper, B. J., Lockhart, D., & Hoobler, J. (2001). Justice, citizenship, and role definition effects. *Journal of Applied Psychology, 86*, 789-796.
- Tepper, B. J. & Taylor, E. C. (2003). Relationships among supervisors’ and subordinates’ procedural justice perceptions and organizational citizenship behaviors. *Academy of Management Journal, 46*, 97-105.
- Thomas, E. J. (1957). Effects of facilitative role interdependence on group functioning. *Human Relations, 10*, 347-366.
- Tsui, A. S., Egan, T. D., & O’Reilly, C. A. III. (1992). Being different: Relational demography and organizational attachment. *Administrative Science Quarterly, 37*, 547-579.

- Tsui, A. S. & O'Reilly, C. A. III. (1989). Beyond simple demographic effects: The importance of relational demography in superior-subordinate dyads. *Academy of Management Journal*, 32, 402-423.
- Turner, J. C. (1987). *Rediscovering the social group: A self-categorization theory*. Oxford, England: Basil Blackwell.
- Van Der Vegt, G. S. & Janssen, O. (2003). Joint impact of interdependence and group diversity on innovation. *Journal of Management*, 29, 729-751.
- Van Dyne, L. & Ang, S. (1998). Organizational citizenship behavior of contingent workers in Singapore. *Academy of Management Journal*, 41, 692-703.
- Wageman, R. (2011). The meaning of interdependence. In M. E. Turner (Ed.), *Groups at work: Advances in theory and research* (pp. 197-217). Hillsdale, NJ: Lawrence Erlbaum Associates.
- Walz, S. M. & Niehoff, B. P. (2000). Organizational citizenship behaviors: Their relationship to organizational effectiveness. *Journal of Hospitality and Tourism Research*, 24, 301-319.
- Weber, M. (1958). *The Protestant ethic and the spirit of capitalism*. (T. Parsons, Trans.). New York: Scribner. (Original work published 1904-1905).
- Williams, L. J. & Anderson, S. E. (1991). Job satisfaction and organizational commitment and predictors of organizational citizenship and in-role behaviors. *Journal of Management*, 17, 601-617.
- 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, 745-756.
- Zenger, T. R. & Lawrence, B. S. (1989). Organizational demography: The differential effects of

age and tenure distributions on technical communication. *Academy of Management Journal*, 32, 353-376.

Table 1

Value Types with Hypothesized Relationships to OCB

Value Type	Definition	Schwartz Values Survey Items
Power	Social status and prestige, control or dominance over people and resources	WEALTH (material possessions, money) AUTHORITY (the right to lead or command) SOCIAL POWER (control over others, dominance) PRESERVING MY PUBLIC IMAGE (protecting my "face")
Achievement	Personal success through demonstrating competence according to social standards	AMBITIOUS (hard-working, aspiring) INFLUENTIAL (having an impact on people and events) CAPABLE (competent, effective, efficient) SUCCESSFUL (achieving goals)
Benevolence	Preservation and enhancement of the welfare of people with whom one is in frequent personal contact	LOYAL (faithful to my friends, group) HONEST (genuine, sincere) HELPFUL (working for the welfare of others) RESPONSIBLE (dependable, reliable) FORGIVING (willing to pardon others)
Self-direction	Independent thought and action – choosing, creating, exploring	CREATIVITY (uniqueness, imagination) INDEPENDENT (self-reliant, self-sufficient) CHOOSING OWN GOALS (selecting own purposes) FREEDOM (freedom of action and thought) CURIOUS (interested in everything, exploring)
Conformity	Restraint of actions, inclinations, and impulses likely to upset or harm others and violate social expectations or norms	POLITENESS (courtesy, good manners) SELF-DISCIPLINE (self-restraint, resistance to temptation) HONOURING OF PARENTS AND ELDERS (showing respect) OBEDIENT (dutiful, meeting obligations)

Source: Schwartz (1994, p. 22) and Schwartz (2009).

Table 2

Means (M), Standard Deviations (SD), and Intercorrelations of Study Variables

Variable	M	SD	1	2	3	4	5	6	7	8	9	10	11	12	13	14
1 OCB-I ^a	5.54	.84	(.89)													
2 OCB-O ^a	5.83	.88	.83**	(.75)												
3 Sex ^b	.43	.50	.15**	.09*	NA											
4 Univ satisfaction ^c	.02	.78	.12**	.09*	.10*	(.89)										
5 Extraversion ^d	3.63	.74	.13**	.17**	.15**	.16**	(.81)									
6 Agreeableness ^d	3.85	.63	.21**	.19**	.31**	.17**	.30**	(.72)								
7 Conscientiousness ^d	3.46	.65	.19**	.19**	.15**	.16**	.07	.32**	(.69)							
8 Emotional stability ^d	2.96	.71	-.09*	-.06	-.25**	.08*	.10*	-.07	-.04	(.70)						
9 Openness to exp ^d	3.54	.58	.14**	.21**	-.04	.03	.23**	.16**	.06	.10*	(.62)					
10 Benevolence ^e	.41	.48	.14**	.13**	.05	.12**	.08	.38**	.14**	.03	.06	(.76)				
11 Conformity ^e	.14	.52	.06	.00	-.03	.06	.03	.16**	.19**	.01	-.13**	.17**	(.68)			
12 Power ^e	-.67	.83	-.13**	-.09*	-.23**	-.14**	-.09*	.04	-.15**	.03	-.31**	-.50**	-.14**	(.75)		
13 Achievement ^e	.39	.49	.10*	.13**	-.03	-.01	.10*	-.02	.08	.02	.12**	-.02	-.03	-.15	(.73)	
14 Self-direction ^e	.30	.48	.08*	.15**	.06	-.07	.07	-.43**	-.04	-.03	.39**	-.11**	-.31**	-.21**	.01	(.72)

Notes. Coefficient alpha (α) reliability estimates are listed on the diagonal. Means, standard deviations, and reliability estimates are individual level ($n = 582$).

* $p < .05$, ** $p < .01$, two-tailed.

^a 7-point scale.

^b 1 = female, 0 = male.

^c 3-point scale.

^d 5-point scale.

^e 7-point scale but data standardized as part of cleaning process.

Table 3

Results of Random-Intercepts Regression Analyses

	OCB-I		OCB-O	
	γ	Standard Error	γ	Standard Error
Step 1				
Sex	.11*	.06	.05	.06
University satisfaction	.06	.04	.05	.05
Extraversion	.05	.04	.10*	.04
Agreeableness	.12*	.06	.06	.07
Conscientiousness	.14**	.05	.19**	.06
Emotional stability	-.09**	.04	-.09*	.04
Openness to experience	.11*	.05	.16**	.06
ΔR^2	.08		.08	
Step 2				
Benevolence	.08	.08	.19*	.09
Power	.02	.05	.07	.05
Achievement	.11*	.06	.16*	.06
Self-direction	.13*	.06	.22**	.07
Conformity	.12*	.05	.04	.06
ΔR^2	.01		.02	

Notes. Coefficients are unstandardized and from the full model. ΔR^2 represents the percent of level-1 error variance explained relative to the previous step.

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

Table 4

Results of Intercepts as Outcomes Regression Analyses

	OCB-I		OCB-O	
	Regression Coefficient	Standard Error	Regression Coefficient	Standard Error
Level-1 controls				
Sex	.13	.07	.05	.07
University satisfaction	.06	.04	.05	.05
Extraversion	.05	.04	.10*	.05
Agreeableness	.14*	.06	.08	.07
Conscientiousness	.14**	.05	.19**	.06
Emotional stability	-.09*	.04	-.09*	.04
Openness to experience	.10	.06	.19**	.06
Conformity	.12*	.06		
Level-2 predictors of level-1 slopes				
Benevolence slope				
Benevolence mean	.01	.13	.10	.13
Achievement				
Achievement mean	.10	.09	.10	.11
Self-direction slope				
Self-direction mean	.28**	.11	.25*	.11
Power				
Power mean	-.07**	.03	-.07*	.03
ΔR^2	.01		.01	

Notes. Coefficients are unstandardized and from the full model. For parsimony, regression coefficients for the variables used to control for spurious cross-level effects (level-1 values and values means as predictors of the level-1 intercept) are not reported above, but were included in the HLM model. ΔR^2 represents the percent of level-1 error variance explained relative to step 2 of the random-intercepts regression analyses reported in Table 3.

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

Table 5

Schwartz's Bipolar Value Dimensions as an Integrative Framework for Understanding the Values-OCB Literature

	Self-Enhancement	Self-Transcendence	Openness to Experience	Conservation	
Schwartz value types Included Omitted	Power	Achievement	Benevolence (Universalism)	Self-direction (Hedonism, Stimulation)	Conformity (Tradition, Security)
Hypothesized OCB dimensions	OCB-I	OCB-I and OCB-O	OCB-O	OCB-I and OCB-O	OCB-O
Related constructs	Impression management Reciprocity	Work ethic	Other orientation Prosocial values Collectivism	Role breadth	--
Theoretical mechanism	Social exchange theory	Social exchange theory	Theory of other orientation	Role definition theory Role identity theory	Regulatory focus theory
Dewett & Denisi (2007) Regulatory focus OCB type	Promotion Proactive/change- oriented	Promotion Proactive/change- oriented	Promotion Proactive/change- oriented	Promotion Proactive/change- oriented	Prevention Maintenance
Rioux & Penner (2001) Motive type	Impression management	Impression management	Prosocial values	--	Organizational concern

Notes. Our treatment of prosocial values differs somewhat from that of Rioux and Penner (2001). We placed it in the self-transcendence column and related it to OCB-O based on the theory of other orientation. They likewise differentiated prosocial values from impression management and social exchange mechanisms, but their measure included items directed toward both the organization at large and proximate individuals. While we did not find evidence of a relationship between benevolence and OCB-I, future research may indicate that self-transcendence also has two potential targets, similar to achievement and self-direction.

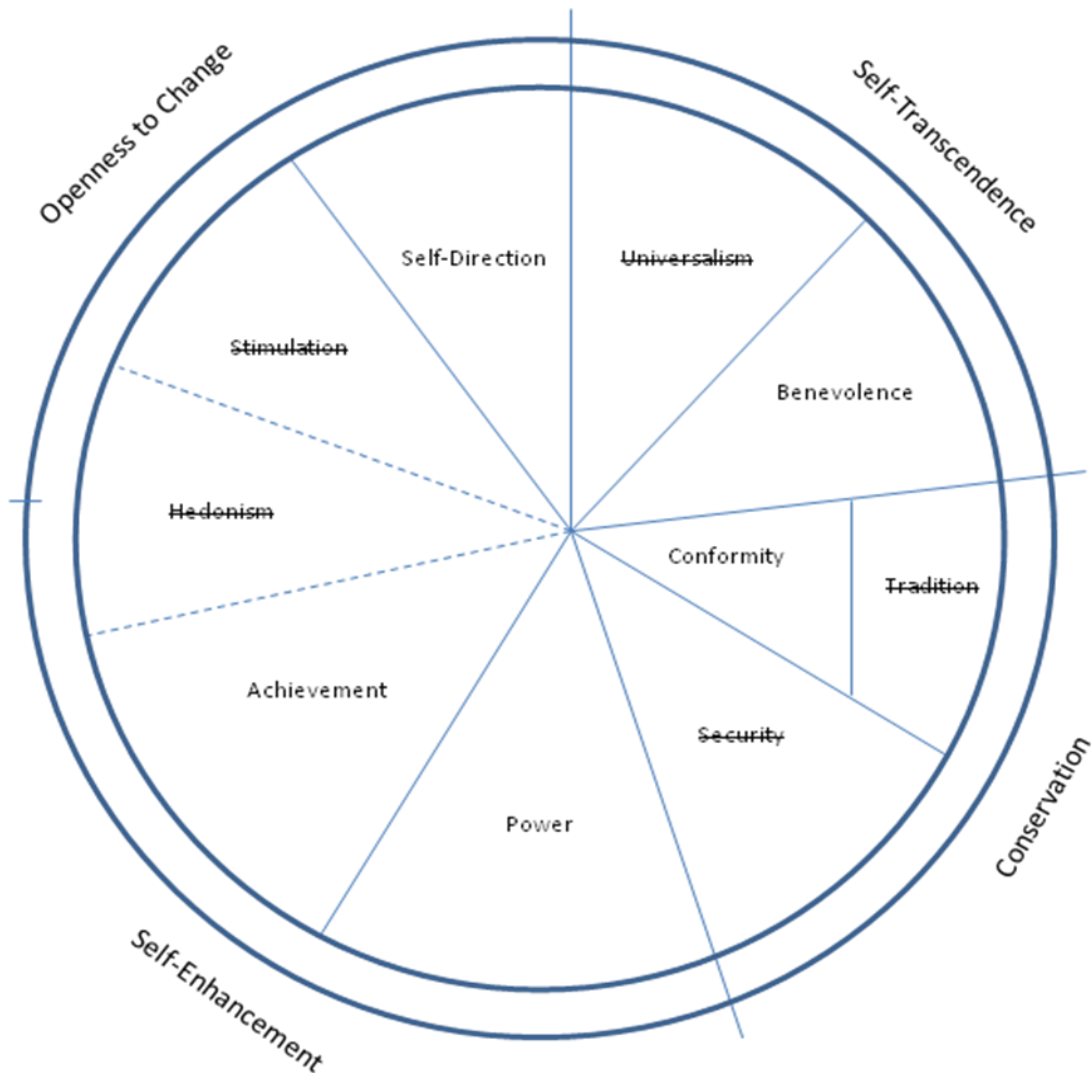


Figure 1. Schwartz's circumplex of individual value types.

Notes. Modified from Schwartz (1994). We included five of the ten value types in our analyses, as described in the text.

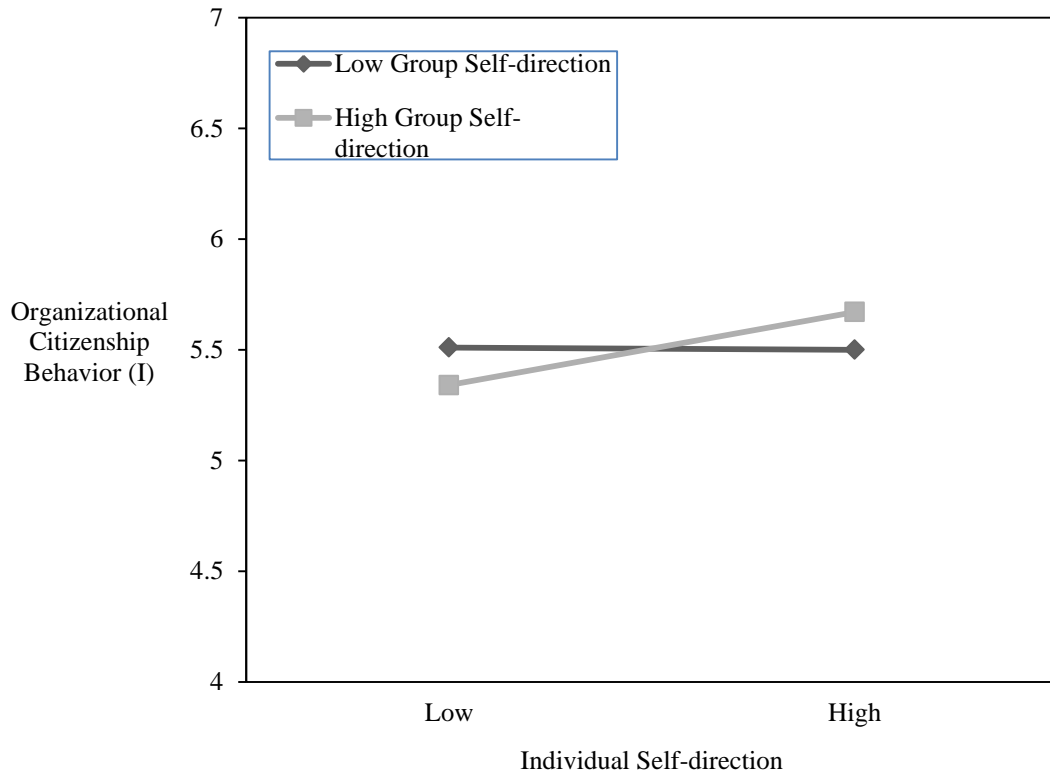


Figure 2. Interaction of group mean self-direction and individual self-direction on OCB-I.

Note. We obtained nearly identical results for the interaction of self-direction values on OCB-O, but do not provide a separate graph in the interest of space.

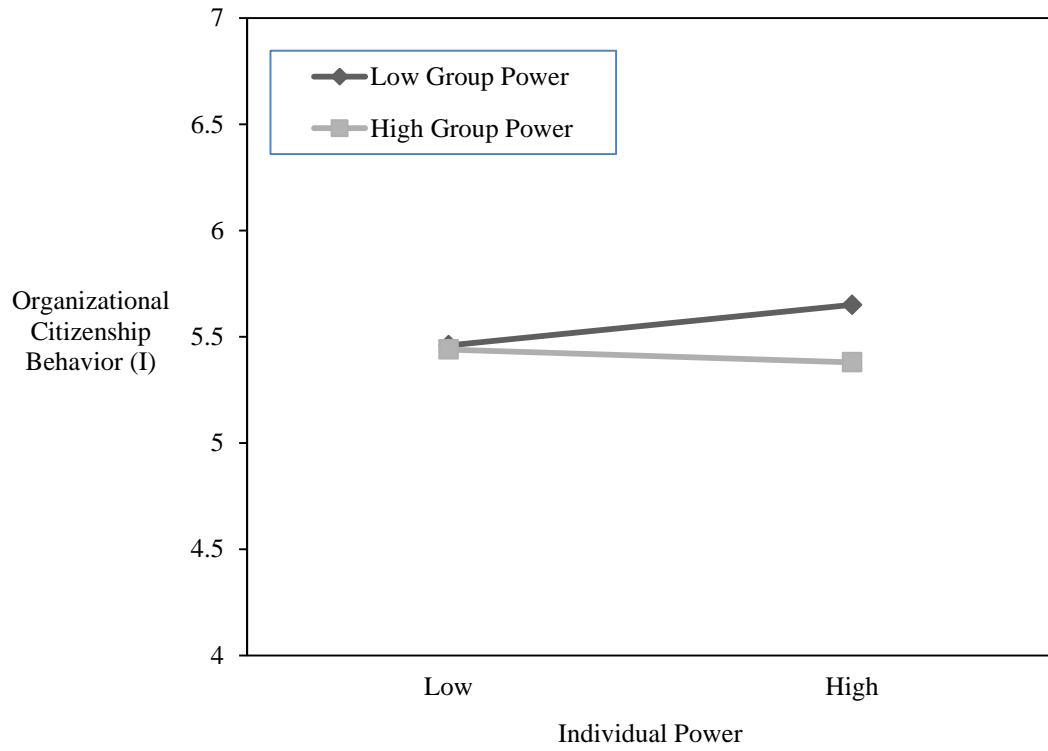


Figure 3. Interaction of group mean power and individual power on OCB-I.

Note. We obtained similar results for the interaction of power values on OCB-O, but do not provide a separate graph in the interest of space.