The trickle-down effect of OCB in schools: the link between leader OCB and team OCB

Anit Somech and Bat-El Ohayon
Department of Educational Leadership & Policy, University of Haifa, Haifa, Israel

Abstract

Purpose – Research has provided accumulative evidence that the willingness of teachers to invest in organizational citizenship behavior (OCB) is a fundamental component for achieving school effectiveness. However, most studies examined OCB of the individual teacher, while neglecting the fact that such behavior might grow in a context. Furthermore, educational scholars have focused almost solely on OCB of teachers, and have almost completely neglected to address the concept through a managerial prism. By taking a contextual perspective, the purpose of this paper is to postulate a positive link between leader OCB and team OCB, and suggest that organizational justice serves as a moderator in this relationship.

Design/methodology/approach – Data were collected through a survey from multiple sources, to avoid one-source bias. The sample included 82 schools: 82 management teams and their 82 principals, as well as 246 teachers, who were not members of management.

Findings – Results of the hierarchical regression analysis confirmed the hypotheses. The authors found a positive association between leader OCB and team OCB and revealed that this positive relationship was significant under high levels of organizational justice, but non-significant under low levels.

Practical implications – The importance of leader OCB in promoting team OCB can inspire the educational system to learn how to develop organizational mechanisms that encourage principals to perform citizenship behaviors and to take this component into consideration in screening processes and succession planning.

Originality/value – The contribution of the study is in identifying leader OCB as a key instrument that may encourage teams to invest in OCBs. To the best of the authors’ knowledge, this is the first study ever to examine the link between leader OCB and team OCB. The finding that there is a positive association between the two constructs may imply that leader OCBs contribute to the school, not only directly, by exhibiting behaviors of helping and support, but also indirectly, through the leader’s impact on his or her team’s behavior.

Keywords Organizational justice, School, Leader OCB, Team OCB

Paper type Research paper

Over the past two decades, scholars have provided accumulative evidence that the willingness of teachers to invest in organizational citizenship behavior (OCB) has become a fundamental component for achieving school effectiveness (e.g. Cheng, 2016). Despite the variety of definitions that exist in the literature (e.g. Organ, 1988, 1997; Van Dyne et al., 1994), most researchers refer to OCB as voluntary behavior, exhibited in order to promote organizational goals, that goes beyond specified role requirements (Organ, 1988). Generally speaking, citizenship behaviors are essential, because they shape the social and psychological context of the work environment that supports the core activities of the organization (Organ and Ryan, 1995). These pro-social behaviors provide schools with additional resources and eliminate the need for expensive formal mechanisms, otherwise crucial for successful restructuring processes (Polat and Celep, 2008).

Most research heretofore has focused mainly on citizenship behaviors of the individual teacher (e.g. DiPaola and Tschannen-Moran, 2001; Elma and Aytaç, 2015), neglecting the fact that OCB might grow in a context. Although most OCBs are performed by individuals,
these behaviors could be extended conceptually to the team and organizational levels. Teachers do not perform or fail to perform OCBs in a vacuum, and the organizational context most probably encourages or discourages such (Somech and Drach-Zahavy, 2004). School attributes such as school culture (collective vs individualistic values) or the principal’s leadership style may impact the willingness of the school faculty to engage in citizenship behaviors (Somech and Ron, 2007).

Another, and maybe more crucial lacuna in the literature on OCB refers to the surprising fact that educational scholars focused almost solely on citizenship behaviors of teachers (Duyar and Normore, 2012), and almost completely neglected to address the concept through a managerial prism. To the best of our knowledge, only one qualitative study has yet to discuss the phenomenon as manifested by principals (Nutov and Somech, 2017). Leader OCB may play a fundamental role in promoting school effectiveness. Leader citizenship behaviors of assistance, support and mentoring may have a direct impact on shaping the social-emotional environment of the school, which in turn enhances school performance (Shapira-Lishchinsky and Raftar-Ozery, 2018). But just as important, leader OCB may serve as a model for teachers (Yaffe and Kark, 2011). By observing the extra-role behaviors of their principal, teachers learn what is important and ensure that their behaviors are in line with the accepted norms of the school (Ehrhart and Naumann, 2004). In other words, leader OCB may encourage teachers to invest in those behaviors that are not part of their formal duties, namely, to exhibit OCB in order to promote school success (Seashore Louis et al., 2010).

By taking a contextual approach, the present study seeks to fill these voids and to investigate the link between leader OCB and team OCB in schools. This trickle-down perspective examines how leader OCB flows from the management level down to the team level. Furthermore, we suggest a moderating model that posits that the extent to which leader OCB will promote team OCB depends on the contextual factor of perceived organizational justice.

**Theoretical background and hypotheses**

**OCB as a contextual phenomenon**

The common approach to understanding the OCB phenomenon in schools has heretofore concentrated on the individual teacher (DiPaola and Hoy, 2005; Somech and Oplatka, 2014). Many studies adopted Organ’s (1988) definition according to which OCB is an “individual behavior that is discretionary, not directly or explicitly recognized by the formal reward system, and that in the aggregate promotes the effective functioning of the organization” (p. 4). This definition emphasizes the distinction between in-role performance, which refers to the formal role of the employee, and OCB, which refers to behaviors that are not part of that formal job definition, are not remunerated, are performed voluntarily and whose objective is to enhance organizational effectiveness. It seems, however, that understanding the phenomenon of OCB in schools from the perspective of the individual teacher only falls short of our purpose, since the individual approach overlooks the possibility that these behaviors are social in nature. In other words, the tendency of teachers to exhibit citizenship behaviors could be understood as a team- or organizational-level phenomenon that grows in a context (Ras, 2012). Put differently, the extent to which teachers tend to invest above and beyond the call of duty does not exist in a vacuum, and the organizational context most probably serves to encourage or discourage this behavior (Podsakoff et al., 2018). Social psychology theory and research have already established the idea that teams may serve as a powerful instrument to influence the behaviors of individuals (Bandura, 1986; Yang et al., 2010). Teams may develop shared values of cooperation and helping that can promote the development of an environment in which OCB becomes the norm (van Dick et al., 2006). Indeed, team members who exhibit citizenship behaviors may encourage the same behaviors among their fellow team members (Peterson and Luthans, 2003).
Thus, it may be argued that team-level OCBs are subject to collective-level dynamics that are far beyond individual initiatives and actions; therefore, they contribute to the organization above and beyond the impact of the individual-level OCB (Ehrhart and Naumann, 2004). Accordingly, if team members exhibit high levels of OCB, it will have a more powerful impact on school effectiveness than the sporadic activities of a single teacher (Podsakoff et al., 2000). This perspective urges researchers to develop appropriate measures for team OCB; measures that evaluate group-level OCB differently than simply aggregating individual-level data to the group level (Tepper et al., 2004; Vigoda-Gadot et al., 2007). Following this approach, Vigoda-Gadot et al. (2007) developed and validated a scale of group-level OCBs in the education system. This scale consists of two dimensions: the first (GOCB-Individual) represents behaviors intentionally directed at helping a specific person, either the supervisor or another teacher. The second dimension (GOCB-Organization) pertains to a more impersonal form of behavior, and is directed toward the benefit of the entire team or the school as a unit. This approach was adopted in the present study.

Only a handful of studies have focused on team- or organizational-level models of OCB in the educational setting (e.g. Somech and Khotaba, 2017; Vigoda-Gadot et al., 2007). For example, Somech and Drach-Zahavy (2004) identified the school as the unit of analysis. Results from a sample of 31 schools indicated that schools differ in their teachers’ willingness to engage in citizenship behaviors, and the organizational learning culture predicts these differences. The researchers concluded, accordingly, that OCB can be viewed as an organizational attribute. Similarly, data collected from 206 teachers and their principals provided Vigoda-Gadot et al. (2007) with additional empirical support for the notion that OCB can be evaluated using a broader group-level analysis. This context-related approach is important because the aggregate level of OCB, rather than individual action, affects school effectiveness (Organ, 1988). This means that only collective efforts to invest in extra-role behaviors can improve the psychological and social context of a school that supports the core activities of its teachers, which, in turn, may provide the school with a competitive advantage over other, less OCB-oriented schools (Vigoda-Gadot et al., 2007). Having established the advantages of viewing OCBs as a context-related phenomenon, we now discuss the role of leader OCB as an antecedent to team OCB.

**Leader OCB as an antecedent to team OCB**

The position of principals, as the heads of their schools, makes them responsible for setting organizational values and norms (Bush, 2007; Leithwood and Jantzi, 2006). Principals may encourage teachers to engage in citizenship behaviors by promoting norms of helping, cooperation or working beyond formal hours (Dick et al., 2007). Similarly, they may themselves engage in certain activities that may increase the willingness of teachers to exhibit citizenship behaviors. Indeed, researchers have identified several leadership styles that were found to be strongly related to teacher OCB (e.g. Shapira-Lischinsky and Raftar-Ozery, 2018). For example, Nguni et al. (2006) showed that transformational leadership has a strong effect on teachers’ OCB. Transformational leadership emphasizes the ability of leaders to provide empathy and support, and to attend to each follower’s needs, coupled with the ability to inspire and challenge. In this sense, these leaders motivate their followers to do more than they originally expected to do and often more than they even thought possible (Savelyeva and Lee, 2012). A series of studies conducted by Bogler and Somech (e.g. Bogler and Somech, 2004; Somech and Bogler, 2002) likewise demonstrated a positive link between participative leadership and teacher OCB. By enabling a shared influence in decision-making processes, participative leadership enhances a sense of fairness and trust, which in return increases teachers’ willingness to engage in OCB (Oplatka, 2006).
Despite the accumulative evidence for the importance of OCB in promoting school effectiveness and the principal’s key role in motivating teachers to exhibit such extra-role behaviors (Nguni et al., 2006), only one study has heretofore examined the phenomenon of OCB among principals. In a qualitative study, Nutov and Somech (2017) sought to answer two central questions: Is leader OCB a valid phenomenon? And if it is, what are its nature and dimensions? The first question, regarding the empirical distinction between leader in-role performance and leader OCB, is not trivial. The managerial role includes, by definition, components of initiative and innovation introduction, as well as assistance, support and mentoring behavior, which are all central components of the OCB concept (Podsakoff et al., 2000). Indeed, Nutov and Somech (2017) showed that principals emphasized that the managerial role definition is inherently fuzzy and that no clear boundary exists between formal role requirements and extra-role behaviors. Nevertheless, their results revealed that principals could distinguish between behaviors that are part of the principal’s job definition and a set of behaviors that they perform that are above and beyond their in-role boundaries. In response to the second questions, the researchers identified three main categories of leader OCB: extra effort invested in the school community, which includes behaviors such as solving students’ complex personal problems, providing professional and personal support for teachers and administrative staff, and assisting students’ families; initiatives, which refer to those initiating activities that go beyond that which is required by the role, such as fundraising or developing new and unique social values programs; and supporting the local community, which refers to activities undertaken by principals for the benefit of the school’s external community. Such activities include leading a project in the school’s neighborhood, supporting students’ families, and helping and supporting alumni.

Following this vein, the main claim of the present study suggests that leader OCB may serve as an antecedent to team OCB. Two theoretical foundations support this proposal: the social learning theory and the social contagion theory. The social learning theory (Bandura, 1977) emphasizes the importance of social processes, such as observation and modeling, in shaping perceptions and behaviors. In school, the team observes the principal, and follows his or her behaviors in response to organizational events; it is how they learn what is important, and ensure that their behavior is in line with the school’s accepted norms (Bommer et al., 2003; Ehrhart and Naumann, 2004). Furthermore, because principals, generally, have higher status and power than their followers, they may serve as role models for their team (Yaffe and Kark, 2011). Seeing their leader exhibiting behaviors that go above and beyond the formal role requirements may encourage team members to emulate this tendency to exhibit citizenship behaviors (Yang et al., 2010).

The second justification for a possible positive link between leader OCB and team OCB stems from the social contagion theory (Hatfield et al., 1994). According to this theory, attitudes and behaviors can spread within teams whose members interact with one another for significant periods of time (Brett and Stroh, 2003). Since leaders are meaningful figures within the organization, they have ample opportunity opportunities to exhibit and transfer their attitudes, feelings and behaviors (Barsade, 2002) and since their tendency to perform citizenship behaviors is often contagious, they may lead the team to exhibit the same behaviors (Clapp-Smith et al., 2009). We therefore hypothesize:

\[ H_1. \] There will be a positive link between leader OCB and team OCB.

Organizational justice as a moderator in the relationship between leader OCB and team OCB

Following the contextual perspective of the present study, the second claim of the study proposes that organizational justice will serve as a moderator between leader OCB and team OCB. Organizational justice refers to the extent to which teachers perceive that school (through its representatives – management) treats them according to principles of fairness
and equity (Cropanzano et al., 2007). The literature identifies three distinct dimensions of organizational justice (e.g. Folger and Cropanzano, 1998; Özbek et al., 2016): distributive justice, which reflects fairness of outcomes, namely, fairness in the distribution of tangible or intangible rewards and/or resources; procedural justice, which reflects the fairness of procedures and processes; and interpersonal justice, which refers to the extent to which team members are treated with respect and dignity during the decision-making process. Research indicates that organizational justice significantly impacts work-related opinions and behaviors, such as OCB (Özbek et al., 2016). In the present study, we suggest that organizational justice moderates the relationship between leader OCB and team OCB. The exchange theory (Blau, 1964) can provide the theoretical rationale for the proposed model. The social exchange theory, as a cognitive approach, asserts that fairness cognitions are associated with positive attitudes and behaviors of employees toward the organization (Zhao et al., 2014). Individuals perceive justice information as “a heuristic or proxy to guide their attitudes and behaviors” (Lam et al., 2013, p. 4). We argue accordingly that the positive association between leader OCB and team OCB depends upon the degree to which team members perceive the school environment as fair and equal to all its members. Moreover, one can argue that developing an atmosphere of justice within the school not only encourages teachers to reciprocate, but also creates a climate of citizenship. Principals who emphasize values of fairness and equality may promote a spirit of going above and beyond the call of duty; thus, their tendency to citizenship behaviors may permeate to their team (Heled et al., 2015).

At high levels of organizational justice, when team members perceive that their principals can be trusted to protect their interests, the association between leader OCB and team OCB will be positive. Thus, when team members experience that school is managed fairly and that they are treated with respect and dignity, they can use this fairness signal as a proxy that their principal can be a role model for them (Moorman and Byrne, 2013; Yang et al., 2010). Therefore, when the principal exhibits citizenship behaviors of helping or support, they will be perceived as authentic and sincere, and will motivate the team to reciprocate by exerting extra efforts for the benefit of school, namely, by exhibiting high levels of OCB (Yaffe and Kark, 2011). At low levels of organizational justice, on the other hand, when teachers perceive that they are working in an unfair environment that violates basic principles of justice and equality, teachers may develop negative attitudes toward the school, in general, and the principal, in particular (Zhao et al., 2014). Under such circumstances, the leader OCB they observe may not motivate and encourage them to imitate those extra-role behaviors and, therefore, in such a case we expect to see no relationship between leader OCB and team OCB. Hence, we hypothesize:

H2. Organizational justice will moderate the relationship between leader OCB and team OCB such that at high levels of organizational justice, the relationship will be positive, and at low levels of organizational justice no relationship will be found.

Method
Participants and procedure
Data were collected from a total of 82 schools (78 percent response rate). In each school, questionnaires were administrated to three sources to avoid one-source bias (Podsakoff and Organ, 1986): Management team members were asked to assess team OCB; teachers, who were not members of the management team, were asked to evaluate leader OCB and perceived organizational justice; and the principal provided the demographic data regarding the school. All participants completed a demographic questionnaire. Data were collected on site at each school and all respondents were assured anonymity of their responses.
Overall, 492 school members were included in the sample: 82 principals, 165 management team members and 246 teachers, who were not members of the team management. In total, 38 of the schools were elementary schools, 24 were middle schools and 20 were high schools. Management teams averaged 4.83 members (SD = 2.01) and they consisted of principals, deputy heads, grade-level coordinators, disciplinary coordinators and school counselors (to avoid bias, the principal did not complete the management team questionnaire). In all, 131 of the participants in the management teams were women (62.1 percent), the average age was 41.38 years (SD = 6.27), and average seniority in the current school was 8.66 years (SD = 8.07). In terms of education level, 39 percent of the management team members had a bachelor’s degree, 57 percent had a master’s degree and 4 percent had PhDs.

As for the principals, from a total of 82 participants, 62.2 percent were women, the average age was 48.77 years (SD = 4.31), and average seniority in the principal job, in the current school, was 6.80 years (SD = 7.28). In terms of education level, 95 percent of principals had a master’s degree, and 5 percent had PhDs. Finally, regarding the participants who were not members of the management teams, the sample included 246 teachers of which 43 percent were homeroom teachers and 57 percent were subject teachers. In total, 78 percent of them were women, the average age was 38.96 years (SD = 7.23), and average seniority in the current school was 7.96 years (SD = 6.27). In terms of education level, 65 percent had a bachelor’s degree and 35 percent had a master’s degree.

**Measures**

All scales were measured on a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).

**Leader OCB.** Leader OCB was measured on a scale developed by Nutov and Somech (2017) for assessing principal OCB in schools. The scale has 28 items that measure three dimensions: extra effort invested in the school community (18 items: e.g. “When the principal identifies an at-risk student, he or she supports the student personally, even at the expense of his or her private time”), $\alpha = 0.94$; initiatives (6 items: e.g. “The principal promotes the development of joint programs with other schools in the area”), $\alpha = 0.90$; and supporting the local community (4 items: e.g. “The principal advises other schools in the community”), $\alpha = 0.86$. The questionnaire’s reliability was 0.94. Participants used a five-point scale ranging from 1 (very seldom) to 5 (very often).

**Team OCB.** Team OCB refers to the extent of citizenship behaviors exhibited by the school faculty and was measured on a scale developed by Vigoda-Gadot et al. (2007) for use in the educational context. The scale has 18 items that measure two dimensions: OCBI, namely, OCB directed at and contributing to a certain person at school (9 items: e.g. “The teachers in our school help others who have been absent”), $\alpha = 0.93$; and OCBO, namely, OCB directed at the school as a whole (9 items: e.g. “The teachers here make innovative suggestions to improve school life”), $\alpha = 0.91$. The questionnaire’s reliability was 0.93. Participants used a five-point scale ranging from 1 (very seldom) to 5 (very often).

**Organizational justice.** In order to measure organizational justice, we used the 19-item scale developed by Niehoff and Moorman (1993), which was adapted to the school context by Polat and Celep (2008). The scale measures three dimensions: distributive justice (6 items: e.g. “Rewards are distributed fairly at school”), $\alpha = 0.87$; procedural justice (9 items: e.g. “The principal explains all the decisions about the school to everyone without hiding anything”), $\alpha = 0.95$; and interpersonal justice (4 items: e.g. “The principal behaves respectfully and proudly toward all teachers at the school”), $\alpha = 0.72$. The questionnaire’s reliability was 0.92. Participants used a five-point Likert scale ranging from 1 (strongly disagree) to 5 (strongly agree).
Control variables. School size (number of teachers) and school level (elementary, middle or high school) served as control variables in the present study since previous studies showed that they impact teachers’ attitudes and behaviors (e.g. Somech and Drach-Zahavy, 2007).

Level of analysis
School was the unit of theory in the present study and so the hypotheses were posited at the organizational level, and the study variables (leader OCB, team OCB and organizational justice) were aggregates of individual responses at the school level of analysis. To justify aggregation of variables, data must demonstrate high within-team agreement (e.g., James et al., 1993). A value of 0.70 or above is considered to be a “good” amount of within-group interrater agreement (James et al., 1993). All scales exceeded this criterion: the average score for leader OCB was 0.99, for team OCB 0.98 and for organizational justice the average score was 0.98. Next we obtained the following ICC(1) and ICC(2) values: leader OCB 0.86 and 0.95; team OCB 0.80 and 0.89; and organizational justice 0.87 and 0.95. All of the above values were comparable to the recommended ICC values (Bliese, 2000), so we concluded that aggregation was justified for these variables.

Results
Table I shows the means, standard deviations and correlations for the study variables. An examination of the mean patterns shown in Table I reveals several insights. First, it is interesting to note that among the three dimensions of leader OCB, the scale with the highest mean was supporting the local community (M = 4.27), the second scale was initiatives (M = 4.20), while the lowest scale mean was extra effort invested in the school community (M = 4.15). Regarding the sub-scales of team OCB, the mean of OCBI was higher than the mean of OCB (M = 4.00, M = 3.46, respectively). Finally, among the three sub-scales of organizational justice, the highest scale mean was procedural justice (M = 4.29), following by interpersonal justice (M = 3.13), while the lowest scale mean was distributive justice (M = 2.87).

Regarding the analyses, first, it is important to note that due to the very high correlations among the sub-scales, we examined only aggregate measures for all of the variables. To test the model for predicting team OCB, a hierarchical regression analysis was conducted. The control variables (school size and school level) were entered in Step 1. The main effect terms (leader OCB and organizational justice) were entered in Step 2, and the second-order interactive effect of organizational justice was entered in Step 3. Table II and Figure 1 present hierarchical regression analysis results.

As Table II reveals, regarding the prediction of team OCB, the control variables accounted for only a negligible and insignificant percent of the variance in team OCB (F = 1.16; p > 0.05). The joint main effects of leader OCB and organizational justice accounted for 61 percent (F = 30.42; p < 0.001) of that variance and the second-order interaction effect between leader OCB and organizational justice, entered in Step 3, accounted for an additional 16 percent (F = 26.24; p < 0.001). As predicted, the results indicated a positive and significant association between leader OCB and team OCB (B = 0.62, p < 0.001), thus supporting H1. Regarding the moderating effect (H2), as shown in Table II, the effect of the interaction between leader OCB and organizational justice on team OCB was statistically significant (B = 0.28, p < 0.05).

To better understand the interaction patterns, we plotted the high (+1 SD) and low (−1 SD) levels of the moderator, i.e. organizational justice, using the unstandardized regression coefficients (B) from the regression equation (Aiken et al., 1991). This procedure aims to provide less biased regression coefficients for measuring the moderating effect. Analysis of the simple effects revealed that when organizational justice was high, team OCB
### Table I: Descriptive statistics and intercorrelation matrix for study variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>M</th>
<th>SD</th>
<th>1</th>
<th>1a</th>
<th>1b</th>
<th>1c</th>
<th>2</th>
<th>2a</th>
<th>2b</th>
<th>3</th>
<th>3a</th>
<th>3b</th>
<th>3c</th>
<th>4</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Leader OCB</td>
<td>4.24</td>
<td>0.48</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1a. Extra effort invested in the school community</td>
<td>4.15</td>
<td>0.53</td>
<td>0.96***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1b. Initiatives</td>
<td>4.20</td>
<td>0.44</td>
<td>0.95***</td>
<td>0.93***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>1c. Supporting the local community</td>
<td>4.27</td>
<td>0.50</td>
<td>0.99***</td>
<td>0.92***</td>
<td>0.91***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2. Team OCB</td>
<td>3.73</td>
<td>0.31</td>
<td>0.53***</td>
<td>0.53***</td>
<td>0.53***</td>
<td>0.51***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2a. OCBI</td>
<td>4.00</td>
<td>0.49</td>
<td>0.56***</td>
<td>0.56***</td>
<td>0.55***</td>
<td>0.54***</td>
<td>0.96***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>2b. OCBO</td>
<td>3.46</td>
<td>0.20</td>
<td>0.27*</td>
<td>0.25*</td>
<td>0.28**</td>
<td>0.26*</td>
<td>0.75***</td>
<td>0.53***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3. Organizational justice</td>
<td>3.45</td>
<td>0.40</td>
<td>0.64***</td>
<td>0.60***</td>
<td>0.62***</td>
<td>0.64***</td>
<td>0.78***</td>
<td>0.75***</td>
<td>0.57***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3a. Distributive justice</td>
<td>2.87</td>
<td>0.28</td>
<td>0.40***</td>
<td>0.38***</td>
<td>0.40***</td>
<td>0.39***</td>
<td>0.53***</td>
<td>0.50***</td>
<td>0.43***</td>
<td>0.77***</td>
<td>1.00</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>3b. Procedural justice</td>
<td>4.29</td>
<td>0.78</td>
<td>0.67***</td>
<td>0.61***</td>
<td>0.62***</td>
<td>0.68***</td>
<td>0.77***</td>
<td>0.76***</td>
<td>0.53***</td>
<td>0.95***</td>
<td>0.57***</td>
<td>1.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>3c. Interpersonal justice</td>
<td>3.13</td>
<td>0.21</td>
<td>0.44***</td>
<td>0.44***</td>
<td>0.47***</td>
<td>0.41***</td>
<td>0.63***</td>
<td>0.56***</td>
<td>0.58***</td>
<td>0.79***</td>
<td>0.72***</td>
<td>0.61***</td>
<td>1.00</td>
<td></td>
</tr>
<tr>
<td>4. School size</td>
<td>44.20</td>
<td>16.40</td>
<td>−0.13</td>
<td>−0.12</td>
<td>−0.17</td>
<td>−0.11</td>
<td>−0.17</td>
<td>−0.2</td>
<td>−0.03</td>
<td>−0.30**</td>
<td>−0.19</td>
<td>−0.29**</td>
<td>−0.13</td>
<td>1.00</td>
</tr>
</tbody>
</table>

**Notes:** $n = 82$. *p < 0.05; **p < 0.01; ***p < 0.001
was significantly higher when leader OCB was high rather than low ($t = -2.07, p < 0.05$). However, when organizational justice was low, there was no difference in team OCB with either high or low leader OCB ($p > 0.05$) as illustrated in Figure 1.

**Discussion**

The tendency of teachers to contribute to their school above and beyond the call of duty can be understood as a social process, as a construct that grows within a context (Podsakoff et al., 2018). This approach focuses on the work environment as a key factor that shapes the willingness of teachers to exhibit citizenship behaviors (Jackson, 2009). In the present study, we refer to OCB as a team-level phenomenon and examine both the role of the principal in promoting such behavior and the impact of the moderating contextual variable – organizational justice – on this relationship. Our results confirm the proposed model and reveal a positive link between leader OCB and team OCB as well as the moderating role of organizational justice. These findings are important because they show that extra-role behaviors clearly vary depending on the school’s characteristics and context (Jackson, 2009).

The first contribution of the study is in identifying the concept OCB as a group phenomenon. We found that not only could the participants in the present study identify OCB at the team level, but school faculty also exhibited a high level of homogeneity in their

<table>
<thead>
<tr>
<th>Step 1: control variables</th>
<th>$B$</th>
<th>$SE$</th>
<th>Adj. $R^2$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team size</td>
<td>-0.003</td>
<td>0.002</td>
<td></td>
<td></td>
<td>1.16</td>
</tr>
<tr>
<td>School level</td>
<td>0.008</td>
<td>0.043</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 2: independent variables</th>
<th>$B$</th>
<th>$SE$</th>
<th>Adj. $R^2$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team size</td>
<td>0.001</td>
<td>0.001</td>
<td>0.59</td>
<td>0.59</td>
<td>30.42***</td>
</tr>
<tr>
<td>School level</td>
<td>-0.02</td>
<td>0.029</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader OCB</td>
<td>0.62***</td>
<td>0.079</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational justice</td>
<td>0.01</td>
<td>0.063</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Step 3: interaction</th>
<th>$B$</th>
<th>$SE$</th>
<th>Adj. $R^2$</th>
<th>$\Delta R^2$</th>
<th>$F$</th>
</tr>
</thead>
<tbody>
<tr>
<td>Team size</td>
<td>0.001</td>
<td>0.001</td>
<td>0.60</td>
<td>0.01</td>
<td>26.24***</td>
</tr>
<tr>
<td>School level</td>
<td>-0.012</td>
<td>0.028</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader OCB</td>
<td>0.636***</td>
<td>0.077</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Organizational justice</td>
<td>-0.291</td>
<td>0.159</td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Leader OCB $\times$ organizational justice</td>
<td>0.280*</td>
<td>0.135</td>
<td></td>
<td></td>
<td></td>
</tr>
</tbody>
</table>

**Notes:** $n = 82$. *$p < 0.05$, ***$p < 0.001$

**Table II.** Results of hierarchical regression analysis for predicting team OCB

**Figure 1.** The effect of the interaction between leader OCB and organizational justice on team OCB

**Trickle-down effect of OCB in schools**
responses within each school. This indicates that schools differ in the extent to which teachers engage in OCB (Vigoda-Gadot et al., 2007), a finding that may support the notion that organizational behavior can be viewed as an internal organizational attribute (George, 1990). This is important, because random citizenship behaviors by individual teachers do not constitute a critical mass needed to promote school effectiveness; only the aggregate level can drive organizational machinery forward and affect organizational effectiveness (Organ, 1988). In line with the social psychology perspective (Bandura, 1986), teams can, through their norms, send a clear message to their members, in our case teachers, whether or not their investment in citizenship behaviors is valued and regarded as important. High levels of OCB can be observed in schools that emphasize norms of helping, cooperation and reciprocity (Nielsen et al., 2005), while low levels of OCB may develop in schools that encourage norms of competition and self-reliance (van Dick et al., 2006).

The second contribution of the study is in identifying leader OCB as a key instrument that may encourage teams to invest in OCBs. As mentioned, this is, to the best of our knowledge, the first study ever to examine the link between leader OCB and team OCB. The finding that there is a positive association between the two constructs may imply that leader OCBs contribute to the school, not only directly, by exhibiting behaviors of helping and support, but also indirectly, through the leader’s impact on his or her teachers’ behavior (Miller, 2002). As leaders of their schools, principals may influence their teams through two mechanisms: as role models and/or as those who shape the school’s norms and values. Being a key figure in school, it seems that teachers tend to mimic the behaviors of their principal (Detert et al., 2007) and so when the principal exhibits behaviors of cooperation, initiative or helping, teachers may emulate those behaviors by themselves exhibiting/investing in extra-role behaviors (Yang et al., 2010). Parallel to this idea, Mayer et al. (2008) tested a trickle-down model and showed how ethical leadership flows from top levels of management to supervisors, eventuating in employee behavior. The second possible mechanism of influence is through the crucial role of the principal in shaping the school’s values and norms (Dasborough and Ashkanasy, 2002).

Although, as mentioned above, the team itself may develop norms to direct its members’ behaviors, the principal, as top manager of the school, has a broader impact on the organization as a whole (Leithwood and Jantzi, 2006). As such, he or she formulates the general policies and objectives of the school, and establishes the school’s values and norms system (Seashore Louis et al., 2010). Accordingly, by exhibiting OCBs, the principal may make it clear that norms of going the extra mile are highly valued at this school, sending a message that may encourage the team to behave accordingly, namely, to display citizenship behaviors as well. It is, however, important to note that although our model proposed that leader OCB promotes team OCB, one could also argue that norms of OCB that develop within the team may encourage the principal to exhibit citizenship behaviors. In other words, it is possible that when a leader acts in a team that is characterized by a high tendency to exhibit citizenship behaviors, he or she may adapt the team’s pro-social behaviors. This is to say that the leader may not only shape the team’s behavior, but is also affected by it.

Third, the study showed that organizational justice moderates the relationship between leader OCB and team OCB. Specifically, the results indicate that the positive relationship between the two phenomena occurs only at high levels of perceived organizational justice. Again, this finding emphasizes the critical role of the organization, through its representative the principal, in shaping the attitudes and motivation of the team (Cropanzano et al., 2002). When team members feel that they are treated fairly and that the principal is interested in them and respects them, teachers may develop a sense of trust toward him or her (Ambrose and Schminke, 2003; Hoy and Tarter, 2004). These feelings of trust may encourage teachers to follow their principal’s lead and exhibit high levels of citizenship behaviors as well (Polat and Celep, 2008). However, as predicted, at low levels of organizational justice, the results indicate
no significant relationship between leader OCB and team OCB. This is to say that when teachers perceive that they are working in an unfair environment, they cannot perceive the principal as a role model or as a figure who might motivate them to contribute above and beyond their job requirements (Cole et al., 2010). In such a case, the willingness of the principal to invest extra effort for the benefit of the school, i.e. to exhibit OCB, does not lead to higher levels of OCB among the team members (Bobocel and Hafer, 2007).

Limitations and future research
Several cautions should be taken into consideration when interpreting the results of this study. First, we used a cross-sectional design for data collection; a methodology that may raise the question of causality. Thus, for some of the relations found, the explanation for the causality and direction of relationship could be the opposite, or mutual. For example, reciprocal influences may exist between the faculty and the principal that could encourage citizenship behavior. Future research may apply a longitudinal or experimental design to support the causality approach (Chen et al., 2005). Second, although previous research (e.g. Conway, 1999; Nutov and Somech, 2017) provides evidence for the validity of the concept “leader OCB,” a question still remains regarding the existence of a clear boundary between the leader’s formal role requirements and extra-role behaviors. Future studies should provide additional validation of the concept. Furthermore, while leader OCB and team OCB are distinctive structures, the responses of team members regarding their team’s OCB may also be influenced by the principal’s behavior. Further studies should validate that there is no overlap between the two variables. Third, one can argue that the school context (elementary, middle or high school) may affect the pattern of the results. Although we followed previous studies that investigated OCB in schools (e.g. Bogler and Somech, 2004; Oplatka, 2006), we recommend that future research validates the present results by investigating each level of school separately. Furthermore, we chose to examine the role of the contextual variable of organizational justice as the moderating factor in the relationship between leader OCB and team OCB. There are certainly other contextual moderators that could contribute to our understanding regarding the conditions that may enhance and/or neutralize this relationship. For example, positive team attitudes, such as organizational commitment or job satisfaction, may enhance the relationship whereas team conflict or abusive leadership may neutralize it. Another direction that would be interesting to examine would be to identify the mechanisms that translate leader OCB to team OCB. For example, exchange relationships or identification with the leader may mediate between leader OCB and team OCB (Yang et al., 2010).

Practical implications
As one of the first studies to empirically test the construct of leader OCB, this study can provide practical managerial implications to policy makers and administrators. The positive link found between leader OCB and team OCB may guide principals to use their citizenship behaviors as a leadership resource that may encourage the team to go the extra mile and invest above and beyond the call of duty (Yaffe and Kark, 2011). The importance of leader OCB in promoting team OCB can inspire the educational system to learn how to develop organizational mechanisms that will encourage principals to perform citizenship behaviors. Indeed, this component should be considered during screening processes and succession planning. Moreover, the results of this study help us understand the importance of organizational justice in fostering the link between leader OCB and team OCB. It is crucial for principals to understand that developing an atmosphere of justice within their schools is a fundamental tool, as they seek to encourage citizenship behaviors among faculty members. Teachers, who experience a fair environment, may feel more obligated to cooperate and to contribute to the school (Dimmock and Walker, 2005). We found that principals would do good to develop a fair and unbiased school environment that indicates to teachers that they...
can trust and rely on them (Hoy and Tarter, 2004). Actions of clear and transparent school policies, a systematic feedback system, and cogent role expectations can foster positive attitudes, which, in turn, may encourage teachers to mimic their leader’s behavior and display OCBs (Podsakoff et al., 2018).

References


Further reading


Corresponding author
Anit Somech can be contacted at: anits@edu.haifa.ac.il

For instructions on how to order reprints of this article, please visit our website: www.emeraldgrouppublishing.com/licensing/reprints.htm
Or contact us for further details: permissions@emeraldsight.com

Trickle-down effect of OCB in schools