Summary The Effect of Team Collectivism on Performance and Citizenship Behavior: The Mediating Role of Peer Procedural Justice

Arzu Sert Özen

Gebze Technical University

Meral Elçi

Gebze Technical University

"If you want to go fast, go alone. If you want to go far, go together" - African Proverb.

Teams consist of two or more individuals who interact or coordinate with each other to achieve a common goal (Baker & Salas, 1997). Teams, which have various positive effects on organizational outcomes, have gained ground in organizations in today's world. However, teamwork is a complicated issue, and organizations need to develop team-based strategies in order to achieve organizational goals (Gundlach, Zivnuska, & Stoner, 2006).

Team collectivism refers to the shared perception of the members within the same team on how important common interests and welfare are compared to the individual interests, and how important the concepts of cohesion and collaboration are as team values (Colquitt, Noe, & Jackson, 2002; Lai, Lam, & Lam, 2013). Though various studies have shown that team collectivism has an effect on team member behavior, there are very few studies (e.g., Bell, 2007; Colquitt et al., 2002; Dayan & Colak, 2008) that examined collectivism as a team-level variable. In the previous studies, it has been shown that team collectivism has an impact on procedural justice climate (Colquitt et al., 2002; Dayan & Colak, 2008). However, to our knowledge, a study on the effect of team collectivism on peer procedural justice has not been conducted yet.

Cropanzano, Li, and Benson (2011) conducted the first study related to peer procedural justice, and this concept refers to the shared perception of justice regarding how fairly the team members treat one another in the decision-making process. Though it has been determined that procedural justice, which has been evaluated at the team level, has a positive relationship with team task performance and team citizenship behavior (e.g., Cropanzano et al., 2011), the potential factors which may affect such relationships have not been examined yet.

Team task performance, which refers to the degree to which a team fulfills its objectives or tasks (Bell, 2007), is the most important indicator of a team's success. Team members need to fulfill their tasks in cooperation through cognitive, verbal, and behavioral activities to show successful performance (Marks, Mathieu, & Zaccaro, 2001). One of the effective elements in the cooperation of individuals with one another in the team context is collectivism (Wagner, 1995). In the previous studies conducted at the team level, it has been found that team collectivism had a positive effect on team effectiveness (Kirkman & Shapiro, 2001) and team task performance through team collaboration (Ebv & Dobbins, 1997). Furthermore, a meta-analysis study at the team level conducted by Bell (2007) showed that team collectivism had a positive effect on team task performance.

Team citizenship behavior refers to team members' shared perceptions on the behaviors performed within the team such as voluntarily helping, sharing work load, participating in extra duties for the team success, and such, provides an empirical guide on how to behave in the future (Cropanzano et. al., 2011; Ehrhart, 2004). Team citizenship behavior is a concept considered different from the concept of organizational citizenship behavior at the individual level (toward organization or coworkers) because it regulates social interaction and affects social identity (Ehrhart, 2004; Ehrhart, Bliese, & Thomas, 2006). In a study conducted at the individual level of analysis, Jackson, Colquitt, Wesson, and Zapata-Phelon (2006) found that psychological collectivism had a positive effect on team members' citizenship behaviors. In the same vein, the research conducted by Finkelstein (2012, 2014) demonstrated that collectivism had a positive effect on organizational citizenship behavior. However, to our knowledge, there is no study that examined the effects of collectivism as a team level construct on team citizenship behavior.

Address for Correspondence: PhD Candidate, Arzu Sert Özen, Gebze Technical University, Faculty of Business Administration, 41400, Gebze/Kocaeli.

E-mail: arzusertt@gmail.com

As stated in the literature review, there are very few studies conducted at the team level on the variables of concern, and new studies are needed. Therefore, (a) the effects of team collectivism on peer procedural justice, team task performance, and team citizenship behavior, and (b) the mediator role of peer procedural justice in the relationship between team task performance and team citizenship behavior will be examined in this study. Thus, based on the literature review, we propose hypotheses as follows:

Hypothesis 1: Team collectivism would be positively related to peer procedural justice.

Hypothesis 2: Team collectivism would be positively related to team citizenship behavior.

Hypothesis 3: Team collectivism would be positively related to team task performance.

Hypothesis 4: Peer procedural justice would be positively related to team task performance.

Hypothesis 5: Peer procedural justice would be positively related to team citizenship behavior.

Hypothesis 6: Peer procedural justice would mediate team collectivism and team citizenship behavior relationship.

Hypothesis 7: Peer procedural justice would mediate team collectivism and team task performance relationship.

Method

Sample and Data Collection

The sample of this study consisted of 560 team members who worked in 93 teams. Participants, who worked in production and service teams took the survey. The sample comprised 36% female and 64% male participants. The average age of the team members was 32.7 years (SD = 8.16), and the average tenure was 3.3 years (SD = 3.26). Forty percent of the teams were composed of seven to ten individuals; 24% were composed of more than ten individuals; 19% were composed of five to six individuals; (SD = .50). Additionally, 89% of participants had an undergraduate degree, and 11% had a post-graduate degree.

Measures

Team members responded to the questionnaires below with a 5-point Likert scale ranging from 1 (*strongly disagree*) to 5 (*strongly agree*).

Peer Procedural Justice. Peer procedural justice was measured using a 5-item scale developed by Li and Cropanzano (2009) based on the criteria proposed by Leventhal (1976) (Sample item: "We can express our emotions and thoughts about the decision-making pro-

cess in our team."). The Cronbach's alpha was found to be .91, and the test-retest reliability was .96 (p = .01).

Team Collectivism. Team collectivism was measured with a 6-item scale developed by Wagner (1995) (Sample item: "Individuals in the team should be disposed to make self-sacrifice for the good of their team."). For team collectivism, the average of the individual responses of team members was used (Colquitt et al., 2002). In this study, the Cronbach's alpha was found to be .87, and the test-retest reliability was .97 (p = .01).

Team Task Performance. Team task performance was measured using a 9-item scale developed by Goodman and Svyantek (1999). Team task performance was evaluated by team supervisors' responses for their team members at the team level. High scores achieved by the teams show that team task performance was high (Sample item: "Team members achieve the objectives of the job."). The Cronbach's alpha was found to be .86.

Team Citizenship Behavior. Based on the previous studies (Cropanzano et al., 2011; Van der Vegt, Van de Vliert, & Oosterhof, 2003), we focused on helpfulness and faithfulness regarding the social team process of the organizational citizenship behavior in order to measure team citizenship behavior. Helping behavior was measured via a 4-item scale (Sample item: "Team members help the others who have a heavy workload"), and loyalty behavior was measured via a 3-item scale (Sample item: "Team members never avoid extra duties and responsibilities for the tasks"), both of which were adapted to team level by Cropanzano et al. (2011) based on the research by Van der Vegt et al. (2003). For team citizenship behavior, the average of team members' responses was used. In this study, the test-retest reliabilities for helping and loyalty behavior were found, respectively, as .93 and .98 (p = .01). As the discriminant validity of the two subdimensions could not be established in this scale, all items were collected in a single dimension. In this study, the Cronbach's alpha was found as .95.

Procedure

In this study, the structural model was tested via structural equation model (SEM) using SmartPLS (v. 3.2.7) software by running the bootstrap resampling method (with 1000 resamples).

Results

 H_1 predicted that team collectivism would be positively related to peer procedural justice. The research findings indicated that team collectivism had a statistically positive effect on peer procedural justice ($\beta = .50$, t = 6.93, p < .001); therefore, H_1 was supported. H_2 predicted that team collectivism would be positively related to team citizenship behavior. The results suggested that team collectivism had a statistically positive effect on team citizenship behavior ($\beta = .25, t = 3.11, p = .002$); thus, H, was supported. Furthermore, H, predicted that team collectivism would be positively related to team task performance. As predicted, the results demonstrated that team collectivism predicted team task performance positively (β = .29, t = 2.69, p = .009); therefore, H₃ was supported. H₄ proposed that peer procedural justice would be positively related to team task performance. As proposed, the findings suggested that peer procedural justice had a statistically positive effect on team task performance ($\beta = .34$, t = 3.02, p = .003); hence, H₄ was supported. Additionally, H, predicted that peer procedural justice would be positively related to team citizenship behavior. It was found that peer procedural justice had a statistically positive effect on team citizenship behavior $(\beta = .63, t = 8.72, p < .001)$; therefore, H_s was supported.

Additionally, the mediator effect of peer procedural justice was examined in this research. The indirect effect of team collectivism on team task performance and team citizenship behavior via peer procedural justice was found statistically significant. Furthermore, there was a significant and linear relationship between team collectivism and team task performance, and the path coefficient decreased from $\beta = .46$ (p < .001) to β = .29 (p = 0.009) after the inclusion of the mediator variable in the model. However, including this mediating effect increased R^2 from .21 to .29. The path coefficient decreased from $\beta = .57$ (p < .001) to $\beta = .25$ (p = 0.002) after introducing peer procedural justice as mediator of the path between team collectivism and team citizenship behavior. However, including the mediating effect increased R^2 from .32 to .62. Therefore, it can be said that peer procedural justice had a partial mediator role. In addition, the total effect and the variance accounted for (VAF) values were used to examine the magnitude of mediation (Wong, 2016). The total effect is found with the accumulation of the direct effect and indirect effect. The total effect in H_6 was .25 + .31 = .56, and the total effect in H₂ was .29 + .17 = .46. The VAF value was calculated as the indirect effect divided by the total effect. The threshold value for the VAF value is .20 and values below .20 indicate that there is no mediating effect. The values between .20 and .80 indicate partial mediating effect, and the values which are .80 and above indicate full mediating effect (Hair, Hult, Ringle, & Sarstedt, 2013). The VAF value for $H_6 = .31 / .56 = .55$ and for $H_7 = .17$ /.46 = .37. Fifty-five percent of the effect of team collectivism on team citizenship behavior was explained by the mediating variable, peer procedural justice; and the magnitude of the mediation was partial. Thus, H was partially supported. Thirty-seven percent of the effect of team collectivism on team task performance was explained by the mediating variable, peer procedural justice; and the magnitude of the mediation was partial. Thus, H₂ was partially supported.

Discussion

The aim of this study was to investigate the predictive effect of team collectivism on team citizenship behavior and team task performance, and also to test whether peer procedural justice had a mediating role in the relationships of team collectivism with team task performance and team citizenship behavior. The findings indicated that team collectivism had a positive effect on peer procedural justice, team citizenship behavior, and team task performance, and that peer procedural justice had a partial mediator role in the relationships of team collectivism with team citizenship behavior and team task performance.

The results of this research are consistent with the literature on collectivism. In previous studies (e.g., Colquitt et al., 2002; Dayan & Colak, 2008), it was found that team collectivism had a positive relationship with procedural justice climate. In this study, it was found that collectivism at the team level had a positive relationship with the perceptions of peer procedural justice. Additionally, the findings are similar to those of previous studies conducted at the individual level of analysis which showed that collectivism had positive effects on organizational citizenship behavior (e.g., Finkelstein, 2012, 2014; Jackson et al., 2006; Van Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000) and team task performance (Bell, 2007; Eby & Dobbins, 1997). Additionally, it has been found that peer procedural justice at the team level affected team task performance and team citizenship behavior (Cropanzano et al., 2011).

The current study has several theoretical implications. First, to our knowledge, there has been no study that examined the effect of team collectivism on peer procedural justice in the field so far. Secondly, although the effect of collectivism on team citizenship behavior has been tested, none of the scholars have tested the effect of collectivism at the team level. As Ehrhart (2004) stated that team citizenship behavior could not be fully explained by the antecedents of organizational citizenship behavior at the individual level, collectivism has been considered as a variable at the team level in this study. As a result, this study indicated that team collectivism had a significant positive effect on team citizenship behavior. Finally, by examining a mediational model, it was demonstrated that the effect of team collectivism on team citizenship behavior and team task performance seems to be partially mediated through peer procedural justice.

The current study has various contributions to practice. Firstly, it has been found that team collectivism had a positive effect on team performance. Collectivists show better performance and become more successful in teamwork compared to individualists. On the other hand, though it is highly difficult to determine how the individualistic team members, who value their own interests above the team interests, work effectively with other team members, individuals can be turned into successful team members with careful planning and foresight. Unifying the team objective and the individual objective and rewarding individual contributions can provide an opportunity to fulfill the teamwork and prevent possible group productivity losses. In this regard, it has been thought that it can be beneficial for managers to consider individuals' compliance with the team values in personnel selection and make plans accordingly. Thus, this can contribute to achieving positive outcomes, such as decreased intention to leave and increased work satisfaction, performance, and team cohesion.

Team collectivism is a concept that positively affects perceptions of procedural justice within the team. When team collectivism is low, the perception of injustice that may occur within the team increases the turnover rates and decreases the performance. In such cases, managers should consider that it is important to support peer procedural justice in order to increase the cohesion of the team. In this regard, teaching the employees to be fair is one of the methods to be followed. Thus, the employees' tendency to act negatively can be decreased, and they might help the other individuals in the team and work efficiently (Greenberg, 2005).

One of the main limitations of this study is that it is a cross-sectional study. A longitudinal study is required to test causal relationships more precisely (Colquitt et al., 2002; Ehrhart, 2004; Molina, Moliner, Martínez-Tur, Cropanzano, & Peiro, 2015). Another limitation of this study is the evaluation of team task performance by a single supervisor. For future studies, it is recommended that two supervisors' independent evaluations are obtained for team performance so that the inter-rater reliability can be measured (Cropanzano et al., 2011). Lastly, evaluation of the cross-level effects of variables at the team level (e.g., peer justice) on variables at the individual level (e.g., the individual's intention to leave or job-related stress) will offer a more sophisticated analysis and contribution to the literature.