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A Multilevel Intrateam Trust-Outcomes Relationship: The Mediating Role of Team Learning

ABERE A. KASSA
Lombardo College of Business
Millersville University of Pennsylvania
40 Dilworth Rd, 332 McComsey Hall
Millersville, PA 17551
Email: abere.kassa@millersville.edu
United States of America

ABSTRACT

Trust is one of the key factors in employee-employer relationships. Following recent recommendations for a multilevel perspective of trust, the current study investigates the role intrateam trust (trust within teams) plays in team processes as well as individual- and team-level work outcomes. Drawing from a data set of 282 team members, nested within 78 teams, and a multilevel design, I found support for the cross-level mediated effects of intrateam trust on outcomes (job satisfaction and job engagement) at both individual and team levels via team learning. I used the social exchange theory and the norm of reciprocity as theoretical frameworks to develop the hypothesized relationships. Overall, this study not only responds to calls for multilevel trust research and provides evidence to extend trust research, but also makes specific recommendations to practitioners to maximize the limited resources in managing teams and individuals.

Keywords: intrateam trust, team learning, job engagement, job satisfaction.

Introduction

Trust is considered one of the vital ingredients in work and interpersonal relationships (De Jong, Gillespie, Williamson, & Gill, 2021; Kramer, 1999). As such, there has been a plethora of research showing the positive impacts of trust in the organization on various employee work outcomes (e.g., Aryee, Budhwar, & Chen, 2002; Colquitt, Scott, & LePine, 2007; Ozyilmaz, Erdogan, & Karaeminogullari, 2018; Tan & Lim, 2009; Tekleab & Chiaburu, 2011; Tourigny, Han, Baba, & Pan, 2019; Verburg, Nienaber, Searle, Weibel, Den Hartog, & Rupp, 2018). Moreover, trust is an essential part of teamwork because team tasks require a high level of interdependence among members (Mach, Dolan, & Tzafrir, 2010; Salas, Sims, & Burke, 2005) such that the mutual dependence and trust generate synergy in the form of cooperation and interaction amongst team members (Salas, et al., 2005). As such, trust within teams or intrateam trust has received increased scholarly attention from trust researchers in the past two decades (Costa, Fulmer, & Anderson, 2018) because it impacts team behaviors and outcomes (e.g., team information sharing and performance; De Jong, Dirks, & Gillespie, 2016; justice climate, Liu, Hernandez, & Wang, 2014; team learning, Wibowo & Hayati, 2019; creativity, Tsai, Chi, Grandey, & Fung, 2012; team performance, Hughes, Rigtering, Covin, Bouncken, & Kraus, 2018: Langford, 2007; Szulanski, Cappetta, & Jensen, 2004; employee engagement, Downey, van der Werff, Thomas, & Plaut, 2015). It is believed to enhance organizational relationships (and performance) by increasing the ability of employees to work together (Mayer, Davis, & Schoorman, 1995; McAllister, 1995). Given this evidence, it is not surprising that employees' experience of trust is considered one of the main themes to assess the best firms to work for (see Fortune, 2021).

Despite steady growth in the number of trust studies conducted at the team and organizational levels (e.g., De Jong & Elfring, 2010; Langfred, 2004; Serva, Fuller, & Mayer, 2005), extant trust research primarily has focused on trust at the individual level (e.g., Lewicki, Tomlinson, & Gillespie, 2006; Mayer et al., 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). The growth in team- and organizational-level trust studies has made significant contributions to our understanding of team trust at the individual, team, and organizational levels, and there is an increasing accumulation of insights at each respective level (Cao & Lumineau, 2015; De Jong et al., 2016). In contrast, however, very little progress is being made in terms of cross-level research on trust. Recently, however, there has been a growing interest in exploring the antecedents and consequences of trust from a multilevel perspective because of the multilevel nature of trust within organizations (e.g., Braun, Peus, Weisweiler, & Frey, 2013; Breuer, Hüffmeier, & Hertel, 2016; Costa et al., 2018; Fulmer & Gelfand, 2012). Indeed, there have been calls for studies that explore the effect of trust on organizational outcomes across different levels of analysis (e.g., Costa et al., 2018; Fulmer & Gelfand, 2012; Tan & Lim, 2009). Extending current trust research and responding to the above calls to fill the gap in the trust literature, this study explores how intrateam trust (team-level trust with a focus on the team as a whole) influences individual and team-level outcomes in organizations. The study builds on the social exchange theory (SET, Blau, 1964) to examine the effects of intrateam trust on the individual- and team-level outcomes. In doing so, this study examines one team-level construct (team learning) as a mediator and job satisfaction and job engagement at both levels as outcome variables. I selected team learning as prior research indicates that trust is related to learning behavior (Wibowo & Hayati, 2019) using a cross-lagged panel design. Moreover, I examine job satisfaction and job engagement (both at the team and individual level) because

job satisfaction and job engagement are highly valued in organizations and are key drivers of performance (Bakker & Bal, 2010; Haynie, Mossholder, & Harris, 2016; Owens, Baker, Sumpter, & Cameron, 2016; Ozyilmaz, 2020; Rich, Lepine, & Crawford, 2010; Zhong, Wayne, & Liden, 2016).

While addressing the gaps identified above and responding to calls for studies of this type (multi-level trust studies), this study aims at making the following contributions to the team trust literature. First, previous studies examining trust have focused on studying its effect at one level at a time. That is, there has been little research that addresses the effect of trust at multiple levels. The focus of the team trust studies had been on the impacts of team trust on team-level outcomes. Hence, this study adds to the literature on team trust by investigating a neglected area in team trust research, the effects of intrateam trust on individual, team, and organizational outcomes using a multilevel study design.

Second, extant research attempted to examine limited sets of team processes as mechanisms through which team trust influences team outcomes (De Jong & Elfring, 2010). That is, extant studies explored narrow sets of factors as mediators of the team trust-outcomes relationship. Thus, this study contributes to the existing team trust research by identifying additional team processes (team learning) through which intrateam team trust elicits individual- and team-level outcomes.

THEORETICAL BACKGROUND AND HYPOTHESES
Team Trust

In their seminal work, Mayer et al. (1995: 712) define trust as "the willingness of a party to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party." Thus, in an organizational setting that involves interpersonal and social relationships, trust can be understood as the confidence that one party (the trustor) has in the other party (the trustee) to behave in a certain way such that the trustor willingly forsakes control over the actions performed by the trustee without fear of being taken advantage of (Lewicki, McAllister, & Bies, 1998; Mayer et al., 1995; Rousseau et al., 1998;).

Therefore, trust plays the role of a behavioral deterrent to opportunistic behavior (Lado, Dant, & Tekleab, 2008).

Team trust may be classified into two as intrateam trust and inter-team trust. Intrateam trust refers to "shared generalized perceptions of trust that team members have in their fellow teammates" (De Jong & Elfring, 2010: 536). Interteam trust, on the other hand, is defined as a collectively held belief by members of a given team about the trustworthiness of another team (Serva et al., 2005). Thus, while intrateam trust is concerned with the degree to which members of a given team develop confidence in their team (Langfred, 2004), interteam trust focuses on the extent to which members of one team collectively trust the members of another team (Mayer et al., 1995; Zaheer, McEvily, & Perrone, 1998). This paper focuses on investigating the effect of intrateam trust on organizational outcomes at individual and team levels.

Team Trust and Organizational Outcomes

Scholars from various periods and a diversity of disciplines seem to agree that trust is highly beneficial to the functioning of organizations at both micro (Edwards & Cable, 2009; Colquitt et al.,2007), and macro levels (Sonpar, Handelman, & Dastmalchian, 2009). The following sections provide the theoretical frameworks and the proposed hypotheses focusing on intrateam trust.

Appendix A: Figures
Figure 1: The Multilevel Effects of Intrateam Trust on Organizational Outcomes
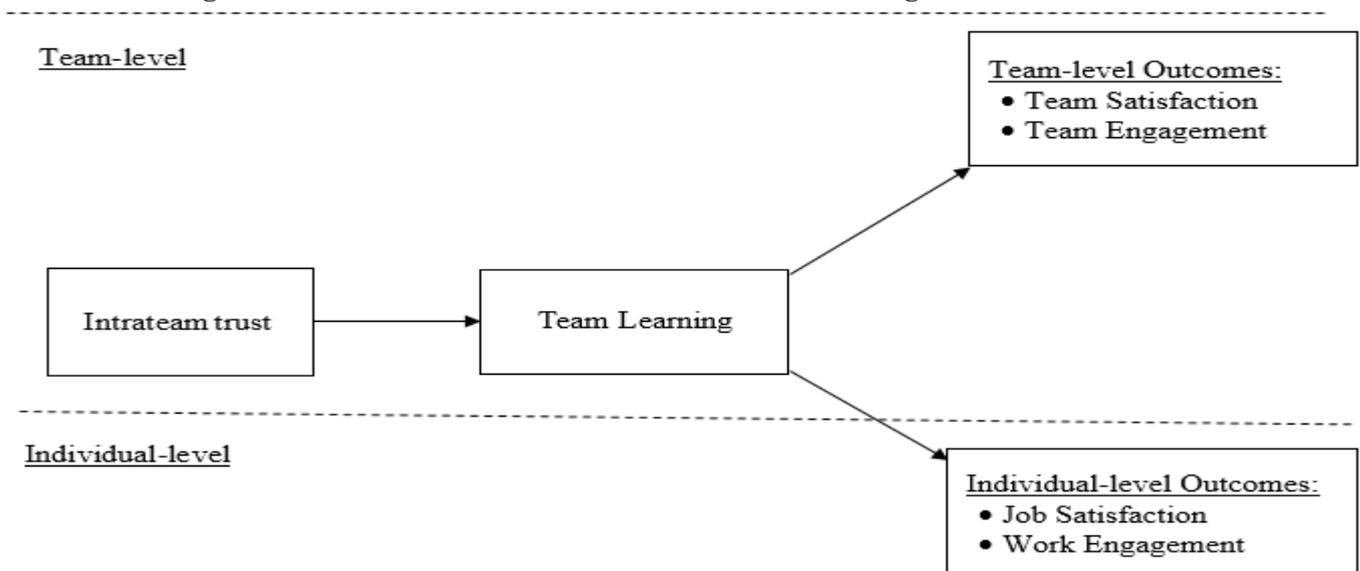
Intrateam Trust and Individual-Level Outcomes

Extant trust research at an individual level indicates that interpersonal trust enhances employee satisfaction (Edwards & Cable, 2009), job performance (Colquitt, LePine, Zapata, & Wild, 2011), and work engagement (Bakker & Demerouti, 2007; Chughtai & Buckley, 2013; Jiang & Probst, 2015). The social exchange theory (Blau, 1964) and norm of reciprocity (Gouldner, 1960) provide theoretical arguments for these effects.

Specifically, these theories suggest that when individuals trust one another, they reciprocate in various forms, including developing more favorable attitudes among themselves (Mayer & Gavin, 2005), putting in extra effort and other resources to develop and maintain the relationship (Brower, Lester, Korsgaard, & Dineen, 2009), spending more time on required tasks (Konovsky & Pugh, 1994), and being more productive (Dirks & Skarlicki, 2009). Owing to the social exchange theory (Blau, 1964) and the norm of reciprocity (Gouldner, 1960), we argue here that intrateam trust would have a similar effect on individual-level outcomes. That is, when there is trust in a team, team members believe that other teammates are honest, do have integrity, and may not take advantage of fellow teammates (Lado et al., 2008); thus, team members become committed to the team goals (Dirks & Ferrin, 2002), loyal to the employing organization (Brower et al., 2009), and engaged in their work (Bakker & Demerouti, 2007). Similarly, when there is high trust among teammates, they develop similar trust-related schemas about the trustworthiness of the team and interpret trust-related events in similar ways (Dionne, Sayama, Hao, & Bush, 2010), develop a sense of belongingness to the team (Den Hartog, De Hoogh, & Keegan, 2007), and actively share resources among themselves (Dirks & Skarlicki, 2009). The shared mental models and sense of belongingness help team members to be more satisfied (Braun et al., 2013), more engaged (Jiang & Probst, 2015), and become more productive (Colquitt et al., 2011). Consequently, based on the social exchange theory and the above literature, I hypothesize:

Hypothesis 1: *Intrateam trust is positively related to team members' individual[level] job satisfaction and job engagement.*

Intrateam Trust and Team-Level Outcomes

Intrateam trust may enhance members' satisfaction with the team (Chou, Wang, Wang, Huang, & Cheng, 2008). This is because the confidence that exists among team members enables them to openly communicate with one another and protects team members from fears of being taken advantage of by opportunistic team members (Costa, Roe, & Taillieu, 2001). Similarly, a lack of trust in other team members has been attributed as one of the top reasons for employee turnover (Jiang & Probst, 2015). Moreover, studies indicate that trust in management improves employees' work engagement behaviors (Macey & Schneider, 2008) and affective commitment (Costa, 2003). Based on the above literature, I hypothesize:

Hypothesis 2: *Intrateam trust is positively related to team satisfaction team job engagement*

The Mediating Role of Team Learning

Team processes are defined as "members' acts that convert inputs to outcomes through cognitive, verbal, and behavioral activities directed toward achieving collective goals (De Jong & Elfring, 2010: 537)." In this study, I focus on examining the mediating role of team learning in the interteam trust-outcomes relationship. The choice of team learning is based on evidence of its relevance as a mediator between trust and outcomes (Edmondson, 1999; Lubatkin, Simsek, Ling, & Veiga, 2006; Schippers, Den Hartog, Koopman, & Wienk, 2003) and the fact that the mediating role of team learning in the trust-outcomes relationship is understudied. Below I discuss how team learning transmits the effects of intrateam trust to organizational outcomes.

Team Learning

Team learning can be defined as "a relatively permanent change in the team's collective level of knowledge and skill produced by the shared experience of the team members" (Ellis, Hollenbeck, Ilgen, Porter, West, & Moon, 2003, p. 822). Team learning involves asking questions, challenging assumptions, raising doubts, soliciting feedback, exploring differing viewpoints, assessing alternatives, and collectively reflecting on past behavior (Schaubroeck, Carmeli, Bhatia, & Paz, 2016; van der Vegt & Bunderson, 2005). For teams to engage in these activities, members must be willing and able to freely share their opinions, listen to one another, reexamine their views, and integrate them with others (Burke, Salas, & Diaz, 2008; Edmondson, 1999). This would be possible if team members do have mutual trust among themselves (Lee, Gillespie, Mann, & Wearing, 2010; MacCurtain, Flood, Ramamoorthy, West, & Dawson, 2010). That is, the confidence that exists in teams enables team members to overtly share and exchange information, ideas, knowledge, and insights (Kozlowski & Bell, 2008; Lee et al., 2010). Moreover, intrateam trust enhances the degree of openness and transparency among teammates (Chowdhury, 2005) such that suggesting new, unpopular, or extraordinary ideas, expressing doubts, discussing divergent viewpoints, and challenging assumptions are non-threatening to others (Akgün, Lynn, Keskin, & Dogan, 2014; Baer & Frese, 2003). In a nutshell, confidence among teammates creates a perceived learning climate that encourages the creation, acquisition, and exchange of knowledge (Eldor & Harpaz, 2016). In contrast, in teams where intrateam trust is low, members' perceptions of risk for raising problems, and discussing new ideas or information is high (Edmondson, Dillon, & Roloff, 2007). Based on the above line of reasoning, I hypothesize:

Hypothesis 3a: *Intrateam trust has a positive relationship with team learning.*

Team learning can affect organizational outcomes in different ways. First, team learning leads to better decisions

(Davenport, Jarvenpaa, & Beers, 1996) by enabling team members to consider more alternatives and learn from others' experiences and adjust their responses (Argote, McEvily, & Reagans, 2003). Second, team learning leads to better problem solving (Salisbury, 2001) by creating the chance for team members to deliberate on issues at length and consider various alternatives and evaluate the possible solutions from multiple angles. Third, team learning leads to enhanced creativity through the exchange of tacit knowledge-insights, hunches, and lessons learned from previous experience (Edmondson et al., 2007) among teammates. Exchanging such tacit knowledge, in turn, leads to the creation of novel ideas that leads to new products and processes (Lee et al.,2010). Fourth, team learning helps to establish better approaches for performing a task (Schaubroeck et al., 2016), to facilitate the utilization of new technology, and to improve team members' skills (Edmondson, 2004). Fifth, team learning helps teams and their members adapt to changing circumstances and uncertainties (van Woerkom & Croon, 2009) by facilitating the absorption of new information in the team thereby helping to refine processes and practices, and discover new and better ways of achieving team objectives (Bunderson & Sutcliffe, 2003; Edmondson, 1999). Moreover, Lee et al. (2010) reported that team knowledge sharing (i.e., team learning) significantly predicted team performance as measured through leaders' and managers' ratings. Similarly, by encouraging adaptive behaviors, team learning orientation was found to have a positive effect on business unit performance (Bunderson & Sutcliffe, 2003).

Besides enhancing team performance, team learning affects team members' work engagement and job satisfaction. This is because, team learning helps employees achieve their goals and facilitates their personal development as a result of which team members are more likely to be satisfied with their job, engaged in their work, and feel content and appreciate their team membership (Eldor & Harpaz, 2016). Further, when employees perceive that they are supported and their efforts are valued through supportive and challenging learning activities that cater to their needs, they are more likely to be satisfied in their work and engaged in their work (Burke, Holman, & Birdi, 2006). The more employees perceive that the learning activities of their organization are effective for achieving their personal and organizational goals, the more they find meaning and competence in meeting these learning challenges and the more willing employees will become engaged and satisfied (Bakker, Albrecht, & Leiter, 2011). Based on these arguments and that intrateam creates a conducive atmosphere for team learning to take place (Hypothesis 3a), I hypothesize:

Hypothesis 3b: *Team learning mediates the relationship between intrateam trust and a) job satisfaction and b) job engagement at the individual and levels.*

METHOD

Data for this study were collected from a large organization located in Addis Ababa, Ethiopia, from two sources at two time periods. Team members (N=316) were contacted to complete the surveys at time 1; of which, 283 team members responded at time 1. At time 2, all those who completed at time 1 and their supervisors (N=79) were contacted, and 282 members and 77 supervisors responded. Each participant received ETB 100 (Ethiopian Birr), which is equivalent to about $5, as an honorarium for participating in the study. I excluded three teams (and 10 members) and two supervisors because they could not be matched with a specific team/supervisor. Thus, I retained 272 team members (75 teams) and 75 team leaders with matching data at both periods and supervisor ratings. At time 1, data on team members' demographic characteristics, intrateam trust, and trust in the organization were collected from team members. A month later (Time 2), data on employee job engagement and team job engagement were collected from team members, while data on performance (individual and team) were collected from the team leaders. Sixty-nine percent of the team members and 72 percent of the team leaders were male. Actual team sizes ranged from 3 to 6 with an average of 3.62. The average work experience of team members was 4.02 years while the average work experience of team leaders was 8.76 years.

Measures

Multi-item scales that have been widely used in previous research were used in this study. Unless otherwise indicated, responses were obtained on a Likert-type scale ranging from 1 (strongly disagree) to 7 (strongly agree). To form team-level variables, all individual responses were aggregated to the team level as appropriate. We assessed the uni(multi)-dimensionality of each scale using the EQS software. Given the multilevel nature of our study, we conducted multilevel confirmatory factor analysis (MLCFA) for all variables. The fit of the factor structure is assessed using comparative fit index (CFI), standardized root-mean-square residual (SRMR), and root-mean-square error of approximation (RMSEA). I also examined whether each team-level construct fulfills the criteria for aggregation by examining their own(j)s. Last, I examined if there were sufficient variabilities on the Level-1 mediator and dependent variables using the interclass correlations (ICC(1)).

Intrateam Trust. Intrateam trust was measured using McAllister's (1995) 11-item scale. The items were modified to reflect the team setting and the referent was adjusted to teammates. A sample item reads "If I share my problems with my teammates, they would respond constructively and with care.' The internal reliability yielded an acceptable value of .80.

Team Learning. Team learning was measured with Edmondson's (1999) seven-item scale. A sample item reads "We invite people from outside the team to present information or have discussions with us." The internal reliability of the team learning scale was .83.

Individual Job Satisfaction. Individual Job satisfaction was measured using Netemeyer, Maxham III, &
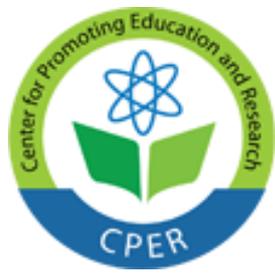
Lichtenstein's (2010) three-item scale. A sample item reads "All in all, I am satisfied with my present job at [the bank]." The internal reliability of the individual job satisfaction scale was .90.

Individual Job Engagement. Individual job engagement was assessed with Rich et al. (2010) 18-item job engagement scale (JES). A sample item reads "I am enthusiastic about my job." The internal reliability of the individual job engagement scale was .97.

Team Satisfaction. Team satisfaction was measured using Netemeyer, Maxham III, & Lichtenstein's (2010) three-item scale. The items were modified to reflect the team setting and the referent was adjusted to the team. A sample item reads "All in all, my team is satisfied with its job." The internal reliability of the individual job satisfaction scale was .94.

Team Job Engagement. Team-level work engagement was assessed using the 18-item job engagement scale developed by Rich et al. (2010). The items were modified to reflect the team setting and the referent was adjusted to the team. A sample item reads "Our team works with intensity on our job." The internal reliability of the team job engagement scale was .98.

Individual-level Controls: The study controlled for team members' gender (coded 0 = Female and 1 = Male), age, and the number of years of experience at the individual level. However, respondents' age and the number of years of experience had a very high correlation (r = .91). In addition, there were more missing values for years of experience than age. Thus, the number of years of experience is dropped from further consideration as a control variable.

Team-Level Controls: The study controlled for participants' average age of team members, gender composition of team members, team size, gender of the team leaders (coded as 0= Female and 1= Male), and age of team leaders. Similar to team member respondents, team leaders' age and the number of years of experience had a very high correlation (r =.93). Thus, the number of years of experience is dropped from further consideration as a control variable.

Besides the level-specific controls discussed above, the study controlled for differences in location (i.e., whether the teams were obtained from the head office (coded 0) or from outlying branches (coded 1). This is because an analysis of variance (ANOVA) test indicates that the location of the teams (head office or branches) had a significant effect on team reflexivity (F=4.50, p<.05) and team learning (F=2.98, p<.10).

Analyses

First, I performed a series of MLCFAs using EQS to examine the factor structure of all scales in the study. Given a large number of items relative to the sample size, we used either the known dimensions (team engagement and job engagement) or item parceling (intrateam trust) to reduce the number of parameters estimated in MLCFAs. For team learning, I used its respective items. I also calculated rwg(j) for the team level constructs to examine if the responses from the team members could be aggregated to the team level. Then, I constructed the scales by averaging the items for the respective scales. Finally, I ran multilevel regression analyses using the multilevel package of the R software (version 4.04). Specifically, for the individual-level relationships and multilevel effects, I used the lme function to account for the team and individual level variances. For team-level relationships, I used the lm function to test study hypotheses. To justify the need for multilevel analyses, I calculated ICC(1) for individual-level job engagement and job satisfaction. Finally, I tested for indirect effects using PROCESS macro (Hayes, 2018) using SPSS.

RESULTS

Descriptive Statistics

Tables 1a and 1b present descriptive statistics and correlations for the individual-and team-level variables, respectively. Coefficient alphas are shown in parentheses on the diagonal.

Appendix B: Tables
Table 1a. Descriptive Statistics and Correlations (Individual-Level)

	Variable	Mean	SD	1	2	3	4
1.	Age (Team Members)	29.05	6.20				
2.	Gender (Team Members)	.31	.46	-.14**			
3.	Individual Job Satisfaction	4.51	1.60	.10	-.05	.90	
4.	Individual Job Engagement	5.57	1.05	.08	-.10	.62***	.97

N = 282 (Team Members)   *P<.10   **P<.05   ***p<.01

Note: All significance levels are based on two-tailed tests.

Table 1b. Descriptive Statistics and Correlations (Team-level)

No.	Variable	Mean	SD	1	2	3	4	5	6	7
1.	Location of the team (head office or branches)	0.74	0.44							
2.	Team Size	3.62	0.71	.10						
3.	Gender (Team Members)	0.30	.29	.07	.22					
4.	Age (Team Members)	29.30	4.36	-.41***	-.24**	-.31***				
5.	Age (Team Leaders)	34.69	7.06	-.21	-.28**	-.13	.26**			
6.	Gender (Team Leaders)	0.28	.45	.11	.18	.22	-.13	-.08		
7.	Intrateam Trust	5.32	0.43	-.09	.13	.06	-.00	-.11	.13	.80
8.	Interteam Trust	5.19	0.75	.17	.07	-.02	-.06	-.04	.12	.06
9.	Team Learning	5.16	0.63	-.17	.07	-.08	.10	-.12	.18	.56***
10.	Team Satisfaction	4.47	0.78	.10	.06	-.15	-.01	-.05	.17	.31***
11.	Team Engagement	5.22	0.60	-.02	-.04	-.22*	.04	-.24**	.25**	.43***

N = 78   *P<.10   ** p<.05   ***p<.01

Note: The control variables were omitted from this table for brevity purposes.
All significance levels are based on two-tailed tests.

Table 1b. Descriptive Statistics and Correlations (Team-level) (Continued)

No.	Variables	8	9	10	11	12	13
8.	Interteam Trust	.80					
9.	Team Learning	.11	.83				
10.	Team Satisfaction	.21*	.49***	0.23**	.94		
11.	Team Engagement	.21*	.74***	0.24**	0.62***	.98	

N= 78 (Teams)   *P<.10   ** <.05   ***p<.01

Note: The control variables were omitted from this table for brevity purposes.
All significance levels are based on two-tailed tests.

Tests of Hypotheses

Hypothesis 1 predicted that intrateam trust would be positively related to team members' job satisfaction and job engagement. The results presented in Table 2a (Model 2s) revealed that intrateam trust was significantly related to individual job satisfaction (b=.53, s.e.=.23, p<.01) and individual engagement (b=.49, s.e.=.16, p<.01). Thus, Hypothesis 1 was supported.

Hypothesis 2 predicted that intrateam trust would be positively related to team members' satisfaction and team-level job engagement. As shown in Table 2b (Model 2), the results revealed that intrateam trust was significantly related to team satisfaction (b=.58, s.e. =.20, p<.01) and team job engagement (b=.62, s.e. = .14, p<.01). Thus, Hypothesis 2 was supported.

Table 2a. Multi-Level Regression Results for Predicting the Mediating Role of Team Learning in the Intrateam Trust-Individual Level Outcomes Relationship

VARIABLES	INDIVIDUAL JOB SATISFACTION		INDIVIDUAL JOB ENGAGEMENT	
	MODEL 2	MODEL 3	MODEL 2	MODEL 3
PREDICTOR				
INTRATEAM TRUST	.52***	.24	.49***	.35**
	(.23)	(.23)	(.16)	(.16)
MEDIATOR				
TEAM LEARNING		.68***		.36***
		(.18)		(.12)
R^2	.01	.06	.06	.08

N= 282 (Individuals) N = 78 (teams)   *P<.10   **P<.05   ***p<.01

Note: All control variables were omitted from this table for brevity purposes.
Unstandardized Beta coefficients are reported
Standard errors are reported in brackets
All significance levels are based on two-tailed tests.

Table 2b. Regression Results for Predicting the Mediating Role of Team Learning in the Intrateam Trust-Team Level Outcomes Relationship

VARIABLES	TEAM LEARNING	TEAM SATISFACTION		TEAM ENGAGEMENT	
	MODEL 2	MODEL 2	MODEL 3	MODEL 2	MODEL 3
PREDICTOR					
INTRATEAM TRUST	.42***	.58***	.35*	.62***	.46***
	(.14)	(.20)	(.19)	(.14)	(.14)
MEDIATOR					
TEAM LEARNING			.56***		.38***
			(.15)		(.11)
R^2	.15***	.14***	.28***	.25***	.36***
ΔR^2	.10***	.10***	.14***	.20***	.11***
Δ F-VALUE	8.46***	8.56***	13.55***	18.73***	12.25****

N = 78 (teams)   *P<.10   **P<.05   ***p<.01

Notes: All control variables were omitted from this table for brevity purposes.
Unstandardized Beta coefficients are reported.
Standard errors are reported in brackets
All significance levels are based on two-tailed tests

Hypothesis 3a predicted that intrateam trust would be positively related to team learning. As indicated in Table 2b, the results revealed that intrateam trust was significantly related to team learning (b=.42; s.e.=.14, p<.01). Hence, Hypothesis 3a was supported.

Hypothesis 3b proposed that team learning would mediate the relationship between intrateam trust and the outcomes (job satisfaction and employee engagement) at individual and team levels. At the individual level, the results shown in Table 2a indicate intrateam trust was significantly related to individual job satisfaction (b=.52, s.e.=.23, p<.05) and individual engagement (b=.49, s.e.=.16, p<.01). The results presented in Table 2a (Model 3) show that after controlling for team learning, the relationships between intrateam trust and individual job satisfaction was no longer significant (b=.24, s.e.=.23, p>.10) while the relationship between intrateam trust and individual job engagement was still significant (b=.35, s.e.=.16, p<.05). Thus, a full mediation and a partial mediation were found on individual job satisfaction and individual job engagement, respectively.

At the team level, the results presented in Table 2b (Model 2) indicate that intrateam trust significantly predicted team learning (b=.42, s.e.=.14, p<.01), team satisfaction (b=.58, s.e.=.20, p<.01) and team engagement, (b=.62, s.e.=.14, p<.01). The results presented in Table 2b (Model 3) show that after controlling for team learning, the relationship between intrateam trust and team satisfaction (b=.35, s.e.=.19, p<.10) and intrateam trust and team engagement (b=.46, s.e.=.14, p<.01) were still significant, implying partial mediation.

To establish the significance of the indirect effects of the mediated relationships, I used the PROCESS procedure for bias-corrected bootstrapping (Hayes, 2018) to compute a 95% confidence interval. The result confirmed the significant indirect effect of team learning on the relationship between intrateam trust and team satisfaction (indirect effect = .24, boot S.E. =.12, p <.01, 95% CI = [.06, .54]) and on the relationship between intrateam trust and team engagement (indirect effect = .16, boot S.E. = .08, p < .01, 95% CI = [.04, .37]). Hence, full mediation was obtained on both team-level outcome variables. Thus, Hypothesis 3b was supported.

DISCUSSION

Trust is the basis for effective relationships in organizations. Employees' attitudes and behaviors are influenced by their level of trust in the partner, whether that partner is other employees (e.g., team members) or an entity (organization). In this study, I investigated the role of intrateam trust (trust within teams) in influencing organizational outcomes at individual and team levels. I found the multilevel effects of intrateam trust in influencing organizational outcomes at individual and team levels. Moreover, I found evidence that intrateam trust improved team learning, which in turn enhanced satisfaction and engagement at both individual and team levels.

Contributions of the Study

This study contributes to a small but growing body of literature on the effect of team trust on organizational outcomes (e.g., Braun et al., 2013; De Jong & Dirks, 2012; Lee et al., 2010) by providing a multi-level test of the consequences and mediators of intrateam trust. Based on the results obtained, this study has multiple theoretical and practical contributions.
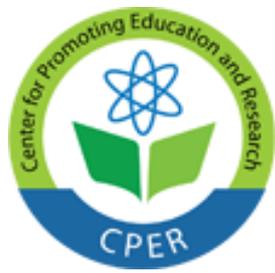
Theoretical Contributions

Several theoretical contributions stem from this study and serve to promote research opportunities for future studies. In this section, I highlight four primary contributions to the team trust literature.

First, this study provides empirical evidence that intrateam trust is an important predictor of job satisfaction and job engagement both at individual and team levels. In doing so, this study has built upon Braun et al.'s (2013) earlier work theoretically and empirically suggesting the benefits associated with intrateam trust at different organizational levels.

Second, through an investigation of the team processes as mediators of the effect of intrateam trust on organizational outcomes, I build upon and expand De Jong and colleagues' previous work exploring mediators of the effects of team trust on outcomes (e.g., De Jong & Elfring, 2010; Mach et al., 2010; Madjar & Ortiz-Walters, 2009). The current research findings complement and expand their earlier findings (which suggested team monitoring, team effort, team cohesion, and team psychological safety as mediators of the team trust-team outcomes relationship) in that team processes mediated the relationships not only at the team level but also at an individual level. These findings inform existing literature by providing evidence that team learning plays a vital role in transmitting the effect of intrateam trust on organizational outcomes across levels.

Third, the study is the first to examine the effect of team trust on organizational outcomes in a new research context, Ethiopia (and Africa, in general), where there is scarce research on this topic. Thus, the findings of the study would answer recent calls to do trust research in different cultural and social contexts (Braun et al., 2013; Fulmer & Gelfand, 2012). In doing so, the results provide empirical support to the 'universal' role of trust in organizational relationships (Ferrin & Gillespie, 2010) across different contexts. Moreover, the results revealed that the effects of trust identified in existing, typically North American, models are largely relevant across other contexts (Wasti & Tan, 2010).

Finally, the cross-lagged research design addresses the shortcomings of prior cross-sectional studies (e.g., De Jong & Elfring, 2010) and helps to establish a cause-effect relationship between team trust and organizational outcomes across levels. Moreover, the cross-lagged research design helps to reduce inflated relationships by minimizing common method bias (P. Podsakoff, MacKenzie, Lee, & N. Podsakoff, 2003).

Practical Implications

Several practical implications also stem from the findings of this study. First, this study reveals that intrateam trust has a constructive effect on organizational outcomes across levels. Specifically, intrateam trust positively affects job satisfaction and employee engagement at individual and team levels. Accordingly, the results suggest that organizations will benefit significantly if they focus on trust-building initiatives within teams. Specifically, teams that strive to improve job satisfaction and employee engagement should be encouraged

(e.g., by managers, etc.) to work on building and nurturing trust.

Second, the positive impact of intrateam trust on outcomes implies that to promote organizational outcomes, managers and team leaders need to actively engage in managing interpersonal relationships and fostering trust within teams. Moreover, by showing that intrateam trust enhances job satisfaction and job engagement of teams and individual team members, the findings demonstrate the importance and practical meaningfulness of trust in team contexts.

Third, the results of the study suggest that team processes play a critical role in transmitting the effects of intrateam team trust to outcomes. This implies that, in addition to nurturing the development of trust within teams, managers, team leaders, supervisors, etc. should create an atmosphere that promotes camaraderie and cohesiveness and facilitates learning and reflection among teammates.

Limitations and Future Research Directions

The current study, however, is not without limitations. First, the current study investigated the effect of intrateam trust on organizational outcomes using 282 individuals nested under 78 teams from one organization. Though the sample size at the individual level was moderate (282 individuals), the number of teams in this study was relatively small (78 teams). This small sample size might have limited the generalizability of the findings. Sampling a greater number of teams is especially important in detecting cross-level moderating effects (Mathieu, Aguinis, Culpepper, & Chen, 2012). Thus, further studies of team trust should collect data from a larger number of teams working in different settings and/or multiple organizations.

Second, despite the use of multiple sources (team members, team leaders) and multiple times to collect data, the current study primarily used self-ratings in measuring most of the study variables. This may lead to biased responses. Future studies should therefore collect data from multiple sources to minimize any potential bias. Finally, this study measured team-level constructs through the aggregation method. Yet, team-level measures can also be assessed using group discussion or consensus ratings methods. Indeed, some studies show that the group discussion method is a better predictor of team outcomes than the aggregation method (e.g., Quigley, Tekleab, & Tesluk, 2007). Hence, a future study using team-level scales that do not rely on aggregating individual-level responses would be worthwhile.

CONCLUSION

Recent team trust research has shifted from its traditional focus on individual-level trust to multilevel team trust study and beyond. Building upon and extending this research, the current study explored the effects and the mediators of intrateam trust on organizational outcomes. Support was found for the effects of intrateam trust on job satisfaction and job engagement at both individual and team levels. In addition, this study also showed that team learning is
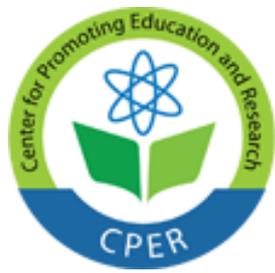
an important mediator of the effect of intrateam trust on organizational outcomes across levels.

References

Akgün, A. E., Lynn, G. S., Keskin, H., & Dogan, D. (2014). Team learning in IT implementation projects: Antecedents and consequences. *International Journal of Information Management*, 34(1), 37-47.

Argote, L., McEvily, B., & Reagans, R. (2003). Managing knowledge in organizations: An integrative framework and review of emerging themes. *Management Science*, 49(4), 571-582.

Aryee, S., Budhwar, P.S., & Chen, Z.X. (2002). Trust as a mediator of the relationship between organizational justice and work outcomes: Test of a social exchange model. *Journal of Organizational Behavior*, 23(3): 267-285.

Baer, M., & Frese, M. (2003). Innovation is not enough: Climates for initiative and psychological safety, process innovations, and firm performance. *Journal of Organizational Behavior*, 24(1), 45-68.

Bakker, A.B. & Bal, M.P. (2010). Weekly work engagement and performance: A study among starting teachers. *Journal of Occupational and Organizational Psychology*, 83(1): 189-206.

Bakker, A. B. & Demerouti, E. (2007). The job demands-resources model: State of the art. *Journal of Managerial Psychology*, 22(3), 309-328.

Bakker, A. B., Albrecht, S. L., & Leiter, M. P. (2011). Key questions regarding work engagement. *European Journal of Work and Organizational Psychology*, 20(1), 4-28.

Blau, P.M. (1964). *Exchange and Power in Social Life*. Transaction Publishers.

Braun, S., Peus, C., Weisweiler, S., & Frey, D. (2013). Transformational leadership, job satisfaction, and team performance: A multilevel mediation model of trust. *The Leadership Quarterly*, 24(1): 270-283.

Breuer, C., Hüffmeier, J., & Hertel, G. (2016). Does trust matter more in virtual teams? A meta-analysis of trust and team effectiveness considering virtuality and documentation as moderators. *Journal of Applied Psychology*, 101(8): 1151-1177.

Brower, H. H., Lester, S. W., Korsgaard, M. A., & Dineen, B. R. (2009). A closer look at trust between managers and subordinates: Understanding the effects of both trusting and being trusted on subordinate outcomes. *Journal of Management*, 35(2), 327-347.

Bunderson, J. S., & Sutcliffe, K. M. (2003). Management team learning orientation and business unit performance. *Journal of Applied Psychology*, 88(3), 552-560.

Burke, M. J., Holman, D., & Birdi, K. (2006). A walk on the safe side: The implications of learning theory for developing effective safety and health training. In G. P. Hodgkinson, & J. K. Ford (Eds.), *International Review of Industrial and Organizational Psychology* (pp. 1–44). Chichester, UK: Wiley.

Burke, S., Salas, E., & Diaz, D. (2008). The role of team learning in facilitating team adaptation within complex environments: Tools and strategies. In Valerie Sessa, & Manuel London (Eds.), Work group learning. Understanding, improving & assessing how groups learn in organizations (pp. 15–44). Mahwah, NJ: Lawrence Erlbaum Associates.

Cao, Z., & Lumineau, F. (2015). Revisiting the interplay between contractual and relational governance: A qualitative and meta-analytic investigation. *Journal of Operations Management*, 33, 15-42.

Chou, L. F., Wang, A. C., Wang, T. Y., Huang, M. P., & Cheng, B. S. (2008). Shared work values and team member effectiveness: The mediation of trustfulness and trustworthiness. *Human Relations*, 61(12), 1713-1742.

Chowdhury, S. (2005). The role of affect-and cognition-based trust in complex knowledge sharing. *Journal of Managerial Issues*, 310-326.

Chughtai, A.A. & Buckley, F. (2013). Exploring the impact of trust on research scientists' work engagement: Evidence from Irish science research centers. *Personnel Review*, 42, 396-421.

Colquitt, J.A., LePine, J.A., Zapata, C.P., & Wild, R.E. (2011). Trust in typical and high-reliability contexts: Building and reacting to trust among firefighters. *Academy of Management Journal*, 54(5): 999-1015.

Colquitt, J. A., Scott, B. A., & LePine, J. A. (2007). Trust, trustworthiness, and trust propensity: a meta-analytic test of their unique relationships with risk-taking and job performance. *Journal of Applied Psychology*, 92(4): 909-927.

Costa, A.C., Fulmer, C.A., & Anderson, N.R. (2018). Trust in work teams: An integrative review, multilevel model, and future directions. *Journal of Organizational Behavior*, 39(2): 169-184.

Costa, A.C., Roe, R.A., & Taillieu, T. (2001). Trust within teams: The relation with performance effectiveness. *European*
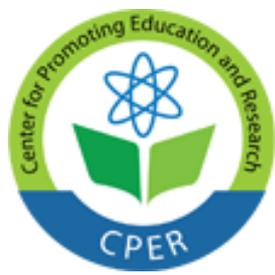
Journal of Work and Organizational Psychology, 10(3): 225-244.

Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review*, 32(5), 605-622.

Davenport, T. H., Jarvenpaa, S. L., & Beers, M. C. (1996). Improving Knowledge Work Processes. *Sloan Management Review*, 37(4), 53-65.

De Jong, B.A. & Dirks, K.T. (2012). Beyond shared perceptions of trust and monitoring in teams: implications of asymmetry and dissensus. *Journal of Applied Psychology*, 97(2): 391-406.

De Jong, B.A. & Elfring, T. (2010). How does trust affect the performance of ongoing teams? The mediating role of reflexivity, monitoring, and effort. Academy of Management Journal, 53(3): 535-549.

De Jong, B.A., Dirks, K.T., & Gillespie, N. (2016). Trust and Team Performance: A Meta-Analysis of Main Effects, Moderators, and Covariates. *Journal of Applied Psychology*, 101(8): 1134-1150.

De Jong, B.A., Gillespie, N., Williamson, I., & Gill, C. (2021). Trust Consensus Within Culturally Diverse Teams: A Multistudy Investigation. *Journal of Management*, 47(8): 2135-2168.

Den Hartog, D. N., De Hoogh, A. H., & Keegan, A. E. (2007). The interactive effects of belongingness and charisma on helping and compliance. *Journal of Applied Psychology*, 92(4), 1131-1139.

Dionne, S. D., Sayama, H., Hao, C., & Bush, B. J. (2010). The role of leadership in shared mental model convergence and team performance improvement: An agent-based computational model. *The Leadership Quarterly*, 21(6), 1035-1049.

Dirks, K.T. & Skarlicki, D.P. (2009). The Relationship Between Being Perceived as Trustworthy by Coworkers and Individual Performance. *Journal of Management*, 35(1): 136-157.

Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. Journal of applied psychology, 87(4), 611-628.

Downey, S.N., van der Werff, L., Thomas, K.M., & Plaut, V.C. (2015). The role of diversity practices and inclusion in promoting trust and employee engagement. *Journal of Applied Social Psychology*, 45(1): 35-44.

Edmondson, A. (1999). Psychological safety and learning behavior in work teams. *Administrative Science Quarterly*, 44(2): 350-383.

Edmondson, A. C. (2004). *Psychological Safety, Trust and Learning in Organizations: A Group-Level Lens*. In R. Kramer & K. Cook (Eds.), Trust and Distrust across Organizational Contexts: Dilemmas and Approaches (pp. 239-272). New York: Russell Sage.

Edmondson, A. C., Dillon, J. R., & Roloff, K. S. (2007). 6 Three Perspectives on Team Learning: Outcome Improvement, Task Mastery, and Group Process. *The Academy of Management Annals*, 1(1), 269-314.

Edwards, J. R., & Cable, D. M. (2009). The value of value congruence. *Journal of Applied Psychology*, 94(3), 654-677.

Eldor, L., & Harpaz, I. (2016). A process model of employee engagement: The learning climate and its relationship with extra-role performance behaviors. *Journal of Organizational Behavior*, 37(2), 213-235.

Ellis, A. P., Hollenbeck, J. R., Ilgen, D. R., Porter, C. O., West, B. J., & Moon, H. (2003). Team learning: collectively connecting the dots. *Journal of Applied Psychology*, 88(5), 821-835.

Ferrin, D. L., & Gillespie, N. (2010). Trust differences across national-societal cultures: Much to do, or much ado about nothing. *Organizational trust: A cultural perspective*, 42-86.

Fortune. (2021). 100 Best companies to work for. https://fortune.com/best-companies/2021/. 05/10/2021

Fulmer, C.A. & Gelfand, M.J. (2012). At What Level (And In Whom) We Trust: Trust Across Multiple Organizational Levels. *Journal of Management*, 38(4): 1167-1230.

Gouldner, A. W. (1960). The norm of reciprocity: A preliminary statement. *American Sociological Review*, 161-178.

Hayes, A.F. (2018). Partial, conditional, and moderated mediation: Quantification, inference, and interpretation. *Communication Monographs*, 85(1): 4-40.

Hughes, M., Rigtering, J.C., Covin, J.G., Bouncken, R.B., & Kraus, S. (2018). Innovative behavior, trust, and perceived workplace performance. *British Journal of Management*, 29(4): 750-768.

Jiang, L., & Probst, T. M. (2015). Do your employees (collectively) trust you? The importance of trust climate beyond individual trust. *Scandinavian Journal of Management*, 31(4), 526-535.

Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy Of Management Journal*, 37(3), 656-669.

Kozlowski, S. W. J. & Bell, B. S. (2008). *Team learning, development, and adaptation* [Electronic version]. In V. I. Sessa & M. London (Eds.), Work group learning (pp. 15-44). Mahwah, NJ: Lawrence Erlbaum Associates

Kramer, R.M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual Review of*
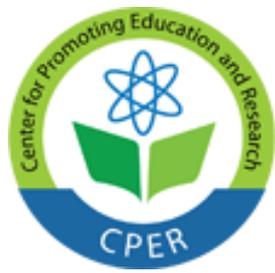
Psychology, 50(1): 569-598.

Lado, A. A., Dant, R. R., & Tekleab, A. G. (2008). Trust-opportunism paradox, relationalism, and performance in interfirm relationships: evidence from the retail industry. *Strategic Management Journal*, 29(4), 401-423.

Langfred, C.W. (2004). Too much of a good thing? Negative effects of high trust and individual autonomy in self-managing teams. *Academy of Management Journal*, 47(3): 385-399.

Langfred, C.W. (2007). The downside of self-management: A longitudinal study of the effects of conflict on trust, autonomy, and task interdependence in self-managing teams. *Academy of Management Journal*, 50(4): 885-900.

Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management Learning*, 473–491

Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review*, 23(3), 438-458.

Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management*, 32(6), 991-1022.

Liu, D., Hernandez, M., & Wang, L. (2014). The role of leadership and trust in creating structural patterns of team procedural justice: A social network investigation. *Personnel Psychology*, 67(4), 801-845.

Lubatkin, M. H., Simsek, Z., Ling, Y., & Veiga, J. F. (2006). Ambidexterity and performance in small-to medium-sized firms: The pivotal role of top management team behavioral integration. *Journal of Management*, 32(5), 646-672.

MacCurtain, S., Flood, P. C., Ramamoorthy, N., West, M. A., & Dawson, J. F. (2010). The top management team, reflexivity, knowledge sharing and new product performance: a study of the Irish software industry. *Creativity and Innovation Management*, 19(3), 219-232.

Macey, W. H., & Schneider, B. (2008). The meaning of employee engagement. *Industrial and Organizational Psychology*, 1(1), 3-30.

Mach, M., Dolan, S., & Tzafrir, S. (2010). The differential effect of team members' trust on team performance: The mediation role of team cohesion. *Journal of Occupational and Organizational Psychology*, 83(3): 771-794.

Madjar, N., & Ortiz-Walters, R. (2009). Trust in supervisors and trust in customers: Their independent, relative, and joint effects on employee performance and creativity. *Human Performance*, 22(2), 128-142.

Mathieu, J. E., Aguinis, H., Culpepper, S. A., & Chen, G. (2012). Understanding and estimating the power to detect cross-level interaction effects in multilevel modeling. *Journal of Applied Psychology*, 97(5), 951-966.

Mayer, R.C. & Gavin, M.B. (2005). Trust in management and performance: Who minds the shop while the employees watch the boss? *Academy of Management Journal*, 48(5): 874-888.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734.

McAllister, D.J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1): 24-59.

Netemeyer, R. G., Maxham III, J. G., & Lichtenstein, D. R. (2010). Store manager performance and satisfaction: effects on store employee performance and satisfaction, store customer satisfaction, and store customer spending growth. *Journal of Applied Psychology*, 95(3), 530-545.

Ozyilmaz, A. (2020) Hope and human capital enhance job engagement to improve workplace outcomes. *Journal of Occupational and Organizational Psychology*, 93(1): 187-214.

Ozyilmaz. A., Erdogan, B., & Karaeminogullari A (2018) Trust in organization as a moderator of the relationship between self-efficacy and workplace outcomes: A social cognitive theory-based examination. *Journal of Occupational and Organizational Psychology*, 91(1): 181-204.

Podsakoff, P. M., MacKenzie, S. B., Lee, J. Y., & Podsakoff, N. P. (2003). Common method biases in behavioral research: a critical review of the literature and recommended remedies. *Journal of Applied Psychology*, 88(5), 879-903.

Quigley, N.R., Tekleab, A.G., & Tesluk, P.E. (2007). Comparing Consensus- and Aggregation-Based Methods of Measuring Team-Level Variables. *Organizational Research Methods*, 10, 589-608.

Rich, B.L., Lepine, J.A., & Crawford, E.R. (2010). Job engagement: Antecedents and effects on job performance. *Academy of Management Journal*, 53(3): 617-635.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review*, 23(3), 393-404.

Salas, E., Sims, D.E., & Burke, C.S. (2005). Is there a "big five" in teamwork? *Small Group Research*, 36(5): 555-599.
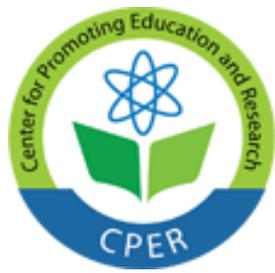
Salisbury, M. (2001). An example of managing the knowledge creation process for a small work group. *Management Learning*, 32(3), 305-319.

Schaubroeck, J., Carmeli, A., Bhatia, S., & Paz, E. (2016). Enabling team learning when members are prone to contentious communication: The role of team leader coaching. *Human Relations*, 0018726715622673.

Schippers, M. C., Den Hartog, D. N., Koopman, P. L., & Wienk, J. A. (2003). Diversity and team outcomes: The moderating effects of outcome interdependence and group longevity and the mediating effect of reflexivity. *Journal of Organizational Behavior*, 24(6), 779-802.

Serva, M. A., Fuller, M. A., & Mayer, R. C. (2005). The reciprocal nature of trust: A longitudinal study of interacting teams. *Journal of Organizational Behavior*, 26(6), 625-648.

Sonpar, K., Handelman, J. M., & Dastmalchian, A. (2009). Implementing new institutional logics in pioneering organizations: The burden of justifying ethical appropriateness and trustworthiness. *Journal of Business Ethics*, 90(3), 345-359.

Szulanski, G., Cappetta, R., & Jensen, R.J. (2004). When and how trustworthiness matters: Knowledge transfer and the moderating effect of causal ambiguity. *Organization Science*, 15(5): 600-613.

Tan, H.H. & Lim, A.K. (2009). Trust in coworkers and trust in organizations. *The Journal of Psychology*, 143(1): 45-66.

Tekleab, A.G. & Chiaburu, D.S. (2011). Social exchange: Empirical examination of form and focus. *Journal of Business Research*, 64(5): 460-466.

Tourigny, L., Han, J., Baba, V.V., & Pan, P. (2019). Ethical leadership and corporate social responsibility in China: A multilevel study of their effects on trust and organizational citizenship behavior. *Journal of Business Ethics*, 158(2): 427-440.

Tsai, W.C., Chi, N.W., Grandey, A.A., & Fung, S.C. (2012). Positive group affective tone and team creativity: Negative group affective tone and team trust as boundary conditions. *Journal of Organizational Behavior*, 33(5): 638-656.

van Der Vegt, G. S., & Bunderson, J. S. (2005). Learning and performance in multidisciplinary teams: The importance of collective team identification. *Academy of Management Journal*, 48(3), 532-547.

van Woerkom, M., & Croon, M. (2009). The relationships between team learning activities and team performance. *Personnel Review*, 38(5), 560-577.

Verburg, R.M., Nienaber, A.M., Searle, R.H., Weibel, A., Den Hartog, D.N., & Rupp, D.E. (2018). The role of organizational control systems in employees' organizational trust and performance outcomes. *Group and Organization Management*, 43(2): 179-206.

Wasti, S. A., & Tan, H. 2010. *Antecedents of supervisor trust in collectivist cultures: Evidence from Turkey and China*. In M. N. K. Saunders, D. Skinner, G. Dietz, N. Gillespie, & R. J. Lewicki (Eds.), Organizational trust: A cultural perspective: 311-334. Cambridge, UK: Cambridge University Press.

Wibowo, A. & Hayati, N.R. (2019). Empowering leadership and trust on team learning behavior. *Journal of Management Development*, 38(3): 238-248.

Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization Science*, 9(2), 141-159.

Zhong, L., Wayne, S.J., & Liden, R.C. (2016). Job engagement, perceived organizational support, high-performance human resource practices, and cultural value orientations: A cross-level investigation. *Journal of Organizational Behavior*, 37(6): 823-844.