

# **VERTICAL TRUST WITHIN ORGANIZATIONS AND PERFORMANCE: A SYSTEMATIC REVIEW**

## **Abstract**

The concept of trust within organizations, or intra-organizational trust, has been considered as a potential mechanism to increase performance and as such, has attracted growing interest in the organizational literature. However, despite the increasing number of studies examining the relationship between intra-organizational trust and performance, this apparently positive link has not been consistently confirmed by empirical research, and a deeper understanding is called for. Moreover, the literature on the trust–performance link is highly fragmented and dispersed. This study carries out a systematic review of the evidence, focusing on the vertical dimension of intra-organizational trust and performance relationship in an attempt to provide an integrative picture of the existing literature and to propose new research avenues on the topic. Specifically, this systematic review delves deeper into the antecedents, mediating effects and moderators of vertical intra-organizational trust and performance, providing a more comprehensive framework for these relationships.

*Keywords:* trust, vertical trust, organizational trust, performance

## Introduction

In recent years, heightened interest in understanding the role of trust in organizations has given rise to a burgeoning body of research on the importance of trust. This interest has been fueled partly by accumulating evidence that trust has a number of important benefits for organizations and their members (Kramer, 1999). For example, the literature reports that trust enhances cooperation and healthy teamwork, improves communication and employee satisfaction, creates more positive attitudes, facilitates organizational citizenship behavior (OCB), and increases task, group and organizational performance (e.g., Davis, Schoorman, Mayer, & Tan, 2000; De Jong, Dirks, & Gillespie, 2016; Dirks & Ferrin, 2001; Matzler & Renzl, 2006; Podsakoff, MacKenzie, Moorman, & Fetter, 1990). Thus, trust seems to be a valuable resource within organizations that has significant organizational, group and individual implications.

Moreover, in a complex and unstable business environment, organizations tend to develop from traditional hierarchical forms into flexible and network forms, which demand increasing levels of mutual trust (Bijlsma-Frankema, 2004; Costa & Peiro, 2009). Likewise, traditional management forms have given way to more collaborative approaches based on cooperative working where trust is seen as a critical element (Costa, 2003; Fulmer & Gelfand, 2012). In fact, with technology transforming workplaces from physical spaces into virtual environments, building trust among organizational members has become increasingly important for the effectiveness of global organizations and virtual teams (Germain & McGuire, 2014).

In particular, the human resource development (HRD) literature has identified trust as an essential component for employee development (Tansky & Cohen, 2001), learning

processes and knowledge sharing (Germain & McGuire, 2014; Song, Kim, & Kolb, 2009), team development and success (Kang & Stewart, 2007), social capital development (Germain & McGuire, 2014; Gubbins & MacCurtain, 2008) and organizational growth and effectiveness (Kang & Stewart, 2007). Intra-organizational trust—or trust within organizations—is therefore becoming central to the functioning of organizations and seems to be critical to the effectiveness and development of individuals, teams, and organizations.

Intra-organizational trust is a multidimensional construct that encapsulates lateral trust, which is the trust relationships among peers (or equals), and vertical trust, or the trust through hierarchical relationships (Costigan, Iiter, & Berman, 1998; McCauley & Kuhnert, 1992). Accumulated evidence has consistently confirmed a positive relationship between team or lateral trust and performance (e.g., Dirks, 1999; Palanski, Kahai, & Yammarino, 2011; Shen & Chen, 2007). However, in the case of vertical trust within organizations the apparent positive link between trust and performance seems less obvious in light of the mixed results from empirical research. For example, Mayer and Gavin (2005) found that while trust in leadership is positively related to extra-role performance, when it is associated with in-role performance the relationship is non-significant. Other empirical research has also found that trust in organizational leaders has positive consequences for organizational performance, whereas non-significant effects were found between trust in direct leaders and organizational performance (e.g., Cho & Poister, 2014). Similarly, although trust in the organization has been confirmed as a precursor of performance (e.g., Guinot, Chiva, & Mallén, 2013; Vanhala & Dietz, 2015), other studies report non-significant effects on the relationship (e.g., Tremblay, Cloutier, Simard, Chênevert, & Vandenberghe, 2010).

Moreover, although a recent meta-analysis by De Jong et al. (2016) examined the conditions under which lateral trust (e.g., intra-team trust) seems to affect team performance,

previous meta-analytic reviews of trust have focused on certain trust referents (i.e., leaders or coworkers) and specific measures of performance (i.e., job performance) (e.g., Colquitt et al., 2007; Dirks & Ferrin, 2002). Furthermore, no systematic literature review has yet analyzed the vertical trust–performance relationship. Therefore, further review of vertical trust is needed to provide a complete picture that integrates the empirical results of the literature by including more vertical trust referents (i.e., trust in leaders, trust in subordinates, trust in organization and leadership-follower mutual trust) and a broad set of performance measures (i.e., job performance, team performance and organizational performance). Accordingly, this review analyzes the relationships between vertical intra-organizational trust and individual, team and organizational performance measures, in an attempt to provide an integrative framework for this research question.

Our review of the literature on this link is therefore motivated by the need for further understanding of the relationship between vertical intra-organizational trust and performance. Given the number of quantitative studies on the trust–performance link that have proliferated over the past two decades, our understanding of this connection could be improved by synthesizing the evidence of a diverse sample of empirical studies, and examining and discussing in detail the variations in how the relationship is studied. The resulting theoretical and empirical review could serve as a reference framework providing a more comprehensive view of the vertical intra-organizational trust–performance relationship, integrating the existing literature.

This review involved a systematic literature search using the Web of Science. The review is limited to empirical studies analyzing the role of vertical trust within organizations in several dimensions of performance (employee job performance, team performance and organizational performance). We adopt a multiple referent analysis approach—trust in leader,

in subordinates and in the whole organization—to organize research conducted on vertical intra-organizational trust between 1997 and 2016 at individual, team, and organizational levels of analysis.

In our analysis of the vertical trust–performance relationship, we will describe the antecedents of vertical intra-organizational trust considered in the literature (when vertical trust is a mediating/moderating variable), as well as the contextual factors that affect this relationship (moderating variables such as structure, culture, practices, etc.), and the variables that mediate the trust–performance link. In sum, we delve deeper into the antecedents, mediating effects and moderators of vertical intra-organizational trust and performance in order to integrate the existing literature on the relationship. A systematic understanding of the current findings in this promising but fragmented topic could also establish some basic guidelines to address future research more appropriately and map new avenues to explore in the area.

## **Theoretical Background**

In this section we provide the theoretical foundations of the concept of trust, define the measures of performance examined in the study and then we provide the main theoretical mechanisms explaining the relationship between different vertical trust referents and measures of performance.

### **Organizational Trust**

In an attempt to integrate all essential components based on the different approaches used to investigate trust in organizations, Mayer, Davis and Schoorman (1995, p. 712) defined organizational trust as ‘the willingness of one party to be vulnerable to the actions of another party based on the expectation that the other party will perform a particular action important to the trustor, irrespective of the ability to monitor or control the other party’. Thus, one person’s trust in another is generally based on his or her expectations of the intentions or behavior of the other party. Such Mayer’s et al. conceptualization of trust has been predominantly used by academics in the study of organizational trust.

Two main forms of interpersonal trust—*affective* and *cognitive* trust—have been distinguished as psychological foundations for understanding the extent to which one person is willing to trust another (Lewis & Weigert, 1985; McAllister, 1995). The rational decision to trust the other party involves the cognitive base of trust. This decision is based on qualities such as responsibility, dependability and competence (Costigan et al., 1998). On the other hand, *affect-based* trust is grounded in reciprocal interpersonal care and concern or emotional bonds (McAllister, 1995). When this type of trust relationship arises, individuals are emotionally involved, show sincere interest and concern for the other party, believe in the intrinsic virtue of these relationships and understand that these feelings will be reciprocated (McAllister, 1995). Thus, available knowledge of trustworthiness (i.e., reliability and dependability) is the basis upon which rational trust and the emotional bonds between individuals (i.e., interpersonal care and concern) provide the basis for affective trust (McAllister, 1995). However, *cognition-based* trust is seen as more superficial and less special than *affect-based* trust, since trust relationships are closely grounded in interpersonal affect and emotion (Johnson-George & Swap, 1982). As McAllister (1995, p. 30) points out, “people’s baseline expectations for peer reliability and dependability must be met before they

will invest further in relationships”. Thus, early levels of trust are possible and are driven by cognitive issues, whereas affective trust becomes more important as the relationship develops (Webber, 2008).

Trust is both an interpersonal and collective phenomenon (Zaheer, McEvily, & Perrone, 1998) and it is expressed at three levels within organizations: individual, team and organizational (Costa, 2003; Tan & Lim, 2009). Trust at the individual level denotes an individual’s degree of trust in another party; trust at the team level refers to the aggregated degree of trust that is shared with sufficient consensus among team members; and trust at the organizational level involves the aggregated degree of trust shared with sufficient consensus among members in an organization (Fulmer & Gelfand, 2012).

Employees may develop trust beliefs in an individual referent, whereby individuals trust specific individuals, such as their supervisors, subordinates, leaders, managers or coworkers; and in the collective referent, whereby employees build trust relationships with a collective entity such as a team or an organization. Thus, although most research refers to organizational trust as the trust within organizations, it can also include trust in other organizations such as partners, clients or suppliers. Accordingly, organizational trust has been classified into intra- and inter-organizational trust. Intra-organizational trust refers to trust among members in the same organization (Trapp, 2011), whereas inter-organizational trust, according to Zaheer et al., refers to “the extent to which organizational members have a collectively-held trust orientation toward [a] partner firm” (1998).

Intra-organizational trust has been described as a multidimensional variable that can be lateral or vertical (Costigan et al., 1998; McCauley & Kuhnert, 1992). This theoretical review focuses on the vertical dimension of intra-organizational trust. While lateral trust

refers to the trust between workmates or equals sharing a similar employment position, vertical trust refers to trust between workers and their leaders, their subordinates or organizations as a whole (McCauley & Kuhnert, 1992). Trust in leadership/subordinates is defined as an expectation or belief that employees/leaders can rely on their leader/subordinate's actions or words and that the leader/subordinate has good intentions (Dirks, 2000). On the other hand, trust in the organization is considered as the "employee's willingness to be vulnerable to the actions of the organization, whose behavior and actions he or she cannot control" (Tan & Lim, 2009, p.46).

## **Performance**

In this systematic review, we examine performance at three levels: individual job performance, team performance and organizational performance. Viswesvaran and Ones define individual job performance as the "scalable actions, behaviors and outcomes that employees engage in or bring about that are linked with and contribute to organizational goals" (2000). It is viewed as a multi-faceted construct that includes in-role and extra-role performance (Viswesvaran & Ones, 2000). In-role performance, or task performance, refers to the proficiency with which employees perform activities that are formally recognized as part of their jobs, and concerns the accomplishment of duties and tasks that are specified in a job description (Humborstad, Nerstad, & Dysvik, 2014; Viswesvaran & Ones, 2000). On the other hand, extra-role performance entails individual behavior that goes beyond an employee's formal work role and that promotes the effective functioning of the organization (Organ, 1988). This study analyzes these two job performance dimensions.



Team performance is defined as the extent to which the team's outputs meet the standards set by the organization in terms of quantity and quality of work; these standards reflect how well the team members accomplish their goals or mission (Devine & Phillips, 2001). Thus, team performance refers to any indicator of the quantity and quality of team outputs, such as efficiency, productivity, cooperation, coordination, response time, product quality, customer satisfaction and innovation, among others (Cohen & Bailey, 1997). Accordingly, we include studies using quantitative or qualitative measures of team performance.

Organizational performance has been conceptualized in different ways, however, in general terms, it reflects the degree to which an organization accomplishes its organizational goals in an effective and efficient manner (Civelek, Cemberci, Artar, & Uca, 2015). Both objective and subjective indicators have been used to measure the concept. Thus, in this study organizational performance includes both objective (e.g., profit, return on investment, productivity, growth) and subjective performance outcomes (e.g., quality of products and services, client satisfaction, innovativeness). Other particular organizational performance indicators such as HR performance are also included in the study.

### **Vertical Trust and Performance Relationship**

Two different theoretical perspectives—a relationship-based perspective and a character-based perspective—have been proposed to describe how trust in leaders or supervisors affects performance. The relationship-based perspective is grounded in social exchange processes (Blau, 1964). Thus, in high-quality leader-follower relationships, in which leaders show care and consideration, individuals tend to reciprocate with desirable

behaviors such as spending more time or effort on required tasks, and willingness to engage in OCBs (Dirks & Skarlicki, 2004). In turn, the character-based perspective concerns the perception of a leader's character and how it affects followers' vulnerability (e.g., Mayer, Davis, & Schoorman, 1995). Thus, when followers perceive that their leaders possess the characteristics of integrity, capability or benevolence, they feel more at ease participating in risk behaviors (e.g., sharing sensitive information or not covering their backs), which facilitates task performance and OCB. In the main, the literature suggests that trust in leaders may affect job performance through these two complementary routes.

Likewise, according to social exchange principles, employees with a high level of trust in their leader may interpret his or her actions more favorably, with the result that they are more willing to accept vulnerability to management would not waste their time and energy on self-preserving activities, and will therefore be able to focus attention on the work that needs to be done (e.g., in-role performance) and activities that add value to an organization (e.g., extra-role performance) (Mayer & Gavin, 2005). In contrast, a lack of trust in leadership—that is, unwillingness to be vulnerable to management—leads the employee to waste cognitive resources on nonproductive issues and self-protective behaviors that divert attention away from the task and undermine performance (Mayer & Gavin, 2005). Based on the above argumentations, the literature suggests that trust may affect performance outcomes indirectly through variables such as social exchange or attention focus (e.g., Krosgaard, Brodt, & Whitener, 2002; Mayer & Gavin, 2005). Indeed, since trust is a critical variable that governs employee attribution and interpretation of manager behavior, it has been proposed as a decisive moderator of performance because it shapes followers' attributions of leader intentions (Crossley et al., 2013; Dirks & Ferrin, 2001).

Both the affective and the cognitive bases of leadership trust have been separately related to in-role and extra-role performance. High levels of cognitive trust in leaders facilitates the ability to focus attention on performance-related activities by giving employees the confidence to follow supervisors' job directives, take ownership of the work, and channel task-relevant efforts toward established goals (Yang et al., 2009). Cognitive trust thereby increases task-related attention and effort, and as a result has been proposed to boost the level of individual task performance (e.g., Yang et al., 2009). Moreover, since cognitive trust reduces unnecessary worry and anxiety, it increases the likelihood that followers will engage in extra-role behaviors (e.g., willingness to share information with colleagues and engage in proactive feedback seeking) (Zhu et al., 2013). Furthermore, individuals who perceive that their leader demonstrates care and consideration (i.e., affective trust) will reciprocate this sentiment in the form of desired behaviors such as spending more time on required tasks and showing willingness to go above and beyond their job roles to benefit broader organizational goals (Konovsky & Pugh, 1994; Chen et al., 2014). Accordingly, it has been suggested that affective trust leverages in-role and extra-role performance.

Trust in the leader is also considered as a predictor of team performance. Such trust allows team members to willingly accept the leader's activities, goals and decisions, work together to achieve the team's goals, and sacrifice their interests for the team (Dirks, 2000). Moreover, when leader-follower trust is high, employees are more willing to see the legitimate needs of the organization (Argyris, 1964), leaders display more effective risk behaviors (e.g., delegation and empowerment) (Mayer et al., 1995) and subordinates' citizenship behaviors and job performance increase (Davis et al., 2000). Following this line of reasoning, trusting relationships between leaders and followers have been proposed as a way of enhancing organizational functioning and effectiveness, and thus organizational

performance. Likewise, high mutual trust entails greater interdependence, hopeful initiatives, and positive interactions, which may foster team performance (Carter & Mossholder, 2015).

On the other hand, when supervisors or managers trust their subordinates, they are more willing to empower them and delegate tasks, resulting in higher motivation to perform role tasks and go beyond their prescribed roles (Brower et al., 2009; Mayer et al., 1995). Thus, the leader's trust in subordinates nourishes high-quality relationships in which employees are more motivated to make greater effort within and beyond their prescribed roles (Brower et al., 2009). Moreover, the leader's trust in subordinates may lead to a self-fulfilling prophecy in which the leader's positive expectations based on trust give subordinates a sense of confidence and competence, and encourage more favorable attitudes, which have a positive effect on their performance (Brower, Lester, Korsgaard, & Dineen, 2009). Trust in subordinates is therefore a precursor of job performance (in-role and extra-role performance), which in turn can improve organizational performance (Tzafrir, 2005).

Finally, employees' trust in the organization strengthens the emotional bond with and commitment to their organization, thus increasing their motivation to participate in extra-role behaviors and individual efforts to fulfill job tasks (Gould-Williams, 2003; Tremblay et al., 2010). In contrast, a lack of trust in the organization can lead to dysfunctional outcomes such as employee cynicism, low motivation or low commitment, which harms individual and organizational performance (Gould-Williams, 2003). Thus, if employees perceive that the organization is trustworthy, they will be more predisposed to show desirable behaviors (e.g., willingness to take risks on behalf of the organization, helping others, making greater effort), develop more positive attitudes (e.g., job satisfaction and commitment) and enhance social exchanges. Based on these arguments, trust in the organization has been proposed to have a positive effect on job and organizational performance.

## Methodology

### Study Search and Selection

This research aims to provide a rigorous assessment of the literature on intra-organizational trust—here referred to as vertical trust—and its link with various performance indicators in order to integrate the fragmented literature on this topic. To that end, we conducted a systematic literature review using Web of science to search articles published in refereed international journals in the fields of management, human resource management (HRM), human resource development (HRD), organizational behavior, work and organizational psychology, and applied psychology. A systematic review (Tranfield, Denyer, & Smart, 2003) applying archival methodology was adopted to build a reliable knowledge base for the organizational trust field. This analysis process consists in synthesizing research through exhaustive literature search of published studies into a field or question (Tranfield, Denyer, & Smart, 2003). This involves categorizing and classifying the existing literature for a specific academic inquiry using papers published over the last years, to provide collective insights through theoretical synthesis (Renwick, Redman, & Maguire, 2013). To carry out this literature review we followed the same method in conducting systematic review as similar studies in the field used for evaluating the evidence base (e.g., Berends & Antonacopoulou, 2014; Peltoniemi, 2015). A systematic review of the literature then consists of: 1) select a scientific database search service, which in our case was Web of Science (Web of Science is an online scientific citation indexing service that provides access to numerous databases that reference cross-disciplinary research, thus allowing detailed exploration of specialized sub-fields within an academic or scientific discipline). 2) Systematic search: search by using some key terms (trust, performance, trustworthiness, effectiveness, etc.). 3) Select articles according to the research criteria (in English, in refereed international journals,

focused on vertical trust, etc.). 4) Cross-checking, which means checking reference of the selected articles for the identification of additional studies. 5) Analyze the articles found. 6) Classify and categorize those articles.

In line with Berends and Antonacopoulou (2014) and Peltoniemi (2015), the systematic search was conducted using the Web of Science, first combining separately the terms “trust” and “trustworthiness” with “performance”, “outcomes” and “effectiveness” (as synonyms of performance) as search key terms in the title. And then, we carried out an additional search by combining the terms “trust” and “trustworthiness” with “job performance”, “team performance”, “group performance”, “organizational performance” as search topics criteria.

From the resulting search, we selected papers that (1) were in English, (2) had been published in refereed international journals in the fields mentioned before (Management, HRD, HRM, etc), (3) were empirical articles, (4) focused on vertical trust within organizations, and (5) measured employee job performance (including extra-role performance), team performance or organizational/firm performance. Titles and/or abstracts were used as the rationale for selection, but it was sometimes necessary to read the article in order to ascertain whether it met the inclusion criteria. Then, we carried out a last exploration by checking reference lists of selected papers to the identification of additional studies, which met the selection criteria. Finally, the literature search resulted in a sample of 75 studies.

## **Analysis**

Our analysis process involved categorizing and classifying the literature on vertical trust and performance using papers published across the last two decades (1997–2018), a period in which articles on this topic have proliferated. After selecting the articles, our

analysis began with a careful reading of each paper and their classification in tables. The initial reading allowed us to ascertain the effect proposed on the trust–performance link (i.e., direct, moderating or mediating effects). We then classified the papers in tables according to the referent of trust studied and the effect examined through performance. The next stage we complete was to separate the studies into trust as a moderating variable, trust as a mediating variable and trust as an antecedent variable of mediating/moderating variables affecting performance, in order to accurately analyze the mediating/moderating effects on the trust–performance link. Finally, we categorized each of the resulting tables by the level of performance: job performance (also separated into in-role and extra-role performance dimensions), team performance and organizational performance.

## **Results**

Once we have conducted the process of systematic review, in the following sections we provide the results of this literature search. First, we examine empirical evidence for the direct effect of vertical trust on performance. We then review the role of vertical trust as both a mediator and a moderator variable in performance. Finally, we explore the effects of vertical trust on performance through the mediating and moderating role of some intervening variables.

### **Direct Effects on the Vertical Trust–Performance Relationship**

In this section, we summarize the findings from the literature review regarding the direct relationship between vertical trust and performance. The vertical referents of trust for

which empirical support is found in the literature are trust in leadership, trust in subordinates, leader-follower trust and trust in organizations (Table 1). We analyze these four referents of trust on performance separately in the following subsections.

-----  
INSERT TABLE 1 ABOUT HERE  
-----

### **Trust in leadership and performance.**

Numerous studies have included leaders as a trust referent to examine how subordinates' trust in leadership may be related to performance; many of these studies confirm a positive direct relationship in the leadership trust–performance link (see Table 1). However, some studies also found non-significant effects (e.g., Atuahene-Gima & Li, 2002; Ugwu et al., 2016). Specific sample characteristics (such as a non-Western cultural setting) may explain the non-significant effect on the relationship (Ugwu et al., 2016). It has been argued that in some non-Western cultures extrinsic motivators (e.g., good pay, retirement benefits) could play a more significant role in motivating employees than trust in the leader alone (Ugwu et al., 2016). Nevertheless, the authors of these studies also noted that this question calls for further clarification.

Moreover, mixed evidence has been found depending on the leadership referents of trust and types of subordinates considered. For example, empirical evidence indicates that whereas trust in the supervisor is positively related to task and extra-role performance among non-managerial subordinates, this is not the case among their managerial counterparts (e.g., Huang et al., 2010). Likewise, Kannan-Narasimhan and Lawrence (2012) found that only



trust in the supervisor was related to OCB, while trust in a senior manager had no significant effect.

The literature review revealed only one study that has analyzed the direct relationship between trust in leadership and team performance (see Table 1). This study by Dirks (2000) confirmed a direct positive effect on the relationship. Regarding the direct relationship between employees' trust in leadership and organizational performance, several studies confirmed a positive effect on the relationship (e.g., Davis et al., 2000; Davis & Bryant, 2010), although others found no significant effects. Cho and Poister (2014), for example, demonstrated that while trust in department leadership and trust in the leadership team both had direct effects on organizational performance, trust in the supervisor had no direct impact.

To summarize, the literature review revealed substantial empirical research demonstrating that trust in leadership triggers a direct positive effect on several measures of job performance (see Table 1). However, evidence also came to light on the non-significant effects of trust in leadership on role performance (e.g., Ugwu et al., 2016), extra-role performance (e.g., Coxen, van der Vaart, & Stander, 2016; Kannan-Narasimhan & Lawrence, 2012; Huang et al., 2010) and organizational performance (e.g., Cho & Poister, 2014). Likewise, high levels of trust in leadership directly increase team performance (e.g., Dirks, 2000) and organizational performance (e.g., Brown, Gray, McHardy, & Taylor, 2015; Davis et al., 2000; Davis & Bryant, 2010), although few empirical studies have analyzed the direct role of trust in leadership in team and organizational performance. In addition, different referents and types of subordinates of trust in leadership seem to have different effects on performance. To date, however, there has been little research aiming to understand the direct implications of these trust distinctions on performance.

### **Trust in subordinates and performance.**

We only identified one published article examining the relationship between trust in subordinates and performance (see Table 1). This study by Brower et al. (2009) provides empirical support for a direct and positive relationship between managers' trust in subordinates and some dimensions of job performance (task performance and extra-role performance). Thus, when supervisors or managers trust their subordinates, they are more willing to empower them and delegate tasks, which results in higher motivation to perform job tasks and go beyond their prescribed roles (Brower et al., 2009).

### **Leader-follower trust and performance.**

Some empirical studies have recently explored the direct relationship between leader-follower trust and performance (see Table 1). For example, Carter and Mossholder's (2015) study demonstrated that congruence between supervisor and group trust (when supervisors and work groups express the same magnitudes of trust in each other) was positively related to team performance for affective trust but not for cognitive trust. These authors also found that at higher levels of trust alignment the effect of trust on team performance was greater than at lower levels of trust. Likewise, group performance diminished more when groups' affective trust was lower than supervisors' affective trust, than when groups' affective trust was higher than supervisors' affective trust. On the other hand, Jing et al. (2014) provided empirical evidence showing that high levels of trust between leader and followers and enhanced financial performance were positively related, as this increases collaboration and strengthens the ability to confront performance problems, and also reduces friction in organizational relationships and the need for controls (such as rules and monitoring), thus leaving time for

other activities. Other studies (i.e., Cheung, Wong, & Yuan, 2017; Kim, Wang, & Chen, 2018) have also recently confirmed that leader-follower trust increases job performance. In sum, empirical analysis of the role of leader-follower trust in performance is a nascent and under-explored area of research. To date, there is evidence for a positive effect, but when cognitive and affective bases of trust are considered, significant differences are found as well.

### **Trust in the organization and performance.**

Some studies have proposed that when employees trust their organization they will be more predisposed to fulfill their formal tasks and duties and participate in citizenship behaviors, thus enhancing in-role and extra-role performance (Biswas & Kapil, 2017; Coxen, van der Vaart, & Stander, 2016). However, while some research finds positive effects on the relationship, others find no significant link. Our results indicate that, to date, few empirical studies have examined the direct role trust in organizations plays in performance measures, and only one dimension of performance—job performance—has been studied.

### **Vertical Trust as a Mediator Variable**

In this section, we analyze the results from the trust literature on the influence of vertical trust as a mediating variable on job, team and organizational performance outcomes. The literature review reveals that only two referents of vertical trust (trust in leadership and trust in organization) have been empirically examined in this mediating role (see Table 2). We summarize these findings in the following subsections.

-----  
INSERT TABLE 2 ABOUT HERE  
-----

### **Trust in leadership as a mediator variable.**

The literature indicates that trust acts as a social exchanger reinforcing the dynamics between variables (Blau, 1964). Through this social exchange relationship, trust has a mediator effect or intervening role that produces effective work behavior and positive employee attitudes (Cropanzano & Mitchell, 2005), which may result in increased levels of performance. By regarding trust as a primary variable in these exchanges, numerous studies have included trust in leadership as a variable mediating the relationship between different organizational variables and performance measures (see Table 2). The empirical research predominantly suggests that subordinates' trust in leadership acts as an explanatory variable, which translates the benefits of certain work processes, organizational practices or leadership styles into better job, team and organizational performance.

Some studies incorporate cognitive and affective bases of trust to ascertain how subordinates' trust in leadership may play such a mediating role and thus raise levels of job performance (e.g., Chen et al., 2014; Colquitt, LePine, Piccolo, & Zapata, 2012; Miao, et al., 2014; Newman et al., 2016). For example, Colquitt et al. (2012) found that subordinates' trust in a supervisor mediated the relationship between organizational justice and job performance, with affect-based trust driving exchange-based mediation, and cognition-based trust driving uncertainty-based mediation. Other studies (e.g., Miao et al., 2014; Newman et al., 2016) reveal that while affective trust in a supervisor fully mediated the relationships between the supervisor's participative leadership and the subordinate's job performance, cognitive trust in

the supervisor had non-significant or negative effects (see Table 2). This may be because, unlike affective trust, cognitive trust does little to induce social exchange between the two parties in the relationship. Thus, as job performance has been shown to be a function of social exchange, cognitive trust may be less important in engendering performance (Miao et al., 2014). More specifically, mixed results are provided by empirical research when some particular leadership styles (i.e., participative leadership or transformational leadership) are considered according to cognitive and affective bases of trust (e.g., Newman, Rose, & Teo, 2016; Zhu, Newman, Miao, & Hooke, 2013).

Meanwhile, Huang et al. (2010) also found that while trust in supervisors among non-managerial subordinates significantly mediated the link between participative leadership and task and extra-role performance, this was not the case for managerial subordinates. Findings therefore varied according to the subordinates considered.

In sum, as Table 2 indicates, although trust in leadership has been confirmed as a mediating variable that enhances job performance, when bases (cognitive and affective) or domains (reliance and disclosure) of trust are incorporated, results are less consistent. The evidence is also mixed when trust in leader is included as a mediating variable to increase extra-role and team performance (see Table 2). Finally, the literature review also uncovers a lack of empirical analysis of the mediating role that trust in leadership plays in organizational performance.

### **Trust in the organization as a mediator variable.**

In line with social exchange theory, the literature shows that an organization's positive intentions toward employees—through HRM practices, organizational support and

justice, CSR policies or certain leadership styles—may encourage employees’ to perceive the organization as trustworthy, which in turn is positively related to job performance (both in-role and extra-role performance) and organizational performance (see Table 2). Thus, if the organization demonstrates benevolence and support, employees may perceive the organization as trustworthy and they will be more predisposed to engage in extra effort and working toward the organization’s goals.

### **Vertical Trust as a Moderator Variable**

Our literature review found some empirical articles that proposed vertical trust as a variable moderating the effects of other variables on performance (Table 3). To date, the few empirical studies analyzing this moderating role of vertical trust have included trust in leadership, trust in subordinates and subordinate-supervisor trust. We present our findings in the following subsections.

-----  
 INSERT TABLE 3 ABOUT HERE  
 -----

#### **Trust in leadership as a moderator variable.**

The literature has proposed trust in leadership as a moderating variable in the relationships between some variables and measures of job performance (Table 3). Variables proposed as antecedents of trust in leadership in such moderating effect models include HRM practices, job characteristics and some dimensions and referents of trust. Trust is a critical variable that governs employee attribution and interpretation of manager behavior, and thus

may act as a critical moderator by shaping followers' attributions of leaders' intentions (Crossley et al., 2013; Dirks & Ferrin, 2001).

Empirical research has indicated that the effects of trust on job performance differ depending on the leadership referent (e.g., direct leaders vs. organizational leadership), the operational definition of trust (e.g., affective trust vs. cognitive trust) or the job performance measure (e.g., in-role or extra-role performance). For example, findings show that the relationship between trust and job performance is significantly higher when the referent is a direct leader than in the case of organizational leadership (Dirks & Ferrin, 2002). Dirks and Ferrin (2002) also confirm that “overall” definitions of trust—including affective and cognitive elements of trust—have closer relationships with job performance than cognitive or affective definitions of trust alone, since “overall” definitions capture all the theoretical processes (relationship-based and character-based theory) involved in the link.

In sum, trust in leadership has been shown to positively moderate the effect on job performance, with stronger effects depending on the type of trust referent and operational definition of trust considered. However, results for this moderating effect of trust are inconclusive, since non-significant moderating effects were also found when in-role and extra-role measures of job performance are examined (see Table 3). Finally, results indicate that there have been very few empirical attempts to explore the moderating role of trust in leadership on team and organizational measures of performance.

### **Trust in the subordinate and performance.**

We only found one study that has empirically examined the effect of trust in subordinates as a moderating variable influencing performance (see Table 3). This study by

Brower et al. (2009) examined whether the relationship between trust in the manager and task and extra-role performance was stronger when trust in the subordinate is higher. Their results only support a partial moderating effect on the relationship between trust in the manager and OCB. Individual extra-role performance therefore reaches its highest level when both parties' trust is high. These findings not only provide support for the moderating role of trust in subordinates in performance, but also reflect the importance of the interaction of trust measures to predict performance.

### **Leader-follower trust and performance.**

The literature review reveals the lack of empirical analysis to fathom the moderating role in performance of mutual trust between leaders and followers. Only the study by Chang and Chi (2007) has empirically addressed this moderating role of trust (see Table 3), showing that while high affective trust between supervisors and subordinates weakens the positive relationship between HR manager roles and HR performance indicators, cognitive trust does not moderate the relationship. These authors suggest that this result is consistent with the principles of social interaction of the *guanxi*-based Chinese society in which the effects of affective trust prevail over cognitive trust.

### **Vertical Trust Triggering Mediating/Moderating Effects of other Variables on Performance**

Vertical trust has also been proposed as a variable that exerts an influence on job, team or organizational performance through the mediating/moderating role of other variables



(Table 4). The results of our literature review uncover proposals of trust in leadership, trust in subordinates, supervisor-subordinate trust and trust in organizations as vertical referents of trust that engender these mediating/moderating effects on performance. In the following subsections we summarize the empirical findings on these relationships.

-----  
INSERT TABLE 4 ABOUT HERE  
-----

#### **Trust in leadership triggering mediating/moderating effects.**

Several studies have addressed the role of trust in leadership as a driver of mediating effects through certain variables that increase performance (see Table 4). Research has demonstrated that employees' trust in leadership operates by facilitating some mediating processes, such as certain psychological conditions (e.g., psychological availability and psychological safety), high-quality leader-member exchange, and ability to focus, to increase job performance (e.g., Chen, Hwang, & Liu, 2012; Li & Tan 2013; Madjar & Ortiz-Walters, 2009). However, this effect is not confirmed when other psychological conditions such as psychological meaningfulness are introduced (e.g., Li & Tan, 2013) or other trust referents are examined in combination (Brower et al., 2009). Some empirical research has also found that the ability to focus acts as a mediating variable between trust in leadership and extra-role performance, but not in-role performance (e.g., Mayer & Gavin, 2005).

Likewise, the role of trust in leadership as an antecedent of mediating variables to increase team performance has been consistently confirmed by the empirical research. The literature also indicates that team members' trust in leadership enhances team performance through certain group processes and team conditions, such as team longevity, team potency

and personal identification (Table 4). However, some authors highlight the importance of distinguishing between affective and cognitive dimensions of trust when examining factors that potentially mediate relationships between team trust in leadership and team outcomes because these trust dimensions involve different psychological processes (e.g., Schaubroeck, Peng, & Hannah, 2011). For example, Schaubroeck et al. (2011) propose team potency as a plausible mediating path through which cognition-based trust in the leader influences team performance, whereas affect-based trust affects team performance through team psychological safety.

On the other hand, results also indicate that trust in leadership plays a consistent role eliciting mediating effects on other variables that enhances organizational performance (Table 4). The literature review shows that over the last few years a fast growing body of empirical research has begun to explore the role of trust as antecedent of some mediating or moderating variables that may affect performance. Results indicate the potential of trust in leadership in promoting mediating and moderating effects on other variables which are transferred in higher levels of performance.

#### **Trust in subordinates triggering mediating/moderating effects.**

Some studies have considered trust in subordinates as a trust referent that may lead to increased levels of performance by boosting certain mediating effects (see Table 4). For example, Tzafrir (2005) found that HR managers with high levels of trust in their employees are more likely to shape a differential HRM system with high performance work practices, which in turn have a positive impact on organizational performance. Likewise, Salamon and Robinson (2008) found that responsibility norms fully mediate the relationship between

collective felt trust—the extent to which employees are trusted by management—and sales performance, but not the effect of collective felt trust on customer service performance.

Sample size, the nature of the associations and the possibility that other mechanisms may be operating in the relationships were suggested as possible explanations for this non-significant mediating effect (Salamon & Robinson, 2008). This study does, however, identify an additional avenue through which trust affects organizational performance, in which employees' behavior is shaped by how much they feel trusted by management.

In sum, there have been very few attempts in the literature to explore the role that trust in subordinates plays in performance when mediating variables are introduced in the relationship. Moreover, only one level of performance—the organizational level—has been empirically examined in these mediating models, which produced mixed results. Likewise, no empirical attempts appear in the literature examining the effects of trust in subordinates on performance through moderating variables.

### **Leader-follower trust triggering mediating/moderating effects.**

Our review found only two articles that empirically explored the role of leader-follower trust in performance (see Table 4). Based on social exchange dynamics, Carter and Mossholder (2015) examined whether cognitive and affective trust congruence between groups' trust in supervisors and supervisors' trust in their work groups may affect two types of group performance outcomes (in-role and extra-role performance) via work group motivation. They found that supervisor–work group trust congruence strengthens work group motivation, which leads to higher levels of group performance. Similarly, Cheung, Wong and Yuan (2017) found that psychological contract fulfillment positively mediates the

relationship between leader-follower mutual trust and job performance. More research is clearly needed to achieve a deeper understanding of the role mutual trust between leaders and their subordinates plays in affecting performance through other organizational variables or processes.

### **Trust in the organization triggering mediating/moderating effects.**

In the literature review we found some studies that dealt with the concept of trust in the whole organization as a trust referent—trust in the organization—used as an organizational variable that leads to enhanced individual and organizational performance by fostering some mediating processes (Table 4). For example, Guinot et al. (2013) empirically confirm that trust in organizations facilitates organizational learning capability, leading to better organizational performance. On the other hand, Tremblay et al. (2010) proposes that affective organizational commitment (AOC) plays a mediating role between trust in the organization and in-role and extra-role performance, although AOC did not contribute to explaining the manifestation of in-role and extra-role behaviors. These authors suggest that trust in the immediate supervisor and attachment to the work team are probably more significant exchange factors for in-role and extra-role behaviors than exchanges with a more abstract entity such as the organization.

Hence, although trust in the organization has been linked to different measures of performance through some mediating processes, the literature review revealed scarce and inconclusive evidence of such relationships and effects.

## Summary of Results

A significant number of studies confirmed a positive direct effect on job performance, although non-significant effects were also found for particular contexts (e.g., non-Western cultures), specific measures of job performance (e.g., extra-role performance) and some types of subordinates and leaders. There is still little empirical evidence on the direct effects of trust in leadership on team and organizational performance. Likewise, the direct relationship between some trust referents such as subordinates, organization or leader-follower trust and performance has received scant attention. On the other hand, trust in leadership has been consistently confirmed as a mediating variable that enhances job performance, but when different bases of trust (cognitive and affective) or job performance measures (in-role and extra-role) are incorporated, results also present non-significant effects. In turn, the results also consistently confirm the mediating role of trust in organization to improve job and organizational performance, but other trust referents such as trust in subordinates or leader-follower trust have not yet been addressed in the empirical research. Likewise, there is a lack of empirical analysis of the mediating role that vertical trust plays in team and organizational performance. Regarding the moderating role of vertical trust, we found mixed effects on the relationship between trust in leader and job performance, and very little empirical research has addressed the moderating role of vertical trust with other trust referents and measures of performance. Finally, when vertical trust acts by facilitating mediating/moderating processes, trust in leadership has been consistently demonstrated to increase job, team and organizational performance. However, there is a lack of evidence on this role of trust with other trust referents or involving moderating effects.

## Discussion and Suggestions for Future Research

Based on the results from the exhaustive literature search applied in this study, in the following paragraphs we discuss the most relevant findings derived from the review and propose new avenues of research for each of the relationships examined.

Firstly, our results indicate that empirical studies analyzing this direct trust-performance relationship have not consistently demonstrated a positive relationship between them. Further research is needed to fathom the direct consequences of vertical trust on performance. Future studies should continue to analyze the differences in this direct relationship according to the leadership referent of trust (i.e., trust in direct leaders, trust in area managers, trust in Top management, trust in the whole organization), mutual trust (i.e., leader-follower trust), trust dimensions (e.g., affect-based trust and cognition-based trust), trust types (conditional vs. unconditional trust) or cultural settings (Western vs. non-Western).

Moreover, the results of this literature review indicate that further research is required to provide a more fine-grained view of the role of trust in leadership as a mediating variable, including different bases of trust (cognitive and affective), leadership styles and behaviors, HRD practices and types of culture, with other levels of performance such as team and organizational performance. For example, trust, or indeed any of the relationships studied, might be affected by cultural dimensions such as uncertainty avoidance, individualism versus collectivism, indulgence versus restraint, or power distance (Hofstede, 2011), or by HR or organizational practices that imply trust, such as clocking in and out of work, or employee assessment based on self and peer evaluation. Furthermore, the relationships analyzed might be affected by leadership style: a style based on trusting people (e.g., servant leadership) might not be the same as one that does not (e.g., transactional leadership). Future research

should also continue to investigate the mediating role of other variables that have been linked to trust, such as OCB climate, organizational commitment or new emerging leadership styles like shared or authentic leadership.

Regarding the moderating role of trust on performance, the inconclusive results found suggest that for trust to become a potential moderator variable it should be closely related to specific organizational practices, team processes, individual job characteristics or psychological states. The literature review reveals a need for more research to further understanding of the role of different vertical trust referents (e.g., trust in leadership, trust in subordinates, leadership-follower mutual trust, trust in organizations), multiple trust dimensions (i.e., affective and cognitive trust) or cultural context as moderators between individual, team and organizational variables, and performance, since empirical analyses of this moderating effect are scarce. For example, a particular HRM system supporting human capital or increasing investment in training and development practices could raise employees' trust in the organization, thereby affecting the strength of the relationship with job, team or organizational performance. Moreover, the relevance of gender on vertical trust-performance link remains unknown. Empirical research should be addressed to ascertain if gender differences might determine the strength of this linkage.

One promising and underexplored research area is examining the role of trust in subordinates on performance. Since new organizational trends require managers to empower employees, delegate tasks and share responsibilities, trust in subordinates is an essential condition for managers to take these kinds of risks (Brower et al., 2009). As recent management theory models (Chiva, 2014) have suggested trust is an essential element in HRD, specifically trust in subordinates. Particularly, the role of trust in subordinates is important as these emerging management approaches imply the use of non-controlling

managerial practices that allow more freedom and responsibility (Laloux, 2014). In fact, these approaches consider trust to be connected to higher levels of consciousness and individual development. Therefore, vertical trust should be essential for HRD literature.

Future research should therefore examine the mediating/moderating effects on performance measures of variables linked to trust in subordinates, such as high individual autonomy, low monitoring or knowledge transfer. On the other hand, broader referents such as trust in the organization might be linked to organizational performance across particular organizational processes or conditions such as organizational commitment, organizational psychological security, OCB climate or personnel training and development practices.

Another interesting research avenue would be to explore the effects of trust on performance by considering trust as employees' perceptions about the level of trust their supervisors have in them, an area that has attracted very little empirical research attention in terms of organizational performance outcomes. In this sense, HRD practices (e.g., career planning, job learning and training, performance guidance and appraisal) may be perceived by employees as a sign that organizational leaders trust them, which might relate positively to performance measures through perceived trust (feeling trust). Most organizations previously focused on control, as they did not trust employees and efficiency was paramount; nowadays, however, some organizations are moving away from control due to the importance of innovation, autonomy and learning. In this context, leader-follower trust or trust in subordinates is essential because it reflects, for instance, whether managers are following McGregor's (1960) theory X or theory Y. When they trust employees they are probably following theory Y, which also has implications for HRD because managers would consider training and development, and not control, as essential elements for the organization. Moreover, high levels of mutual trust may be particularly important to create a healthy work



environment in which people feel free to express their ideas and opinions, take more risks, participate in more extra-role behaviors or exhibited higher organizational commitment. This, in turn, may result in better job, team and organizational performance levels.

Finally, because within each level of trust (individual, team and organizational) the research concentrates on some referents to the exclusion of others, future studies should examine trust across different referents and levels of analysis in order to discover unique effects on performance. For example, as proposed by De Cremer et al. (2018), future research may investigate how trustworthiness perceptions of separated individuals at different levels of the organization trickle down the organizational hierarchy, from higher to lower levels, to affect performance.

Overall, our findings show that vertical trust within organizations operates in a complex way to provide positive effects on performance. In this sense, leadership styles (e.g., participative leadership, authentic leadership), HRM systems (control vs. commitment HRM systems), organizational culture (egalitarian vs. hierarchical) and HRD may play a prominent role in developing trust, thus affecting performance. However, to date, our findings show that HRD research has not empirically examined the role of organizational trust in promoting performance. Accordingly, researchers and practitioners should pay attention to this role of HRD practices in order to advance the study and promotion of trust in organizations as a strategy to increase performance. Because of the extensive evidence on the positive effects of vertical trust on performance, organizations' HRD efforts to build and spread out trust could be a source of sustainable competitive advantage. By recruiting, selecting, rewarding, developing, promoting and retaining trusted employees, HRD practices could positively impact levels of performance, thus increasing firm competitiveness. Practitioners should consider this in order to manage individuals within organizations and enhance organizational

effectiveness. As HRD is the framework for helping employees develop their personal and organizational skills, knowledge, and abilities, vertical trust could be an essential component to develop HRD practices. High levels of vertical trust may be necessary for the organizational implementation of HRD practices and employees involvement in HRD systems.

### **Conclusions**

In this systematic review, we have explored the role of vertical trust on different measures of job, team and organizational performance. Our findings indicate that vertical trust mainly operates through indirect effects to increase performance. However, further understanding of the direct effects on the relationship is required. In particular, our results reveal a need for in-depth analysis of these direct effects of trust in organizations, especially trust in subordinates, using both cognitive and affective bases of trust and exploring different cultural or organizational settings. This study has also shown the consistent confirmation that trust in leadership has a positive indirect effect on job and team performance, by acting as a mediator/moderator variable or triggering mediating effects through other variables. However, further research on vertical trust should use other referents (i.e., trust in subordinates, leader-follower trust or trust in organizations), types (i.e., congruence trust, mutual trust, unconditional trust) and bases of trust (i.e., affective vs. cognitive trust), as empirical research in these areas is scarce. Likewise, the effect of vertical trust on organizational performance requires further investigation. Future research should examine the role of vertical trust in performance across different referents and levels of analysis, and should also explore differences based on the cultural or organizational context. Finally, one

nascent area of research is examining the relevance of feeling trusted—the perception that another party is willing to accept vulnerability to one’s actions—to performance.

In spite of the proposals suggested in this paper that indicate that vertical trust is positively related to performance, according to 2018 Edelman Trust barometer, levels of trust in CEOs and business are in troubling. For example, 56% of respondents said that companies only think about themselves and their profits are bound to fail and 60% believe that CEOs are driven more by greed than a desire to make a positive difference in the world. Thus rebuilding trust in business leaders and companies is a clarion call to the business community (Harrington, 2017).

This literature review integrates empirical findings on the vertical trust–performance relationship in the last decades and proposes future research avenues to advance understanding of this link. Trust seems to be linked to learning, to human development, or to organizations’ investments in training, which probably imply the use of theory Y rather than theory X (McGregor, 1960), and might have important connections with organizational culture (participative, democratic, etc.) and structure (organic, flat). The HRD literature has traditionally connected trust with individual and collective learning (Gubbins & MacCurtain, 2008), but mainly focused on the concept of learning. Nevertheless, trust is an incipient topic in the HRD literature, and this literature review therefore provides a research reference framework to continue and increase exploring the trust–performance link in the HRD field and other related disciplines.

## References

\*References marked with an asterisk indicate studies included in the literature review.

\*Alfes, K., Shantz, A., & Truss, C. (2012). The link between perceived HRM practices, performance and well-being: The moderating effect of trust in the employer. *Human Resource Management Journal*, 22, 409-427. doi:10.1111/1748-8583.12005

\*Allen, M. R., George, B. A., & Davis, J. H. (2018). A model for the role of trust in firm level performance: The case of family businesses. *Journal of Business Research*, 84, 34-45. doi:10.1016/j.jbusres.2017.10.048

Argyris, C. 1964. *Integrating the individual and the organization*. New York: Wiley.

\*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, 267-285. doi:10.1002/job.138

\*Atuahene-Gima, K., & Li, H. (2002). When does trust matter? Antecedents and contingent effects of supervisee trust on performance in selling new products in China and the United States. *Journal of Marketing*, 66, 61-81. doi:10.1509/jmkg.66.3.61.18501

\*Audenaert, M., Decramer, A., Lange, T., & Vanderstraeten, A. (2016). Setting high expectations is not enough: linkages between expectation climate strength, trust, and employee performance. *International Journal of Manpower*, 37, 1024-1041. doi:10.1108/IJM-12-2015-0201

Bennis, W., & Nanus, B. (1985). *The strategies for taking charge*. Leaders, New York: Harper. Row.

Berends, H., & Antonacopoulou, E. (2014). Time and organizational learning: A review and agenda for future research. *International Journal of Management Reviews*, *16*, 437-453. doi: 10.1111/ijmr.12029

Bijlsma-Frankema, K. (2004). Dilemmas of managerial control in post-acquisition processes. *Journal of Managerial Psychology*, *19*, 252-268. doi:10.1108/02683940410527748

\* Biswas, S., & Kapil, K. (2017). Linking perceived organizational support and organizational justice to employees' in-role performance and organizational cynicism through organizational trust: A field investigation in India. *Journal of Management Development*, *36*, 696-711. doi:10.1108/JMD-04-2016-0052

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*, 270-283. doi:10.1016/j.leaqua.2012.11.006

\*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*, 327-347. doi:10.1177/0149206307312511

\*Brown, S., Gray, D., McHardy, J., & Taylor, K. (2015). Employee trust and workplace performance. *Journal of Economic Behavior & Organization*, *116*, 361-378. doi:10.1016/j.jebo.2015.05.001

- \*Byrne, Z., Pitts, V., Chiaburu, D., & Steiner, Z. (2011). Managerial trustworthiness and social exchange with the organization. *Journal of Managerial Psychology*, *26*, 108-122. doi: 10.1108/02683941111102155
- \*Byun, G., Dai, Y., Lee, S., & Kang, S. (2017). Leader Trust, Competence, LMX, and Member Performance: A Moderated Mediation Framework. *Psychological reports*, *120*, 1137-1159. doi:10.1177/0033294117716465
- \*Carter, M. Z., & Mossholder, K. W. (2015). Are we on the same page? The performance effects of congruence between supervisor and group trust. *Journal of Applied Psychology*, *100*, 1349. doi:10.1037/a0038798
- \*Chang, H. T., & Chi, N. W. (2007). Human resource managers' role consistency and HR performance indicators: the moderating effect of interpersonal trust in Taiwan. *The International Journal of Human Resource Management*, *18*, 665-683. doi:10.1080/09585190601179586
- \*Chen, T. Y., Hwang, S. N., & Liu, Y. (2012). Antecedents of the voluntary performance of employees: Clarifying the roles of employee satisfaction and trust. *Public Personnel Management*, *41*, 407-420. doi:10.1177/009102601204100302
- \*Chen, X. P., Eberly, M. B., Chiang, T. J., Farh, J. L., & Cheng, B. S. (2014). Affective trust in Chinese leaders linking paternalistic leadership to employee performance. *Journal of Management*, *40*, 796-819. doi:10.1177/0149206311410604
- \*Chen, Z., Lam, W., & Zhong, J. A. (2012). Effects of perceptions on LMX and work performance: Effects of supervisors' perception of subordinates' emotional intelligence and subordinates'

perception of trust in the supervisor on LMX and, consequently, performance. *Asia Pacific journal of management*, 29, 597-616. doi:10.1007/s10490-010-9210-z

\*Cheung, M. F., Wong, C. S., & Yuan, G. Y. (2017). Why mutual trust leads to highest performance: the mediating role of psychological contract fulfillment. *Asia Pacific Journal of Human Resources*, 55, 430-453. doi:10.1111/1744-7941.12117

\*Chiaburu, D. S., & Lim, A. S. (2008). Manager trustworthiness or interactional justice? Predicting organizational citizenship behaviors. *Journal of Business Ethics*, 83, 453-467. doi:10.1007/s10551-007-9631-x

Chiva, R. (2014). The common welfare human resource management system: A new proposal based on high consciousness. *Personnel Review*, 43, 937-956. doi:10.1108/00251740710727278

\*Cho, Y. J., & Poister, T. H. (2014). Managerial Practices, Trust in Leadership, and Performance Case of the Georgia Department of Transportation. *Public Personnel Management*, 43, 179-196. doi:10.1177/0091026014523136

\*Chong, V. K., & Law, M. B. (2016). The effect of a budget-based incentive compensation scheme on job performance: The mediating role of trust-in-supervisor and organizational commitment. *Journal of Accounting & Organizational Change*, 12, 590-613. doi:10.1108/JAOC-02-2015-0024

\*Cho, Y. J., & Ringquist, E. J. (2010). Managerial trustworthiness and organizational outcomes. *Journal of Public Administration Research and Theory*, 21, 53-86. doi:10.1093/jopart/muq015

Civelek, M. E., Çemberci, M., Artar, O. K., & Uca, N. (2015). *Key Factors of Sustainable Firm Performance*.

- \*Colquitt, J. A., LePine, J. A., Piccolo, R. F., Zapata, C. P., & Rich, B. L. (2012). Explaining the justice–performance relationship: Trust as exchange deepener or trust as uncertainty reducer?. *Journal of Applied Psychology, 97*, 1-15. doi:10.1037/a0025208
- \*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*, 909-927. doi:10.1037/0021-9010.92.4.909
- Cohen, S. G., & Bailey, D. E. (1997). What makes teams work: Group effectiveness research from the shop floor to the executive suite. *Journal of management, 23*, 239-290.  
doi:10.1177/014920639702300303
- Costa, A. C. (2003). Work team trust and effectiveness. *Personnel Review, 32*, 605-622.  
doi:10.1108/00483480310488360
- Costa, A. C., & Peiró, J. M. (2009). Trust and social capital in teams and organizations antecedents, dynamics, benefits and limitations: an introduction. *Social Science Information, 48*, 131-141.  
doi:10.1177/0539018409102402
- 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*, 225-244.  
doi:10.1080/13594320143000654
- Costigan, R. D., Iiter, S. S., & Berman, J. J. (1998). A multi-dimensional study of trust in organizations. *Journal of managerial issues, 10*, 303-317. Retrieved from <http://www.jstor.org/stable/40604201>



- \*Coxen, L., van der Vaart, L., & Stander, M. W. (2016). Authentic leadership and organisational citizenship behaviour in the public health care sector: The role of workplace trust. *SA Journal of Industrial Psychology*, *42*, 1-13. doi:10.4102/sajip.v42i1.1364
- Cropanzano, R., & Mitchell, M. S. (2005). Social exchange theory: An interdisciplinary review. *Journal of management*, *31*, 874-900. doi:10.1177/0149206305279602
- \*Crossley, C. D., Cooper, C. D., & Wernsing, T. S. (2013). Making things happen through challenging goals: Leader proactivity, trust, and business-unit performance. *Journal of Applied Psychology*, *98*, 540. doi:10.1037/a0031807
- \*Davis, D. D., & Bryant, J. L. (2010). Leader-member exchange, trust, and performance in national science foundation industry/university cooperative research centers. *The Journal of Technology Transfer*, *35*, 511-526. doi:10.1007/s10961-009-9144-0
- \*Davis, J. H., Schoorman, F. D., Mayer, R. C., & Tan, H. H. (2000). The trusted general manager and business unit performance: Empirical evidence of a competitive advantage. *Strategic Management Journal*, *21*, 563-576. doi:10.1002/(SICI)1097-0266(200005)21:5<563::AID-SMJ99>3.0.CO;2-0
- \*Dayan, M., & Di Benedetto, C. A. (2010). The impact of structural and contextual factors on trust formation in product development teams. *Industrial Marketing Management*, *39*, 691-703. doi:10.1016/j.indmarman.2010.01.001
- \*De Cremer, D., Van Dijke, M., Schminke, M., De Schutter, L., & Stouten, J. (2018). The trickle-down effects of perceived trustworthiness on subordinate performance. *Journal of Applied Psychology*, *103*, 1335-1357. doi:10.1037/apl0000339

- 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*, 1134-1150. doi:10.1037/apl0000110
- Devine, D. J., & Philips, J. L. (2001). Do smarter teams do better: A meta-analysis of cognitive ability and team performance. *Small Group Research, 32*, 507-532. doi:10.1177/104649640103200501
- Dirks, K. T. (1999). The effects of interpersonal trust on work group performance. *Journal of applied psychology, 84*, 445-455. doi:10.1037/0021-9010.84.3.445
- \*Dirks, K. T. (2000). Trust in leadership and team performance: evidence from NCAA basketball. *Journal of applied psychology, 85*, 1004-1012. doi:10.1037/0021-9010.85.6.1004
- Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization science, 12*, 450-467. doi:10.1287/orsc.12.4.450.10640
- \*Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: meta-analytic findings and implications for research and practice. *Journal of applied psychology, 87*, 611-628. doi:10.1037/0021-9010.87.4.611
- Dirks, K. T., & Skarlicki, D. P. (2004). Trust in leaders: Existing research and emerging issues. *In Trust and Distrust in Organizations: Dilemmas and Approaches*, edited by Roderick M. Kramer and Karen S. Cook. New York: Russell Sage.
- Fulmer, C. A. & Gelfand, M. J. (2012). At what level (and in whom) we trust trust across multiple organizational levels. *Journal of Management, 38*, 1167-1230. doi:10.1177/0149206312439327

- Germain, M. L., & McGuire, D. (2014). The role of swift trust in virtual teams and implications for human resource development. *Advances in Developing Human Resources, 16*, 356-370.  
doi:10.1177/1523422314532097
- \*Goris, J. R., Vaught, B. C., & Pettit Jr, J. D. (2003). Effects of trust in superiors and influence of superiors on the association between individual-job congruence and job performance/satisfaction. *Journal of Business and Psychology, 17*, 327-343.  
doi:10.1023/A:1022860224080
- \*Gould-Williams, J. (2003). The importance of HR practices and workplace trust in achieving superior performance: a study of public-sector organizations. *International Journal of Human Resource Management, 14*, 28-54. doi:10.1080/09585190210158501
- Graen, G. B., & Uhl-Bien, M. (1995). Relationship-based approach to leadership: Development of leader-member exchange (LMX) theory of leadership over 25 years: Applying a multi-level multi-domain perspective. *The leadership quarterly, 6*, 219-247. doi:10.1016/1048-9843(95)90036-5
- \*Grant, A. M., & Sumanth, J. J. (2009). Mission possible? The performance of prosocially motivated employees depends on manager trustworthiness. *Journal of Applied Psychology, 94*, 927-944.  
doi:10.1037/a0014391
- Gubbins, C., & MacCurtain, S. (2008). Understanding the dynamics of collective learning: The role of trust and social capital. *Advances in Developing Human Resources, 10*, 578-599.  
doi:10.1177/1523422308320372

\*Guinot, J., Chiva, R., & Mallén, F. (2013). Organizational trust and performance: Is organizational learning capability a missing link? *Journal of Management & Organization*, 19, 559-582.  
doi: 10.1017/jmo.2014.3

Harrington, M. (2017). Survey: People's trust has declined in business, media, government, and NGOs. *Harvard Business Review*. <https://hbr.org/2017/01/survey-peoples-trust-has-declined-in-business-media-government-and-ngos>

Hansen, C. D., & Headley, J. (1998). HRD in West Africa: Cultural constraints to organizational productivity. *Human Resource Development International*, 1, 19-34.  
doi:10.1080/13678869800000006

Hofstede, G. (2011). Dimensionalizing cultures: The Hofstede model in context. *Online readings in psychology and culture*, 2. doi:10.9707/2307-0919.1014

\*Huang, J. T. (2012). Be proactive as empowered? The role of trust in one's supervisor in psychological empowerment, feedback seeking, and job performance. *Journal of Applied Social Psychology*, 42, E103-E127. doi:10.1111/j.1559-1816.2012.01019.x

\*Huang, X., Iun, J., Liu, A., & Gong, Y. (2010). Does participative leadership enhance work performance by inducing empowerment or trust? The differential effects on managerial and non-managerial subordinates. *Journal of Organizational Behavior*, 3, 122-143.  
doi:10.1002/job.636

\*Hughes, M., Rigtering, J. C., Covin, J. G., Bouncken, R. B., & Kraus, S. (2018). Innovative Behaviour, Trust and Perceived Workplace Performance. *British Journal of Management*, 29, 750-768. doi:10.1111/1467-8551.12305

- Humborstad, S. I. W., Nerstad, C. G., & Dysvik, A. (2014). Empowering leadership, employee goal orientations and work performance: A competing hypothesis approach. *Personnel Review*, *43*, 246-271. doi:1108/PR-01-2012-0008
- \* Hussain, S., Shujahat, M., Malik, M. I., Iqbal, S., & Mir, F. N. (2018). Contradictory results on the mediating roles of two dimensions of trust between transformational leadership and employee outcomes. *Journal of organizational effectiveness: People and performance*, *5*, 39-63. doi:10.1108/JOEPP-11-2016-0063
- Jarvenpaa, S., Shaw, T., & Staples, S. (2004). Toward contextualized theories of trust: the role of trust in global virtual teams. *Information Systems Research*, *15*, 250-67. doi:10.1287/isre.1040.0028
- \*Jawahar, I. M., & Schreurs, B. (2018). Supervisor incivility and how it affects subordinates' performance: a matter of trust. *Personnel Review*, *47*, 709-726. doi:10.1108/PR-01-2017-0022
- \*Jing, F. F., Avery, G. C., & Bergsteiner, H. (2014). Enhancing multiple dimensions of performance in small professional firms through leader–follower trust. *Asia Pacific Journal of Human Resources*, *52*, 351-369. doi:10.1111/1744-7941.12012
- Kang, D. S., & Stewart, J. (2007). Leader-member exchange (LMX) theory of leadership and HRD: Development of units of theory and laws of interaction. *Leadership & Organization Development Journal*, *28*, 531-551. doi:10.1108/01437730710780976
- \*Kannan-Narasimhan, R., & Lawrence, B. S. (2012). Behavioral integrity: How leader referents and trust matter to workplace outcomes. *Journal of business ethics*, *111*, 165-178. doi:10.1007/s10551-011-1199-9

- Kim, S., & Kuo, M. H. (2015). Examining the relationships among coaching, trustworthiness, and role behaviors: A social exchange perspective. *The Journal of Applied Behavioral Science*, *51*, 152-176. doi:10.1177/0021886315574884
- \*Kim, T. Y., Wang, J., & Chen, J. (2018). Mutual trust between leader and subordinate and employee outcomes. *Journal of Business Ethics*, *149*, 945-958. doi.org/10.1007/s10551-016-3093-y
- Konovsky, M. A., & Pugh, S. D. (1994). Citizenship behavior and social exchange. *Academy of Management Journal*, *37*, 656-669. doi:10.5465/256704
- Koohang, A., Paliszkievicz, J., & Goluchowski, J. (2017). The impact of leadership on trust, knowledge management, and organizational performance: A research model. *Industrial Management & Data Systems*, *117*, 521-537. doi:10.1108/IMDS-02-2016-0072
- Krosgaard, M. A., Brodt, S. E., & Whitener, E. M. (2002). Trust in the face of conflict: The role of managerial trustworthy behavior and organizational context. *Journal of Applied Psychology*, *87*, 312. doi:10.1037/0021-9010.87.2.312
- Knoll, D. L., & Gill, H. (2011). Antecedents of trust in supervisors, subordinates, and peers. *Journal of Managerial Psychology*, *26*, 313-330. doi:10.1108/02683941111124845
- Kramer, R. M. (1999). Trust and distrust in organizations: Emerging perspectives, enduring questions. *Annual review of psychology*, *50*, 569-598. doi:10.1146/annurev.psych.50.1.569
- Laloux, F. (2014). *Reinventing organizations*. Nelson Parker.
- \*Lam, L. W., Loi, R., & Leong, C. (2013). Reliance and disclosure: How supervisory justice affects trust in supervisor and extra-role performance. *Asia Pacific Journal of Management*, *30*, 231-249. doi:10.1007/s10490-011-9249-5

- \*Lee, P., Gillespie, N., Mann, L., & Wearing, A. (2010). Leadership and trust: Their effect on knowledge sharing and team performance. *Management Learning*, *41*, 473-491.  
doi:10.1177/1350507610362036
- \*Lee, A., Willis, S., & Tian, A. W. (2018). Empowering leadership: A meta-analytic examination of incremental contribution, mediation, and moderation. *Journal of Organizational Behavior*, *39*, 306-325. doi:10.1002/job.2220
- Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social forces*, *63*, 967-985.  
doi:10.1093/sf/63.4.967
- \*Li, S. L., Huo, Y., & Long, L. R. (2017). Chinese traditionality matters: Effects of differentiated empowering leadership on followers' trust in leaders and work outcomes. *Journal of Business Ethics*, *145*, 81-93. doi:10.1007/s10551-015-2900-1
- \*Li, A. N., & Tan, H. H. (2013). What happens when you trust your supervisor? Mediators of individual performance in trust relationships. *Journal of Organizational Behavior*, *34*, 407-425. doi:10.1002/job.1812
- \*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*, 771-794. doi:10.1348/096317909X473903
- \*Mach, M., & Lvina, E. (2017). When trust in the leader matters: The moderated-mediation model of team performance and trust. *Journal of Applied Sport Psychology*, *29*, 134-149. doi:10.1080/10413200.2016.1196765

- \*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, 128-142. doi:10.1080/08959280902743501
- \*Manimegalai, S., & Baral, R. (2018). Examining the mediating role of organizational trust in the relationship between CSR practices and job outcomes. *Social Responsibility Journal*, 14, 433-447. doi:10.1108/SRJ-01-2017-0007
- \*Martin, R., Guillaume, Y., Thomas, G., Lee, A., & Epitropaki, O. (2016). Leader–Member exchange (LMX) and performance: A Meta-Analytic review. *Personnel Psychology*, 69, 67-121. doi:10.1111/peps.12100
- \*Matzler, K., & Renzl, B. (2006). The relationship between interpersonal trust, employee satisfaction, and employee loyalty. *Total quality management and business excellence*, 17, 1261-1271. doi:10.1080/14783360600753653
- \*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, 874-888. doi:10.5465/amj.2005.18803928
- Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of management review*, 20, 709-734. doi:10.5465/amr.1995.9508080335
- McAllister, D. J. (1995). Affect-and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of management journal*, 38, pp. 24-59. doi:10.5465/256727



- McCauley, D. P., & Kuhnert, K. W. (1992). A theoretical review and empirical investigation of employee trust in management. *Public Administration Quarterly*, 265-284. Retrieved from <http://www.jstor.org/stable/40862286>
- McGregor, D. (1960). *The human side of enterprise* (Vol. 21, No. 166-171). McGraw-Hill: New York.
- \*Miao, Q., Newman, A., & Huang, X. (2014). The impact of participative leadership on job performance and organizational citizenship behavior: distinguishing between the mediating effects of affective and cognitive trust. *The International Journal of Human Resource Management*, 25, 2796-2810. doi:10.1080/09585192.2014.934890
- \*Mo, S., & Shi, J. (2017). Linking ethical leadership to employee burnout, workplace deviance and performance: Testing the mediating roles of trust in leader and surface acting. *Journal of Business Ethics*, 144, 293-303. doi:10.1007/s10551-015-2821-z
- \*Neves, P., & Caetano, A. (2009). Commitment to change: Contributions to trust in the supervisor and work outcomes. *Group & Organization Management*, 34, 623-644. doi:10.1177/1059601109350980
- \*Newman, A., Rose, P., & Teo, S. (2016). The role of participative leadership and trust-based mechanisms in eliciting intern performance: Evidence from China. *Human Resource Management*, 55, 53-67. doi:10.1002/hrm.21660
- \*Nübold, A., Dörr, S. L., & Maier, G. W. (2015). Considering the orphan: Personal identification and its relations with transformational leadership, trust, and performance in a three-path mediation model. *Leadership*, 11, 230-254. doi:10.1177/1742715014522679

- Palanski, M. E., Kahai, S. S., & Yammarino, F. J. (2011). Team virtues and performance: An examination of transparency, behavioral integrity, and trust. *Journal of Business Ethics, 99*, 201-216. doi:10.1007/s10551-010-0650-7
- Peltoniemi, M. (2015). Cultural Industries: Product–Market Characteristics, Management Challenges and Industry Dynamics. *International journal of management reviews, 17*, 41-68. doi:10.1111/ijmr.12036
- Podsakoff, P. M., MacKenzie, S. B., Moorman, R. H., & Fetter, R. (1990). Transformational leader behaviors and their effects on followers' trust in leader, satisfaction, and organizational citizenship behaviors. *The Leadership Quarterly, 1*, 107-142. doi:10.1016/1048-9843(90)90009-7
- \*Pratoom, K. (2011). Cross validating the consequences model of corporate governance underlying combination of stewardship and stakeholder theories. *African Journal of Business Management, 5*, 11178-11188. doi:10.5897/AJBM11.1400
- \*Rich, G. A. (1997). The sales manager as a role model: Effects on trust, job satisfaction, and performance of salespeople. *Journal of the Academy of Marketing Science, 25*, 319-328. doi:10.1177/0092070397254004
- \*Salamon, S. D., & Robinson, S. L. (2008). Trust that binds: the impact of collective felt trust on organizational performance. *Journal of Applied Psychology, 93*, 593. doi:10.1037/0021-9010.93.3.593
- \*Schaubroeck, J., Lam, S. S., & Peng, A. C. (2011). Cognition-based and affect-based trust as mediators of leader behavior influences on team performance. *Journal of Applied Psychology, 96*, 863-871. doi:10.1037/a0022625

- \*Schaubroeck, J. M., Peng, A. C., & Hannah, S. T. (2013). Developing trust with peers and leaders: Impacts on organizational identification and performance during entry. *Academy of Management Journal*, 56, 1148-1168. doi:10.5465/amj.2011.0358
- \*Schwepker Jr, C. H., & Good, D. J. (2013). Improving salespeople's trust in the organization, moral judgment and performance through transformational leadership. *Journal of Business & Industrial Marketing*, 28, 535-546. doi:10.1108/JBIM-06-2011-0077
- Shen, M. J., & Chen, M. C. (2007). The relationship of leadership, team trust and team performance: A comparison of the service and manufacturing industries. *Social Behavior and Personality: an international journal*, 35, 643-658. doi: 10.2224/sbp.2007.35.5.643
- \*Simmons, B. L., Gooty, J., Nelson, D. L., & Little, L. M. (2009). Secure attachment: Implications for hope, trust, burnout, and performance. *Journal of Organizational Behavior*, 30, 233-247. doi: 10.1002/job.585
- Song, J. H., Kim, H. M., & Kolb, J. A. (2009). The effect of learning organization culture on the relationship between interpersonal trust and organizational commitment. *Human Resource Development Quarterly*, 20, 147-167. doi:10.1002/hrdq.20013
- Tan, H. H., & Lim, A. K. (2009). Trust in coworkers and trust in organizations. *The Journal of Psychology*, 143, 45-66. doi:10.3200/JRLP.143.1.45-66
- Tansky, J. W., & Cohen, D. J. (2001). The relationship between organizational support, employee development, and organizational commitment: An empirical study. *Human Resource Development Quarterly*, 12, 285-300. doi:/10.1002/hrdq.15

- Tranfield, D. R., Denyer, D., & Smart, P. (2003). Towards a methodology for developing evidence-informed management knowledge by means of systematic review. *British journal of management, 14*, 207-222. doi:10.1111/1467-8551.00375
- Trapp, N. L. (2011). Staff attitudes to talking openly about ethical dilemmas: The role of business ethics conceptions and trust. *Journal of business ethics, 103*, 543-552. doi:10.1007/s10551-011-0879-9
- \*Tremblay, M., Cloutier, J., Simard, G., Chênevert, D., & Vandenberghe, C. (2010). The role of HRM practices, procedural justice, organizational support and trust in organizational commitment and in-role and extra-role performance. *The international journal of human resource management, 21*, 405-433. doi:10.1080/09585190903549056
- \*Tzafirir, S. S. (2005). The relationship between trust, HRM practices and firm performance. *The International Journal of Human Resource Management, 16*, 1600-1622. doi:10.1080/09585190500239135
- \*Ugwu, L. I., Enwereuzor, I. K., & Orji, E. U. (2016). Is trust in leadership a mediator between transformational leadership and in-role performance among small-scale factory workers? *Review of Managerial Science, 10*, 629–648. doi:10.1007/s11846-015-0170-z
- \*Vanhala, M., & Dietz, G. (2015). HRM, Trust in employer and organizational performance. *Knowledge and Process Management, 22*, 270-287. doi:10.1002/kpm.1491
- \*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 & organization management, 43*, 179-206. doi:10.1177/1059601117725191

- Viswesvaran, C., & Ones, D. S. (2000). Perspectives on models of job performance. *International Journal of Selection and Assessment*, 8, 216-226. doi:10.1111/1468-2389.00151
- \*Yang, J., Mossholder, K. W., & Peng, T. K. (2009). Supervisory procedural justice effects: The mediating roles of cognitive and affective trust. *The Leadership Quarterly*, 20, 143-154. doi:10.1016/j.leaqua.2009.01.009
- \*Yu, Y., & Choi, Y. (2014). Corporate social responsibility and firm performance through the mediating effect of organizational trust in Chinese firms. *Chinese Management Studies*, 8, 577-592. doi:10.1108/CMS-10-2013-0196
- Zaheer, A., McEvily, B., & Perrone, V. (1998). Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance. *Organization science*, 9, 141-159. doi:10.1287/orsc.9.2.141
- \*Zhu, W., Newman, A., Miao, Q., & Hooke, A. (2013). Revisiting the mediating role of trust in transformational leadership effects: Do different types of trust make a difference? *The Leadership Quarterly*, 24, 94-105. doi:10.1016/j.leaqua.2012.08.004

Table 1

*Summary of Results for the Direct Effects of Vertical Trust on Performance*

<i>Trust referent</i>	<i>Performance dimension</i>				
	Job performance	In-role/task performance	Extra-role performance	Team performance	Organizational performance
Trust in leadership	(+) (Dirks & Ferrin, 2002; Rich, 1997; Madjar & Ortiz-Walters, 2009; Chong & Law, 2016)	(+) (Simmons, Gooty, Nelson & Little, 2009; Schaubroeck, Peng & Hannah, 2013; Brower et al., 2009; Kim & Kuo, 2015; Mo & Shi, 2017)	(+) (Chen, Hwang & Liu, 2012; Brower et al., 2009; Kim & Kuo, 2015; Pratoom, 2011; Chiaburu & Lim, 2008)	(+) (Dirks, 2000)	(+) (Davis, Schoorman, Mayer & Tan, 2000; Brown, Gray, McHardy & Taylor, 2015; Davis & Bryant, 2010; Cho & Ringquist, 2011; Allen, George & Davis, 2018)
	(n.s.) (Atuahene-Gima & Li, 2002)	(*) (Huang, Iun, Liu & Gong, 2010)	(*) (Huang, Iun, Liu & Gong, 2010; Kannan-Narasimhan & Lawrence, 2012)		(*) (Cho & Poister, 2014)
		(n.s.) (Ugwu et al., 2016)		(n.s.) (Coxen, van der Vaart & Stander, 2016)	
Trust in subordinates		(+) (Brower et al., 2009)	(+) (Brower et al., 2009)		
Leader-follower trust	(+) (Cheung, Wong & Yuan, 2017)	(+) (Kim, Wang & Chen, 2018)		(*) (Carter & Mossholder, 2015)	(+) (Jing, Avery & Bergsteiner, 2014)
Trust in organization		(+) (Biswas & Kapil, 2017)	(+) (Coxen, van der Vaart & Stander, 2016) (n.s.) (Tremblay, et al., 2010 )		

*Notes.*

(+) positive relationship

(-) negative relationship

(n.s.) no significant/no supported relationship

(\*) Partial support

Table 2

*Summary of Results for the Mediating Role of Vertical Trust on Performance*

<i>Trust referent</i>	<i>Performance dimension</i>				
	Job performance	In-role/task performance	Extra-role performance	Team performance	Organizational performance
Trust in leadership	(+) <b>Trustworthiness/Trust propensity</b> (Colquitt, Scott & LePine, 2007); <b>Role modeling</b> (Rich, 1997); <b>Organizational justice</b> (Colquitt et al., 2012) <sup>12</sup> ; <b>Budget-based incentive compensation scheme</b> (Chong & Law, 2016); <b>Feedback seeking behavior</b> (Huang, 2012); <b>Participative leadership</b> (Miao, Newman & Huang, 2014 <sup>1</sup> ; Newman, Rose & Teo, 2016 <sup>1</sup> ); <b>Manager trustworthiness</b> (De Cremer et al., 2018)	(+) <b>Interactional justice</b> (Aryee, Budhwar & Chen, 2002); <b>Supervisory procedural Justice</b> (Yang, Mossholder & Peng, 2009) <sup>1</sup> ; <b>Leader benevolence/morality</b> (Chen et al., 2014) <sup>1</sup> ; <b>Managerial coaching</b> (Kim & Kuo, 2015); <b>Leader-Member Exchange</b> (Martin, Guillaume, Thomas, Lee & Epitropaki, 2016); <b>Affective commitment to change</b> (Neves & Caetano, 2009); <b>Transformational leadership</b> (Zhu, Newman, Miao & Hooke, 2013) <sup>1</sup> ; <b>Ethical leadership</b> (Mo & Shi, 2017); <b>Differentiated empowering leadership</b> (Li, Huo & Long, 2017); <b>Empowering leadership</b> (Lee, Willis & Tian, 2018)	(+) <b>Interactional justice</b> (Aryee, Budhwar & Chen, 2002); <b>Supervisory procedural Justice</b> (Yang, Mossholder & Peng, 2009) <sup>2</sup> ; <b>Leader benevolence/morality</b> (Chen et al., 2014) <sup>1</sup> ; <b>Managerial coaching</b> (Kim & Kuo, 2015); <b>Leader-Member Exchange</b> (Martin, Guillaume, Thomas, Lee & Epitropaki, 2016); <b>Transformational leadership</b> (Chen, Hwang & Liu, 2012; Zhu, Newman, Miao & Hooke, 2013) <sup>1</sup> ; <b>Affective commitment to change</b> (Neves & Caetano, 2009); <b>Good corporate governance</b> (Pratoom, 2011); <b>Differentiated empowering leadership</b> (Li, Huo & Long, 2017); <b>Empowering leadership</b> (Lee, Willis & Tian, 2018)	(+) <b>Transformational leadership</b> (Nuebold et al. 2015); <b>Past team performance</b> (Dirks, 2000)  (n.s.) <b>Knowledge builder/sharing</b> (Lee, Gillespie, Mann & Wearing, 2010)	(+) <b>Managerial practices</b> (Cho & Poister, 2014)
	(*) <b>Participative leadership</b> (Huang et al. 2010)	(n.s.) <b>Leader authoritarianism</b> (Chen et al., 2014) <sup>1</sup> ; <b>Transformational leadership</b> (Ugwu et al. 2016); <b>Continuance commitment to change</b> (Neves & Caetano, 2009)	(*) <b>Interactional justice</b> (Lam, Loi & Leong, 2013)		
	(n.s.) <b>Participative leadership</b> (Miao, Newman & Huang, 2014 <sup>2</sup> ; Newman, Rose & Teo, 2016 <sup>2</sup> )	(-) <b>Transformational leadership</b> (Hussain et al., 2018 <sup>12</sup> ; Zhu, Newman, Miao & Hooke, 2013 <sup>2</sup> )	(n.s.) <b>Leader authoritarianism</b> (Chen et al., 2014) <sup>1</sup> ; <b>Supervisory Behavioral Integrity</b> (Kannan-Narasimhan & Lawrence,		

			2012); <b>Continuance commitment to change</b> (Neves & Caetano, 2009); <b>Transformational leadership</b> (Zhu, Newman, Miao & Hooke, 2013) <sup>2</sup> ; <b>Participative leadership</b> (Miao, Newman & Huang, 2014) <sup>2</sup> ; <b>Authentic leadership</b> (Coxen, van der Vaart & Stander, 2016)	
Trust in organization	(+) <b>Expectation climate strength</b> (Audenaert et al. 2016); <b>Transformational leadership</b> (Schwepker & Good, 2013); <b>Employees' perception of HRM</b> (Vanhala & Dietz, 2015)	(+) <b>Organizational control</b> (Verburg et al. 2018); <b>Perceived organizational support/organizational justice</b> (Biswas & Kapil, 2017)	(+) <b>Authentic leadership</b> (Coxen, van der Vaart & Stander, 2016); <b>Organizational control</b> (Verburg et al. 2018); <b>Perceived corporate social responsibility</b> (Manimegalai & Baral, 2018)	(+) <b>HR practices</b> (Gould-Williams, 2003); <b>Perceived corporate social responsibility</b> (Yu & Choi, 2014); <b>Employees' perception of HRM</b> (Vanhala & Dietz, 2015)

*Notes.* Antecedent variables of trust are identified in bold

(+) positive relationship

(-) negative relationship

(n.s.) no significant/no supported relationship

(\*) Partial support

<sup>1</sup> Affective trust

<sup>2</sup> Cognitive trust



Table 3

*Summary of Results for the Moderating Role of Vertical Trust on Performance*

<i>Trust referent</i>	<i>Performance dimension</i>				
	Job performance	In-role/task performance	Extra-role performance	Team performance	Organizational performance
Trust in leadership	(+) <b>Conceptualization of trust (trust dimensions: overall vs. cognitive trust)/ Trust referent (direct leader vs. organizational leadership)</b> (Dirks & Ferrin, 2002) <sup>1</sup> ; <b>Prosocial motivation</b> (Grant & Sumanth, 2009); <b>Supervisor participation</b> (De Cremer et al., 2018)	(+) <b>Perceived HRM practices</b> (Alfes, Shantz & Truss, 2012) <b>(n.s.) Supervisor incivility/Engagement</b> (Jawahar & Schreurs, 2018) <sup>2</sup>	(+) <b>Supervisor incivility/Engagement</b> (Jawahar & Schreurs, 2018) <sup>2</sup> <b>(n.s.) Perceived HRM practices</b> (Alfes, Shantz & Truss, 2012)	(+) <b>Innovative behavior</b> (Hughes et al., 2018)	(+) <b>Challenging unit goals/Manager proactivity</b> (Crossley, Cooper & Wernsing, 2013)
	Trust in the subordinate	<b>(n.s.) Trust in the manager</b> (Brower et al., 2009)	<b>(*) Trust in the manager</b> (Brower et al., 2009)		
Leader-follower trust					<b>(-) HR manager roles</b> (Chang & Chi, 2007)

*Notes.* Antecedent variables of trust are identified in bold

(+) Positive relationship

(-) Negative relationship

(n.s.) No support

(\*) Partial support

<sup>1</sup> Direct leader and overall trust show a higher relationship to job performance than trust in organizational leader and cognitive trust

<sup>2</sup> Moderated mediation

Table 4

*Summary of Results for the role of Vertical Trust Triggering Mediating/moderating Effects of other Variables on Performance*

<i>Trust referent</i>	<i>Performance dimension</i>				
	Job performance	In-role/task performance	Extra-role performance	Team performance	Organizational performance
Trust in leadership	(+) <b>Social exchange with organization</b> (Byrne et al., 2011); <b>High-quality leader-member exchange</b> (Chen, Lam & Zhong, 2012); <b>Psychological availability</b> (Li & Tan, 2013); <b>Psychological safety</b> (Madjar & Ortiz-Walters, 2009); <b>Perceived task significance</b> (Grant & Sumanth, 2009); <b>Supervisor trustworthiness</b> (De Cremer et al., 2018)  (n.s.) <b>Psychological meaningfulness</b> (Li & Tan, 2013)	(n.s.) <b>Ability to focus</b> (Mayer & Gavin, 2005)  (#)(n.s.) <b>Trust in the subordinate</b> (Brower et al., 2009)	(+) <b>Ability to focus</b> (Mayer & Gavin, 2005); <b>Perceived LMX relationships</b> (Byun, Dai, Lee & Kang, 2017)  (#) <b>Leader's competence</b> (Byun, Dai, Lee & Kang, 2017); (*) <b>Trust in the subordinate</b> (Brower et al., 2009)	(+) <b>Team longevity</b> (Dayan, 2010); <b>Team potency</b> (Schaubroeck et al., 2011); <b>Personal identification</b> (Nubold, Dorr & Maier, 2015); <b>Team trust</b> (Mach, Dolan & Tzafir, 2010; Mach & Lvina, 2017)  (#) <b>Trust consensus/Team past performance</b> (Mach & Lvina, 2017)	(+) <b>Teamwork</b> (Cho & Poister, 2014); <b>Affective commitment</b> (Allen, George & Davis, 2018); <b>Knowledge management</b> (Koohang, Paliszkievicz & Goluchowski, 2017)  (#)(*) <b>Sales control/Supervisor behavior</b> (Atuahene-Gima & Li, 2002)
Trust in subordinates					(+) <b>HRM practices</b> (Tzafir, 2005)  (*) <b>Responsibility norms</b> (Deutsch-Salomon & Robinson, 2008)
Leader-follower trust	(+) <b>Psychological contract fulfillment</b> (Cheung, Wong & Yuan, 2017)			(+) <b>Work group motivation</b> (Carter & Mossholder, 2015)	
Trust in organization		(n.s.) <b>Affective organizational commitment</b> (Tremblay, Cloutier, Simard, Chênevert & Vandenberg, 2010)	(n.s.) <b>Affective organizational commitment</b> (Tremblay, Cloutier, Simard, Chênevert & Vandenberg, 2010)		(+) <b>Organizational learning capability</b> (Guinot, Chiva & Mallén, 2013)

*Notes.* Mediating/moderating variables of trust–performance are identified in bold

(+) positive mediation

(-) negative mediation

(n.s.) no support  
(\* ) Partial support  
(#) Moderation