

## VERTICAL TRUST IN ORGANIZATIONS: A REVIEW OF EMPIRICAL STUDIES OVER THE LAST DECADE

Yrd. Doç. Dr. Adnan ÖZYILMAZ

Mustafa Kemal University, Department of Business Administration

### Abstract

*The last decade has shown a proliferation in empirical trust studies in scientific journals due to the contribution of trust to organizational performance through increasing positive employee workplace intentions and behaviors. Given the theoretical suggestions and the empirical evidence on the importance of the referents of trust, this present study reviewed empirical research on trust considering three trust referents: supervisor, management, and organization. This parsimony of the trust research revealed that trust in organization has received much less empirical research attention than trust in direct supervisor and in management. The mediating and moderating role of trust in organization has also received much less empirical research attention than that of trust in supervisor and trust in management. It is this study's conclusion that subordinate workplace intentions and behaviors can be better understood in terms of considering all reciprocal trust relationships among the subordinate, the supervisor, and the subordinate's peers; between the subordinate and the management; and between the subordinate and the organization. Implications and future research directions are also discussed.*

**Keywords:** trust in supervisor, trust in management, trust in organization, vertical trust, referents of trust, mediators of trust, moderators of trust.

## ÖRGÜTLERDE DİKEY GÜVEN: SON ON YILLIK DÖNEMDEKİ AMPİRİK ÇALIŞMALARIN GÖZDEN GEÇİRİLMESİ

### Özet

Güven, çalışanın pozitif işyeri niyet ve davranışlarını artırarak örgütsel performansa katkı sağlamaktadır. Son on yılda bilimsel dergilerde yayınlanan güvenle ilgili ampirik çalışmalarda çok büyük bir artış görülmüştür. Güven imlemlerinin (referents) önemi konusunda teorik tavsiyeler ve ampirik deliller dikkate alındığında, bu mevcut çalışma, yönetici, yönetim ve organizasyon güven imlemlerini dikkate alarak ampirik güven çalışmalarını gözden geçirmiştir. Güvenle ilgili çalışmaların bu üç şekilde birbirinden ayrılması, örgütsel güven konusunun, bir üst yöneticiye güven ve yönetime güven konularından çok daha az araştırma konusu olduğunu ortaya çıkarmıştır. Örgütsel güvenin mediatör ve moderatör rolü de yöneticiye güven ve yönetime güvenin aynı konudaki rollerinden çok daha az ampirik araştırma konusu olmuştur. Astarların işyeri niyet ve davranışları, astlar, bir üst yöneticileri ve astların iş arkadaşları; astlar ve yönetim; ve astlar ve organizasyon arasındaki karşılıklı güven ilişkilerinin dikkate alınması ile anlaşılabilceği bu çalışmanın sonucudur. Çalışmaların sonuçlarının ne anlama geldiği ve gelecek araştırmaların hangi yönde olması gerektiği konuları da bu çalışma içerisinde tartışılmaktadır.

**Anahtar Sözcükler:** yöneticiye güven, yönetime güven, organizasyona güven, dikey güven, güvenin imlemleri (kastedilen nesne veya şey), güvenin mediatörleri, güvenin moderatörleri.

## Introduction

The construct of trust has attracted serious attention over the last three decades due to its high potential to provide performance benefits to individuals and organizations (Dirks and Skarlicki, 2009). Trust, on one hand, enables cooperative behavior, reduces transaction costs within organizations, promotes adaptive organizational forms, and reduces dysfunctional conflict (Rousseau, Sitkin, Burt, and Camerer, 1998). It is a fundamental element of effective leadership (Dirks and Ferrin, 2001, 2002; Dirks and Skarlicki, 2004), enhances spontaneous sociability among organization's employees (Kramer, 1999), improves information sharing between subordinates and managers (Mishra, 1996), helps advance a more effective exchange relationship between a subordinate and a supervisor (Zand, 1972), and drives productivity (Blau, 1964). A lack of trust, on the other hand, generates antisocial work behavior that is harmful to co-workers (Aquino and Byron, 2002) and is financially counterproductive for the organization (Bensimon, 1997).

The number of special journal issues dedicated to trust research especially after the year 1995 may highlight the importance of trust in academic research. The special journal issues dedicated to trust research are addressed in Möllering, Bachmann, and Lee (2004). The intensity of empirical research in trust has also increased over the last decade. This can be observed by investigating the number of empirical articles published in scientific journals, some of which are also included in this present study and shown with an asterisk in the references section, especially the ones directly related to trust in vertical trust-relationships in business organizations. Möllering et al. (2004: 560) emphasize that "until the end of the 1990s, trust research was heavily conceptual – as is typical for a "new" research topic – but more recently, trust researchers have devoted most of their efforts to empirical investigation. Specifically, quantitative studies aimed at hypothesis testing and modeling currently dominate the scene." Even though the number of empirical studies on trust increased after Dirks and Ferrin's (2002) meta-analytic review, no study has provided parsimony of results as to the vertical trust in organizations by now.

There have been two meta-analytic reviews of trust research over the last decade. These are Dirks and Ferrin's (2002) and Colquitt, Scott, and LePine's (2007) studies. Colquitt et al.'s (2007) meta-analytic review tests the antecedents, consequences, mediating role, and moderating role of trust in different referents (trust in co-worker and trust in leader). The results of the study demonstrate that the breakdown of trust antecedents (ability, benevolence, integrity, trust propensity) and trust consequences (risk-taking behaviors, task performance, citizenship behavior, counterproductive behavior) have only a minor impact on the magnitude of the trust relationships, whereas Dirks and Ferrin (2002) reveal a different association between different trust antecedents and different trust consequences. In addition, Colquitt et

al.'s (2007) study also demonstrates that the trust referent has little impact on the magnitude of the trust relationship, with the exception of integrity in which co-worker referents resulted in weaker correlations than leader referents. The meta-analytic review of Colquitt et al. (2007) provided complementary rather than contradictory evidence because the two reviews considered some different variables. For example, Colquitt et al. (2007) include ability and risk taking as variables, whereas Dirks and Ferrin (2002) do not include them in their study. The reviews also differ in terms of the level of aggregation employed in the two studies. For example, Dirks and Ferrin (2002) use an aggregate definition of trust and trustworthiness, whereas Colquitt et al. (2007) use trust in the coworker and leader as the two sub-dimensions of trust and consider each component of trustworthiness - ability, benevolence, and integrity – separately.

There are both empirical results and theoretical assertions in the trust literature that indicate that contextual factors and referents matter in investigating trust (Dirks and Ferrin, 2002; Colquitt et al., 2007; Holtz and Harold, 2008). These contextual factors arise from many sources in organizations. For example, trust in organizations requires considering qualities of not only a specific individual such as a direct supervisor or a collective body of individuals such as management but also the system to be trusted, meaning organization as a system (Cook and Wall, 1980; Butler, 1999) because “hierarchical power differences” and the “asymmetry of information” exist between the different parties (Schoorman, Mayer, and Davis, 2007: 351), especially in hierarchical relationships. Likewise, Shepperd and Sherman (1998) recommended that the behavioral antecedents of trust may vary depending upon the extent of interdependence between the constituents in the trust relationship. The interdependency is probably high when it comes to vertical relationships because of the expectations of both the trustor and trustee to achieve their individual objectives as well all as their common objectives such as organizational objectives.

Moreover, Shamir and Lapidot (2003) suggest that system-level trust, group-level trust, and individual-level trust be considered to understand subordinates' trust in organizational leaders. Accordingly, although group- and individual-level trusts have been studied extensively in the literature and especially individual-level trust has been advocated as a fundamental basis to understand trust, system-level trust has received much less attention. System-level trust refers to trust in organizational systems as a whole or sub-systems within an organization in specific such as high-performance work systems (HPWS). Previous research has also demonstrated that trust in organization and trust in supervisor are related but different constructs, with each having its unique sets of antecedents and outcomes (Tan and Tan, 2000). Accordingly, in terms of the antecedents, trust in organization was strongly associated with such global variables as perceived organizational support and justice, whereas trust in supervisor was more strongly associated with such proximal variables as ability, benevolence, and integrity of supervisor. In terms of the

outcomes, trust in organizations was strongly associated with such outcomes as lower subordinate intention to leave and higher subordinate organizational commitment, whereas trust in supervisor was strongly associated with enhanced subordinate innovative behavior and subordinate satisfaction with supervisors. Therefore, Tan and Tan (2000) argue that to develop trust in organization, organizations should consider the various levels such as the supervisor level and the organizational level and the various constituencies such as the subordinates and management.

The specific outcomes of trust also varies according to some contextual factors as the alternatives available to the trustor, the perceptions of the level of risk, the stakes involved, and the balance of power in the relationship that mainly arise out of hierarchical relationships (Mayer, Davis, and Schoorman, 1995). Of the hierarchical relationships in an organization, the relationship that a subordinate develops with his/her supervisors is distinct from those relationships the same subordinate forms with his/her organization (Stinglhamber, Cremer, and Mercken, 2006).

All this discussion means that contextual differences and referents of trust are important in studying trust. The discussion also indicates that there are mainly three levels in vertical trust relationships that could be used as referents of trust: subordinate-supervisor, subordinate-management, and subordinate-organization. Each trust relationship can be reciprocal. Therefore, it seems a significant contribution to refine the empirical trust research according to these three vertical trust relationships. Earlier, McCauley and Kuhnert (1992) indicate that trust consists of two elements: lateral trust and vertical trust. Lateral trust refers to the trust relationship between a focal employee and his/her co-workers. Vertical trust, on the other hand, refers to the trust relationship between a subordinate and his/her direct supervisor. The study was also used as a base for an empirical study to investigate vertical and horizontal trust relationships by Costigan, Ilter, and Berman (1998). This present study extends McCauley and Kuhnert's (1992) study to include the trust relationships between a subordinate and the management of an organization and between a subordinate and the organization itself at the vertical trust level to investigate the results of these relationships in terms of subordinate work-related intentions and behaviors. Recently, Thau, Crossley, Bennett, and Sczesny (2007) have also considered three different organizational referents of trust: supervisor, senior managers, and organization.

This study reviewed the empirical studies on trust in vertical relationships in business organizations over the last decade, beginning in the year 2000, inclusive. It uses vertical trust in organizations to refer to the trust relationships in a vertical organizational hierarchy, including subordinate-supervisor, subordinate-management, and subordinate-organization. The year 2000 was chosen because Dirks and Ferrin's (2002) meta-analytic study provides a summary of empirical work

and demonstrates that different referents of trust moderate the relationship between different trust antecedents and outcomes. This is one of the earlier indications that referents are important in investigating trust in organizations. In addition, as mentioned above, the intensity of empirical journal articles has intensified over the last decade. However, no review of the literature has considered the contributions and implications of these empirical studies at the vertical trust level. Therefore, it is necessary to investigate the empirical work in vertical trust relationships to understand the developments, converging and diverging results at the three different levels of vertical trust research.

In sum, this study attempts to qualitatively review the primary trust relationships at the vertical levels between subordinate and supervisor, subordinate and management and subordinate and organization and, as a result, the effects of these relationships on subordinate intentions and behavior, thus providing a contribution at the vertical level of trust to the literature base. A review of these empirical studies will help identify important contributions and their implications and identify possible research areas that require further empirical research attention.

### **Trust as an Antecedent to Subordinate Workplace Intentions and Behaviors Trust in supervisor**

Subordinate-supervisor dyadic-trust research (e.g., Ergeneli, Ari, and Metin, 2007; Brower, Lester, Korsgaard, and Dineen, 2009) – the trust research that investigates the trust relationship between a subordinate and an immediate supervisor in an organization – has advanced our understanding of the trust relationship between the two constituencies with regard to the intentional and behavioral consequences on the part of both subordinates and organizations. This present investigation of the empirical literature on trust has revealed that the relationship is not limited to the specific trust relationship between subordinates and immediate supervisors. It has been influenced by some closely related factors such as a subordinate's trust in peers, a supervisor's trust in subordinates, and a supervisor's benevolence toward the subordinate's peers as perceived by the subordinate. All of the related factors also affected the subordinate's trust in the supervisor and thus the subordinate's intentions and behaviors.

For example, not only the subordinate's trust in the supervisor but also the subordinate's trust in his/her peers is a negative and significant predictor of the turnover intention of subordinates (Ergeneli et al., 2007). Accordingly, a full understanding of the turnover intention of subordinates requires subordinates' trust in peers, beyond the effect of subordinates' trust in their direct supervisors. Subordinates' trust in their peers is also a significant predictor of transformational leadership (Ferres, Travaglione, and Connel, 2002). Moreover, the interaction between a subordinate's trust in his/her direct supervisor and a supervisor's trust in

the subordinate is a significant and positive predictor of the subordinate's individually directed organizational citizenship behavior (OCBI) (Brower et al., 2009). Higher levels of mutual trust lead to higher levels of subordinate OCBI.

Mayer et al. (1995) propose an integrative model of trust advocating that a supervisor's ability, benevolence, and integrity (factors of perceived trustworthiness) as perceived by his/her subordinate are the main determinants of trust in the supervisor. The proposed model was tested and validated (Davis, Schoorman, Mayer, and Tan, 2000). Based mainly on the model, Lapierre (2007) demonstrated that a supervisor's ability, the supervisor's benevolence toward subordinates and toward the subordinate's peers had a significant and positive effect on a subordinate's willingness to offer the supervisor extra-role efforts. The supervisor's benevolence toward the subordinate's peers was second in magnitude after the supervisor's benevolence toward the subordinate. A significant interaction effect between the supervisor's benevolence toward a subordinate and the supervisor's benevolence toward the subordinate's peers is also revealed. Accordingly, the effect was stronger when the supervisor's benevolence toward the subordinate's peers was high than when it was low.

Recent research has also revealed not only that a subordinate's trust in a supervisor affects the subordinate's intentions and behaviors but also that a manager's trust in his/her subordinates is positively and significantly associated with subordinate task performance and negatively associated with subordinates' intentions to quit (Brower et al., 2009). In addition, a manager's trust in subordinates is associated with employee perceptions of the quality of the leader-member exchange (LMX) theory of leadership (Gomez and Rosen, 2001) – an exchange relationship of a leader with various employees in which the type of the relationship is qualitatively different for each employee (Dansereau, Graen, and Haga, 1975). Accordingly, a higher level of a supervisor's trust in a subordinate was associated with a higher level of quality of exchange between supervisors and their immediate subordinates. Moreover, there existed a full mediation effect of the LMX on the relationship between supervisors' trust in the subordinates and subordinates' perceptions of empowerment (Gomez and Rosen, 2001), in that in-group members are provided more rewards, responsibility, and support than out-group members.

Subordinates' trust in supervisors predicted organizational citizenship behavior positively and significantly. For example, subordinates' trust in their supervisors was found to be significantly and positively associated with subordinates' organization-directed citizenship behavior (OCBO) (Brower et al., 2009), organizational citizenship behaviors (OCBs) (Menguc, 2000; Wat and Shaffer, 2005), and task performance (Brower et al., 2009).

Holtz and Harold (2008) demonstrate that subordinates' trust in their supervisors was a positive and significant antecedent to such perceptions as

explanation adequacy, legitimacy, and sincerity or managerial explanations for a rejected request of a subordinate. In addition, subordinates' trust in their supervisors was a positive and significant predictor of justice perceptions following a rejected request. It also interacted with employees' explanation perception of a rejected request by their supervisors to influence subordinates' justice perceptions (informational justice, interpersonal justice, procedural justice). A noteworthy contribution of Holtz and Harold's (2008) study is their finding that subordinates' trust in their supervisors did not correlate with the big-five personality traits (agreeableness, conscientiousness, extraversion, neuroticism, and openness).

A negative relationship between trust in the supervisor and a subordinate's antisocial work behaviors existed (Thau et al., 2007). A further analysis reveals that the relationship is fully mediated by subordinates' intention to stay. Poon (2006) demonstrates that there is a positive and significant association between trust in supervisors and subordinates' willingness to help co-workers in a way that costs the employees in the form of time and effort that could be used in some work- or social-life-related activities. He also demonstrates that trust in supervisor interacted with a subordinate's perception of organizational politics to influence subordinates' willingness to help coworkers. This indicated the availability of the perception of organizational politics as the moderator of the relationship between trust in the supervisor and subordinates' perception of organizational politics. The relationship is found to be stronger when perceived politics is low than when the perceived politics is high. When subordinates trust in their supervisor, subordinates become more satisfied with their supervisors, and, as a result, the subordinates' innovative behaviors improve (Tan and Tan, 2000). This has a real implication for those professional managers whose subordinates are supposed to be creative to develop innovative solutions to business problems and create new product and process innovation in ever-increasing competitive global markets.

Affect- and cognition-based trust have been demonstrated to represent the foundation for interpersonal cooperation in organizations (McAllister, 1995). Cognition-based trust refers to the trust that depends on such elements as the competence, responsibility, reliability, and dependability of managers as perceived by their subordinates in their previous interactions with their supervisors, whereas affect-based trust refers to the emotional bonds between subordinates and their immediate superiors (McAllister, 1995). Cognition-based trust in supervisory and managerial positions are direct, positive determinants of psychological empowerment, which consists of the dimensions as defined by cognitive perspective (Spreitzer, 1995) as meaning, competence, self-determination, and impact (Ergeneli et al., 2007). More specifically, (1) cognition-based trust in supervisor is the direct, positive determinant of the meaning and competence aspects of psychological empowerment, (2) cognition-based trust in supervisor and managerial position are the direct, positive determinants of the impact aspect of psychological empowerment,

and (3) only managerial position was the direct, positive determinant of self-determination aspect of psychological empowerment (Ergeneli et al., 2007). Psychologically empowered subordinates may reflect this feeling in many different positive ways for their organization, such as helping customers in a more appropriate manner, investing more time to solve customer complaints, and increasing their efficiency in work.

A subordinate's affect- and cognition-based trust in his/her supervisor are positive and significant but modest predictors of that subordinate's enterprising behavior – a subordinate's behavior of initiative taking, speaking out, independent judgment, and active involvement as defined by Campbell (2000) and as operationalized by Costigan, Insigna, Berman, Ilter, Kranas, and Kureshov (2006). An interesting aspect of this last authors' study is its finding that neither power distance nor in-group collectivism interacted with affect- and cognition-based trust in a supervisor to predict the subordinate's enterprising behavior. Put another way, the relationship between subordinates' trust in their supervisors and the subordinates' enterprising behavior was not moderated by two cultural variables – power distance and in-group collectivism – contrary to the thinking that culture is an important determinant of intentions and behaviors (Hofstede, 1980) in organizational behavior.

Team-level outcomes of player trust in direct leaders have also been revealed. For example, trust in leaders, indeed, trust in the coach of a basketball team, was found to positively and significantly lead to team performance (Dirks, 2000; Bijlsma-Frankema, Jong, and van de Bunt, 2008). Players' trust in their direct leader also mediates the relationship between past team performance and future team performance, and it is thus acknowledged that trust in leadership affects team performance and is affected by team performance (Dirks, 2000). A logical conclusion of this might be that winners always win and losers always lose.

The lack of subordinates' trust in their direct supervisor, on the other hand, implies negative consequences not only on the part of organization and direct supervisors but also on the part of subordinates. The trust of the sales force in the supervisor, for example, is an antecedent to dysfunctional behavior by salespeople that can create undesired consequences for both the direct supervisors and the organizations in the form of unmet sales quotas and, as a result, decreases in sales performance (Choi, Dixon, and Jung, 2004). In light of this, the trust relationship between the two constituencies is increased by means of affording sales force with information about their self-efficacy by their supervisors (Choi et al., 2004).

### **Trust in management**

Trust in management refers to a subordinate's trust in the management of an organization at different levels of its hierarchy, not necessarily his/her immediate manager. Like subordinates' trust in their direct supervisors, trust in management

has been found to be another determinant of a subordinate's workplace intentions and behaviors. Trust in management, trust in peers, and dispositional trust or propensity to trust are found to be significant predictors of the transformational leadership perception of subordinates (Ferres et al., 2002), a conclusion that supports the previous argument presented above that not only trust in direct supervisors but also trust in peers must be addressed to fully explore and understand the effects and outcomes of trust at both individual and organizational levels.

The organizational performance implications of trust in management are also revealed by a study of Davis et al. (2000), who mainly investigate the effect of subordinates' trust in their general managers on organizational performance with regard to sales, profit, and employee turnover. The results indicate that subordinates' trust in their general managers is a predictor of sales and profits performance but not subordinate turnover. This emphasizes that a greater degree to which a general manager gains the trust of his/her subordinates is linked to a greater competitive advantage that his/her organization gets over its competitors. Namely, subordinates' trust in their general managers generates competitive advantage. The unique contribution of Davis et al.'s (2000) study is that it connects subordinates' trust in general management to organizational performance. Trust in general management, therefore, is considered as a construct to gain competitive advantage. A study conducted by Child and Möllering (2003) demonstrates that Hong Kong managers' trust in their staff in mainland China was a positive and significant predictor of performance in the form of the growth of profits and sales from operations in China. The two studies provide evidence that both subordinates' trust in their management and the management's trust in their subordinates generate positive organizational outcomes.

Zacharatos, Barling, and Iverson (2005) report a positive and significant correlation between trust in management and HPWS, safety climate, safety compliance, safety initiative, safety knowledge, safety motivation and a negative and significant association between trust in management and first-aid and near-miss. HPWS refer to "a group of separate but interconnected human resource practices that together recruit, select, develop, motivate, and retain employees" (Way, 2002; Wood and Wall, 2002; Zacharatos et al., 2005). Zacharatos et al. (2005) also further reports that trust in management is a predictor of safety incidents and safety climate. In sum, HPWS enacted in an organization by management helps create subordinates' trust in management that in turn affects subordinate intentions and behaviors. It is noteworthy to mention at this point that beyond the ability, benevolence, and integrity as defined by Mayer et al. (1995) as trustworthiness factors that directly affect trust in management, such management practices as HPWS affect trust in management. Therefore, trust in management is not limited to such behavioral trust-antecedents as ability, benevolence, and integrity; HPWS

enacted by management help increase trust in management, producing a safe environment and decreasing safety incidents.

Subordinates' trust in their plant manager and top management team are independent predictors of subordinates' ability to focus attention – “one's ability to pay attention to value-producing activities devoid of concern over the use of power by others in one's organization” (Mayer and Gavin, 2005: 875) – in that trust in one's plant manager is a stronger predictor of a subordinate's ability to focus attention than trust in one's top management team. Also, subordinates' trust in their plant manager and top management team affects OCBI and OCBO only indirectly through its effect on subordinates' ability to focus attention but not in-role performance. Therefore, managers at all levels of an organization should pay attention to the issue of subordinates' trust in management to the extent that they want to increase OCBI and OCBO because each management level has its unique independent effect on the subordinate ability to focus attention (Mayer and Gavin, 2005). These results support and extend many of the findings of Dirks and Ferrin's (2002) meta-analytic review of trust in leadership. One extension provided by Mayer and Gavin (2005) to the work of Dirks and Ferrin (2002) regards the importance of trust in organizational leadership. Mayer and Gavin (2005: 884) argue that “the importance of trust in organizational leadership may be even more important than they [Dirks and Ferrin, 2002] concluded,” emphasizing that subordinates' trust in multiple levels of management is required to affect subordinate intentions and behaviors for an organization to completely benefit from those subordinate intentions and behaviors.

Subordinates' trust in their general management has been found to produce mixed results with regard to subordinates' turnover intentions. For example, Davis et al. (2000) find subordinates' trust in management to be an insignificant predictor of employee turnover, while Dirks and Ferrin (2002), Connell et al., (2003), and Ferris et al. (2002) reveal high trust in management to be a direct predictor of low employee turnover intention.

Trust in management has been demonstrated to have an effect on subordinates' intentions and behaviors with regard to many job-related outcomes. In both high and low individual-job congruence situations, trust in management is a positive and significant predictor of a subordinate's satisfaction with work, supervision, promotion, co-workers, overall job satisfaction, and subordinate performance (Goris, Vaught, and Pettit Jr., 2003). High trust in management also results in high affective and continuance commitment among subordinates but not in OCB conscientiousness (Connell et al., 2003). Thau et al.'s (2007) study demonstrates that there exists a negative relationship between trust in senior management or organizational authorities and antisocial work behaviors. There also exists a full mediation effect of a perception of workgroup cohesion - an indicator of an subordinate's attachment to the organization or its members - between

subordinates' trust in senior management or organizational authorities and subordinate antisocial work behaviors.

Moreover, trust in management predicts an employee's willingness to be flexible – “willingness to change jobs, willingness to combine jobs or tasks, willingness to work in several departments, willingness to develop new competencies, and ability to change jobs within the department, within the organization, and outside the organization” (Van den Berg and van der Velde, 2005: 113). Furthermore, Van den Berg and Van der Velde (2005) reveal a positive and significant correlation between trust in management and the willingness to be flexible and a negative and significant correlation between trust in management and task formalization. This means a chain effect in which a formalized task results in low trust in management that also results in low employee flexibility.

Research has revealed no difference between contingent and core workers' trust towards an employer, in which trust towards the employer is positively and significantly related to such constructive behaviors as loyalty and OCB and negatively and significantly related to such destructive behaviors as exit and neglect (Gilder, 2005). Further investigation also demonstrates that the relationship between trust and OCB depends on the type of worker considered, core and contingent employees, in that the availability of a positive and significant relationship between trust towards the employee and OCB for core employees is assured, whereas the same relationship is not sustained for contingent employees.

Trust in leadership was associated with such correlates in the order of magnitude as satisfaction with leader ( $r = .73$ ) and LMX ( $r = .69$ ); with such job attitudes and intentions as job satisfaction ( $r = .51$ ), organizational commitment ( $r = .49$ ), intent to quit ( $r = -.40$ ), belief in information ( $r = .35$ ), and decision commitment ( $r = .24$ ); and finally with such behavioral and performance outcomes as job performance ( $r = .16$ ), OCB – courtesy ( $r = .22$ ), conscientiousness ( $r = .22$ ), sportsmanship ( $r = .20$ ), altruism ( $r = .19$ ), and civic virtue ( $r = .11$ ) (Dirks and Ferrin, 2002). These results demonstrate that job satisfaction and organizational commitment are the two job attitudes and intentions that have the most significant relationship with trust in leadership. The results also demonstrate that OCBO (except altruism) has a larger relationship with trust in leadership than job performance. Connell et al. (2003) also demonstrate that trust in managers is a significant and positive predictor of organizational commitment.

### **Trust in organization**

Compared with subordinates' trust in their immediate supervisors and with subordinates' trust in management as antecedent, subordinates' trust in their organizations as an antecedent to subordinate intentions and behaviors has received much less attention. Trust in organization is defined as “positive expectations

individuals have about the intent and behaviors of multiple organizational members based on organizational roles, relationships, experiences, and interdependencies” (Shockley-Zalabak, Ellis, and Winograd, 2000: 37; Huff and Kelley, 2003). Similarly, Tan and Tan (2000: 241) defined organizational trust as “the composite trust of the various constituent groups in the organization.”

This present review could identify only few empirical studies conducted over the last decade that considered trust in organization as an antecedent. For example, Chiaburu and Byrne (2009) reveals trust in organization to be a significant and direct predictor of OCB role definitions, which refers to “the extent to which subordinates perceived specific behaviors directed toward organizational improvement as part of their work roles” (Chiaburu and Byrne, 2009). The study also reveals that the relationship between trust in organization and OCB role definitions are fully mediated by organizational commitment and that the same relationship is moderated by job satisfaction, in that “employees with higher job satisfaction will define their roles more broadly as a positive function of their trust in the organization” (p. 206). Earlier, Tan and Tan (2000) reveals that trust in organization is a significant and positive predictor of organizational commitment and a significant and negative predictor of employee turnover intentions. Both Chiaburu and Byrne (2009) and Tan and Tan (2000) demonstrates trust in organization to be an antecedent to organizational commitment. Shockley-Zalabak et al. (2000) also demonstrates that trust in organization predicts positively and significantly employee job satisfaction and overall perceptions of organizational effectiveness, the first being the strongest in magnitude.

Only recently have there been an attempt to investigate some of these issues at cross-cultural level. For example, the third study in Thau et al. (2007) demonstrates that there exists a negative direct relationship between subordinates’ trust in organization and subordinates’ antisocial work behaviors. They also find that there is a partial mediation of perceptions of workgroup cohesion on the relationship between subordinates’ trust in their organizations and subordinate antisocial work behaviors. Moreover, Thau et al. (2007) study demonstrates that the relationship between subordinates’ trust in supervisor, trust in management, and trust in organization and antisocial behaviors are indirect, through a perception of work group cohesion and an subordinate’s intention to stay. Because Thau et al.’s (2007) study includes three different studies conducted in three different countries and addresses three different organizational referents – direct supervisor, senior managers, organization – the generalizability of the findings across cultures and across organizational referents are supported.

Lee (2004) considers workers on the shop floor to investigate a possible role of trust in predicting continuous improvement efforts among employees. The results of the study demonstrate that trust in organization does not predict continuous

improvement efforts, a conclusion contrary to the expectation in the paper. However, trust in organization interacts with employees' organizational identification to have an effect on continuous improvement efforts. Accordingly, a higher level of employee organizational identification among workers makes the relationship between trust and continuous improvement positive, whereas a lower level of employee organizational identification among employees produces a negative result for the same relationship. A moderate level of employee identification among employees produces no relationship between subordinates' trust in their organizations and continuous improvement efforts among employees. Therefore, a higher level of organizational identification is required for trust in organization to have an effect on such organizational outcome as continuous improvement efforts of workers. Hierarchical regression analysis reveals that the control variables tenure (positively) and sex (negatively) are significant predictors of continuous improvement efforts among employees.

### **Trust as a Mediator**

#### **Trust in supervisor as a mediator**

Over the last decade, there has been an increase in trust research to investigate the mediating role of subordinates' trust in their direct supervisor in the relationship between antecedents of subordinates' trust in their supervisors and their consequences for subordinates' intentions and behaviors. A mediating relationship attempts to "explain how external physical events take on internal psychological significance. Whereas moderator variables specify when certain effects will hold, mediators speak to how or why such effects occur" (Baron and Kenny, 1986: 1176). The main idea of a mediating relationship is "that the effects of stimuli on behavior are mediated by various transformation processes internal to the organism" (Baron and Kenny, 1986: 1176). Therefore, subordinates' trust in their direct supervisors, trust in management, and trust in organization are considered to be 'a transformation process internal to the organism' through which certain antecedents are turned into some other consequences that may or may not be beneficial to the related party or parties considered.

The studies that consider trust a mediator have revealed that trust acts as a transformation mechanism between many antecedents and outcomes. Brashear, Manolis, and Brooks (2005), for example, demonstrate salespeople's trust in their sales managers to be a mediating variable in the relationship between decision control and procedural justice and between process control and distributive justice. In addition, trust in one's sales manager was also found to be partially mediating the relationship between process control and procedural justice and between decision control and distributive justice. Process control refers to a type of control in which a subordinate has some control over the information used in decision making in the

subordinate and manager relationship whereas decision control refers to a type of control in which a subordinate has some control over the final decision in the same relationship. Control in the relationship can be thought of a kind of participation in decision making because it gives the subordinate the chance to provide information needed to reach a decision. An earlier study by Wong et al. (2002) reveals that trust in supervisor fully mediates the relationship between perceived interactional justice and loyalty to supervisor, which in turn positively and significantly affects employee performance. Wong et al. (2002) study demonstrates that the mediation model outperforms the direct effects model considered in the same study.

Subordinate participation in supervisory processes and capability information that supervisors provide to their subordinates are found to have an effect on dysfunctional subordinate behavior through trust in supervisor (Choi et al., 2004). Put another way, Choi et al.'s (2004) study demonstrates that subordinates' trust in their supervisors is a mediator of the relationship between supervisory participation (from the LMX literature) and dysfunctional behavior. It also demonstrates that trust in one's supervisor is a mediator of the relationship between capability information control and dysfunctional behavior. Capability information refers to information and support that supervisors provide to their immediate subordinates, such as recommending opportunities for subordinates' development and confirming subordinates' skills, for subordinates to get maximum results out of their efforts. It also includes helping subordinates to specify goals, monitor goal attainment, and furnishing guidance for improvement aligned with the subordinates' skills and abilities (Challagala and Shervani, 1996). When supervisors provide this kind of information and support to their immediate subordinates, subordinates then have more trust in their supervisors, which in turn reduces dysfunctional subordinate behavior. This is also valid for the relationship between supervisor participation and dysfunctional behavior. As such, when supervisors let their subordinates participate in the supervisory processes (supervisory participation), subordinates' trust in their supervisors increases. This increase in trust in supervisor then reduces dysfunctional subordinate behavior. Therefore, the effect of both capability information and supervisory processes on dysfunctional subordinate behavior is through trust in supervisor.

Trust in supervisor also fully mediates the relationship between procedural justice, distributive justice and sportsmanship dimension of OCB (Wat and Shaffer, 2005). Wat and Shaffer (2005) specifically demonstrate that trust in supervisor fully mediates the relationship between interactional justice and sportsmanship, courtesy, and altruism dimension of OCB. Trust in supervisor also fully mediates the relationship between LMX and the conscientiousness dimension of LMX. Moreover, trust in supervisor partially mediates the relationship between interactional justice and civic virtue of OCB. Earlier, Menguc (2000) demonstrates that trust in manager is a partial mediator of the relationship between procedural justice and OCBs and that

procedural justice has both direct and indirect effects on OCBs through trust in direct manager. Ertürk (2007) demonstrates that trust in supervisor fully mediates the relationship between organizational justice (distributive justice, procedural justice, and interactional justice) and OCBO. However, the mediator role of trust on the same relationship produces only partial mediation. Accordingly, trust in supervisor only partially mediates the relationship between organizational justice and OCBI. Interactional justice is the major source of trust in supervisor when compared to distributive and procedural justice. Based on these conclusions, it is therefore necessary to emphasize that the effect of justice on OCB dimensions is through trust in supervisor.

Trust in supervisor is also found to fully mediate the relationship between interactional justice and loyalty to supervisor (Wong et al., 2002) and between past team performance and future team performance (Dirks, 2000). Dirks (2000) indeed considers trust in one's basketball coach. However, there has been no study investigating whether Dirks's (2000) conclusion is true for employees working at business organizations. Such a research would further our understanding of trust in supervisor for a possible relationship between past employee performance and future employee performance.

Followers' trust in direct managers and value congruence – an indication that followers' values are congruent with their leaders' values – are found to be the mediators of the relationship between transformational leadership, transactional leadership and followers' performance measured in terms of the quantity and quality of the recommendations generated by the student participants and in terms of followers' satisfaction with their leaders (Jung and Avolio, 2000). Although trust in leadership is found to be a mediator of the relationship between transformational, transactional leadership and performance measures, Hartog (2003) shows that this conclusion may not be fully replicated and extended to other leadership theories. For example, Hartog (2003) demonstrates that trust in the focal leader only partially mediates the relationship between leadership (only the individualized consideration dimension of inspirational leadership and not the vision-based dimension of inspirational leadership or the contingent reward and performance-monitoring dimensions of transactional leadership) and trust in management. In addition, trust in one's focal leader does not mediate the relationship between leadership (inspirational and transactional leadership) and trust in colleagues. Moreover, only the integrity dimension among the mediators (integrity, fairness and trustworthiness of trust in the focal leader) partially mediates the relationship between leadership (only the individualized consideration dimension of inspirational leadership and not the vision dimension of inspirational leadership or the contingent reward and performance monitoring dimensions of transactional leadership) and trust in management. Finally, none of the mediators (leader's integrity, fairness, and trustworthiness) mediates the relationship between inspirational and transactional

leadership and trust in colleagues. Accordingly, a full mediation hypothesis of the study by Hartog (2003) is not supported. Very recently, Holtz and Harold (2008) demonstrate that subordinates' trust in their managers mediates the relationship between transformational leadership and explanation perception (adequacy, legitimacy, and sincerity of the explanation provided to subordinates by their managers following a rejected request). Subordinates' trust in their managers also mediated the relationship between transformational leadership and subordinate justice perceptions (informational justice, interpersonal justice, procedural justice). However, subordinates' trust in their managers does not mediate the relationship between transactional leadership and explanation perception.

Yang, Mossholder, and Peng (2009) investigate the mediating role of cognitive and affective trust in supervisor on the relationship between supervisory procedural justice (Supervisory PJ) and such employee behaviors and attitudes as task performance, job satisfaction, and helping behavior. The results provide evidence for the mediating role of cognitive trust in supervisor on the relationship between supervisory PJ and task performance/job satisfaction. In addition, affective trust in supervisor does not mediate the relationship between supervisory PJ and helping behavior. However, affective trust in supervisor moderates the relationship between supervisory PJ and helping behavior. These results provides clear evidence that supervisory PJ does influence such employee attitudes and behaviors as task performance, job satisfaction, and helping behavior through trust in supervisor.

#### **Trust in management as a mediator**

A newly developing area of research in organizational behavior has been psychological capital (PsyCap), which is mainly drawn from positive organizational behavior and positive psychology. PsyCap refers to "an individual's positive psychological state of development and is characterized by; (1) having confidence (efficacy) to take on and put in the necessary effort to succeed at challenging tasks; (2) making a positive attribution (optimism) about succeeding now and in the future; (3) persevering toward goals and, when necessary, redirecting paths to goals (hope) to succeed; and (4) when beset by problems and adversity, sustaining and bouncing back and even beyond (resilience) to attain success" (Luthans, Youssef, and Avolio, 2007: 3). Clapp-Smith, Vogelgesang, and Avey (2009) demonstrate that group-level trust in management is a full mediator of the relationship between follower PsyCap and performance as measured by sales growth. In addition, group-level trust in management is a partial mediator of the relationship between authentic leadership and sales growth. One important contribution of Clapp-Smith et al.'s (2009) study is its use of a group-level analysis that aggregates individual-level responses to the independent, mediator, and outcome variables at the group level.

One of the early contributions to trust in management comes from Whitener's (2001) study. The study demonstrates that trust in management is a partial mediator of the relationship between subordinates' perception of organizational support and subordinate commitment, meaning that perceived organizational support has both direct and indirect (through trust in management) relationships with organizational commitment. Further investigation also reveals that organizations with highly developmental appraisal systems have a stronger relationship between perceived organizational support and trust in management. However, the same relationship is weaker in organizations with highly comprehensive training opportunities. All told, Whitener's (2001) study demonstrates that only when subordinates perceive their organization's commitment and support for them do they trust their managers and, as a result, show their commitment to their organization. Advancing Whitener's (2001) study is the study conducted by Macky and Boxall (2007). Accordingly, trust in management mediates the relationship between HPWS practices and affective commitment (Macky and Boxall, 2007). In addition, trust in management, affective commitment, and job satisfaction are found to be mediators of the relationship between subordinate perceptions of HPWS practices and behavioral commitment.

Ayree, Budhwar, and Chen (2002) define job satisfaction, turnover intentions, and organizational commitment as 'work attitudes' and OCBO, OCBI, and task performance as 'work behaviors.' Accordingly, trust in supervisor fully mediates the relationship between interactional justice and work behavior but not the relationship between interactional justice and work attitude. Even organizational level variables such as HPWS show their effect on safety incidents through trust in management and perceived safety climate (Zacharatos et al., 2005). Put another way, trust in management and safety climate fully mediate the relationship between HPWS and safety incidents. Zacharatos et al. (2005) also reveals that trust in management and safety climate fully mediates the relationship between HPWS and safety incidents, that trust in management predicts safety incidents and safety climate, and that trust in management is a consequence of HPWS, as is safety climate. In sum, it is worth mentioning that HPWS enacted in an organization by management helps create subordinates' trust in their management, which in turn affects subordinate intentions and behaviors.

Trust in management has also been found to be a partial mediator of the relationship between trust antecedents – ability, benevolence, and integrity as defined by Mayer et al., (1995) – and such employee outcomes as risk taking and job performance (Colquitt et al., 2007). Trust in management also partially mediates the relationship between trust propensity and the same outcomes. It is thus appropriate to conclude tentatively that the relationship between the trust antecedents and consequences is only partially mediated by trust in management, a conclusion in contrast with the full mediation thesis of Mayer et al., (1995), which advocates a full mediation model between the trust antecedents and outcomes. An interesting finding

of Colquitt et al. (2007) is that like trust in management, affective commitment (another construct indicating a social exchange relationship like trust) partially mediates the relationship between ability, benevolence, integrity, and trust propensity and the trust consequences risk taking, task performance, citizenship behavior, and counterproductive behavior. Based on these contributions, the meta-analytic review of Colquitt et al.'s (2007) study provides complementary, rather than contradictory, evidence to the work of Dirks and Ferrin's (2002) meta-analytic review because the two reviews consider some different variables. For example, Colquitt et al. (2007) include ability and risk taking as variables, whereas Dirks and Ferrin (2002) do not. In addition, Dirks and Ferrin (2002) use an aggregate definition of trust and trustworthiness, whereas Colquitt et al. (2007) use trust in the co-worker and leader as the two sub-dimensions of trust and consider each component of trustworthiness – ability, benevolence, and integrity – separately.

#### **Trust in organization as a mediator**

This present study could identify only Ayree et al. (2002) study as addressing the mediator role of trust in organization on the relationship between its possible antecedents and consequences. Ayree et al. (2002) demonstrate that trust in organization fully mediates the relationship between interactional justice and job satisfaction, turnover intentions, and organizational commitment. In addition, trust in organization partially mediates the relationship between distributive justice and job satisfaction, turnover intentions, and organizational commitment. Finally, trust in organization partially mediates the relationship between procedural justice and job satisfaction, organizational commitment.

#### **Trust as a Moderator**

##### **Trust in supervisor as a moderator**

The last decade has also shown a paucity of research investigating the moderating role of trust in vertical relationships in an organization, even though trust research has gained momentum during this period. That might be why this present study could identify only one study investigating the moderating role of subordinates' trust in their supervisors, which is Chang and Chi's (2007) study. It mainly considers managerial roles in the context of human relations (HR) – administrative experts, strategic partners, employee champions, and change agents – and HR performance indicators – HR alignment, employee relation, and HR efficiency. The study demonstrates affective trust in supervisors to be the moderator of the relationship between strategic partner role and human resource (HR) indicators. It also found that affective trust moderates the relationship between the change agent role and human resource alignment indicators. However, contrary to expectations, affective trust in supervisor does not moderate the relationship between the employee champion role

and employee relation indicators. With regard to cognitive trust, it does not moderate the relationship between HR manager roles and HR performance indicators. The existence of a positive relationship between HR manager roles and HR performance indicators was weakened with a high level of affective trust. Therefore, it seems imperative to investigate the moderator role of trust in specific situations to acknowledge whether assured effects will be sustained in different conditions. For example, future research could investigate the moderating role of trust in supervisor between organizational culture and subordinate intentions and behaviors.

### **Trust in management as a moderator**

Trust in management moderates the relationship between individual job congruence (especially in low-congruence situations) and overall job satisfaction and the quantity of performance but does not moderate the same relationship in high-congruence situations (Goris et al., 2003). A meta-analytic review of Dirks and Ferrin (2002) sheds light on two important issues related to trust as a moderator between different trust antecedents such as transformational leadership, procedural justice, and propensity to trust and outcomes such as OCBs, job performance, job satisfaction, intent to quit, and satisfaction with one's leader. Trust in direct leader and trust in organizational leadership are the two moderators used in Dirk and Ferrin's (2002) study. The study reveals the trust reference as a moderator of the relationship between trust and job performance, altruism (OCBO), job satisfaction, and organizational commitment (outcome variables). Accordingly, when the referent of trust is trust in direct leader, the relationship between trust and job performance, altruism, and job satisfaction is significantly higher than the same relationships found in trust in organizational leadership. When the referent of trust is trust in organizational leadership, the relationship between trust and organizational commitment is significantly higher than the same relationship found for trust in direct leader. The referent does not operate as a moderator of the relationship with the intention to quit.

The study also revealed referent of trust as a moderator of the relationship between trust and interactional justice, procedural justice, participative decision making (PDM), perceived organizational support (antecedent variables). Accordingly, when the referent of trust is trust in direct leader, the relationship between trust and procedural justice, interactional justice, PDM is significantly higher than the same relationship found in trust in organizational leadership. When the referent of trust is trust in organizational leadership, the relationship between trust and perceived organizational support is significantly higher than the same relationship found in trust in direct leader. The referent of trust was not found as a moderator of the relationship between trust and distributive justice.

Dirk and Ferrin's (2002) study uses cognitive trust and overall trust as moderators of the relationship between trust antecedents and outcomes. The insufficient number of studies on affective trust available in the trust-related literature has precluded its inclusion as a third moderator in the analysis. Among the outcome variables, job satisfaction, organizational commitment, and intent to quit are found to have a greater association with cognitive trust when compared to overall trust, whereas job performance and civic virtue are found to have a larger association with overall trust when compared to cognitive trust. The correlate, LMX, also has a greater association with overall trust than with cognitive trust. No significant differences are revealed as to the relationship of the definition of trust with altruism. Among the antecedent variables, procedural justice was found to have a significantly greater association with cognitive trust when compared to overall trust, whereas no significant association is found in the relationships of trust with interactional justice and distributive justice.

The propensity to trust has been considered a control variable in the empirical literature of trust with the reason that individuals with different propensities to trust would adjust their intentions and behaviors accordingly. The propensity to trust is also tested as a moderator of the relationship between procedural or interactional justice and employee task performance or counterproductive behavior (Colquitt, Scott, Judge, and Shaw, 2006). Accordingly, the propensity to trust does not moderate the effects of procedural justice on task performance and counterproductive behavior. Colquitt et al.'s (2006) study also reveals that the propensity to trust moderates the effects of interactional justice on task performance in the predicted direction at a  $p < .10$  level of significance and on counterproductive behavior in the opposite direction from that stated in the hypothesis. In sum, Colquitt et al. (2006: 123) indicate that "the effects of interpersonal justice on counterproductive behavior were actually stronger for individuals high in trust propensity, opposite to the task performance results."

Casimir, Waldman, Bartram, and Yang (2006) reveal that trust in the leader is lower in Chinese leader-follower relationships than in Australian leader-follower relationships. In addition, trust in leader mediates the relationship between both transactional and transformational leadership and performance in Australian samples, whereas trust in leadership does not mediate the relationship between both transactional and transformational leadership and performance in Chinese samples. Therefore, the mediation effect of trust in leaders on the relationship between both transactional and transformational leadership and performance is stronger in an individualistic culture (Australia) than in a collectivistic culture (China). Accordingly, culture moderates the mediating relationship as explained above.

## **Conclusion**

Over the last decade, empirical research on trust has provided advances to our understanding of subordinates' trust in their supervisors, management, and organizations. Up to now, however, there has been no attempt to qualitatively summarize and explore the contributions of these studies at the vertical trust level. This present article provides parsimonious breakdown of vertical trust research as subordinate-supervisor, subordinate-management, and subordinate-organization and investigates the findings and implications of studies regarding subordinates' intentions and behaviors. In so doing, it identifies and presents future research directions. In addition, it explores the mediating and moderating role of trust at the three vertical trust levels.

Subordinate-supervisor dyadic-trust research has contributed to our understanding that subordinates' trust in their direct supervisors and supervisors' trust in their subordinates have important implications on subordinate intentions and behaviors that may generate beneficial consequences for both supervisors and the organizations they represent. When trust between the constituencies is low, the detrimental consequences of it are obvious in the form of below-average performance on the part of the subordinates. In addition, it also shows that subordinates' trust in their peers as perceived by a focal subordinate has an effect on the same subordinate's intentions and behaviors beyond the effect of a subordinate's trust in his/her supervisor and the supervisor's trust in his/her subordinate. Moreover, it highlights that supervisors' benevolence toward their subordinates' peers affects subordinate intentions and behaviors. An assessment of the findings of subordinate-supervisor dyadic-trust research conducted over the last decade demonstrates that the issue is more complex than previously thought. The complexity arises from the fact that the relationship involves trust not only in one's direct supervisor but also in one's subordinates, supervisors, and peers, as well as in the reciprocal trust relationships between and among them, all of which have a potential to affect subordinates' job-related intentions and behaviors. There might be a possibility that even if subordinates do not fully trust their direct supervisors, they may still wish to stay with the organization because they trust in their peers when the other variables are controlled, thus making the relationship between trust in one's direct supervisor and turnover intentions insignificant. However, none of the empirical studies included in this review empirically examines a possible effect of the peers' trust in the supervisor and the peer's trust in the focal subordinate as perceived by the focal subordinate on the relationship between the focal subordinate's trust in his/her supervisor and his/her intention and behaviors in general and specifically between a focal subordinate's trust in his/her supervisor and his/her turnover intentions. Therefore, this review suggests that future studies focus more on the effect of peers' mutual trust on the relationship between subordinates' trust in their supervisors and

supervisor's trust in their subordinates and subordinate intentions and behaviors to further our understanding of subordinates' trust in their supervisors and its consequences.

This review also observes that a subordinate's trust in his/her supervisor is a determinant of that subordinate's OCBs (Thau et al., 2007). In addition, when subordinates trust their supervisors, the subordinates' antisocial work-related behaviors decrease and their willingness to help co-workers increases, as well (Poon, 2006). When trust in supervisor is high, subordinates' innovative behavior significantly improves (Tan and Tan, 2000). This finding has real implications for R&D managers in manufacturing organizations and for managers of service organizations, where the ideas for innovation may come from subordinates. When subordinates trust in their supervisors, they do not negatively perceive managerial explanations for their request rejected by their supervisors (Holtz and Harold, 2008). When subordinates' cognition-based trust is high, they feel psychologically empowered (Ergeneli et al., 2007). Neither power distance nor in-group collectivism is a moderator of the relationship between a subordinate's trust in his/her supervisor and his/her enterprising behavior (Costigan et al., 2006).

When subordinates' trust in their supervisors and subordinates' trust in management are high, antisocial work behaviors of subordinates are low (Choi et al., 2004; Thau et al., 2007). Subordinates' trust in their supervisors is found to be a positive and significant predictor of OCBs (Menguc, 2000; Wat and Shaffer, 2005; Brower et al., 2009) whereas subordinates' trust in management was found to be an insignificant predictor of OCB conscientiousness (Connell et al., 2003).

Research endeavors should be directed to subordinates' trust in organization because of the paucity of research devoted to subordinates' trust in organization and its effect on subordinates' intentions and behaviors. Considering the constantly changing business environment in today's business world, the effect of change on subordinates' trust in organization and its impact on subordinates' intentions and behavior is also required. Additionally, the ever-increasing diversity of the workforce must also be considered to understand whether a diversified workforce is different in terms of trust in organization and subordinates' intentions and behaviors. Some research questions include "Is there a difference in the level of trust in management among subordinates who are diverse?" If so, "What are its implications in terms of subordinate intentions and behaviors?" These and other similar questions should be investigated so as to reveal the directions in which diversity may affect subordinates' perceptions of trust in their organization. The investigation should also be extended to trust in supervisor and trust in management to observe the possible different effects on trust in supervisor, trust in management, and trust in organization.

Research endeavors should also include a newly developing construct, positive organizational behavior (POB), so as to investigate a possible effect of subordinates'

trust in their supervisors on the positive organizational behavior of subordinates. POB is defined as “the study and application of positively oriented human resource strengths and psychological capacities that can be measured, developed, and effectively managed for performance improvement in today’s workplace” (Luthans, 2002: 59). Youssef and Luthans (2007) use state-like constructs such as hope, optimism, and resilience, constructs that meet the criteria for inclusion in POB, to investigate their influence on such work-related outcomes as performance, job satisfaction, work happiness, and organizational commitment, outcomes that the research in trust in supervisor, trust in management, and trust in organization have also been using. This study thus suggests that the influence of subordinates’ trust in their supervisors, subordinates’ trust in their management, and subordinates’ trust in their organizations on such POB behaviors of subordinates be investigated. Future research should also investigate a possible mediating role of POB in the relationship between subordinates’ trust in their supervisors and its subordinate work-related intentions and behaviors. Finally, the moderating effects of such trait-like constructs as hope, optimism, resilience, and self-efficacy on the relationship between subordinates’ trust in their supervisor, subordinates’ trust in their management, and subordinates’ trust in their organizations and subordinates’ work-related outcomes should be investigated to further our understanding of subordinates’ trust and, as a result, its effects on subordinates’ intentions and behaviors.

Empirical research in subordinates’ trust in their organizations has received much less attention than empirical research in subordinates’ trust in their supervisors and subordinates’ trust in their management. It is necessary to reemphasize that this study could not identify any empirical study on subordinates’ trust in organization as a moderator in a possible relationship between some possible antecedents of trust in organization and subordinates’ intentions and behaviors. For example, it would be a large contribution to investigate whether subordinates’ trust in their organizations moderates a possible relationship between organizational culture as perceived by subordinate and their intentions and behaviors. Because organizational culture takes a long time to implant in an organization and evolves over time, neither a direct individual supervisor nor a specific middle- or top-management team can be held responsible for that. In this case, it is the organization itself that is held responsible for its culture. It is important to recall that culture in an organization has a very high potential to affect subordinates’ intentions and behaviors. Trust in organization can thus be a moderator of the relationship between organizational culture and subordinates’ intentions and behaviors.

## References

- Aquino, K. and Byron, K. (2002). "Dominating Interpersonal Behaviour and Perceived Victimization in Groups: Evidence for a Curvilinear Relationship". *Journal of Management*, 28, 69-87.
- \*Aryee, S., Budhwar, P. S. and 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.
- Baron, R. M. and Kenny, D. A. (1986). "The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations". *Journal of Personality and Social Psychology*, 51, 1173-1182.
- Bensimon, H. (1997). "What to do about Anger in the Workplace". *Training and Development*, 51, 28-32.
- \*Bijlsma-Frankema, K., Jong, B. D. and Van de Bunt, G. (2008). "Heed, a Missing Link between Trust, Monitoring and Performance in Knowledge Intensive Teams". *International Journal of Human Resource Management*, 19, 19-40.
- Blau, P. M. (1964). *Exchange and Power in Social Life*. New York: John Wiley.
- \*Brashear, T. G., Manolis, C. and Brooks, C. M. (2005). "The Effects of Control, Trust, and Justice on Salesperson Turnover". *Journal of Business Research*, 58, 241-249.
- \*Brower, H. H., Lester, S. W., Korsgaard, M. A. and 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.
- Butler, J. K. (1999). "Trust Expectations, Information Sharing, Climate of Trust, and Negotiation Effectiveness and Efficiency". *Group and Organization Management*, 24, 217-238.
- Campbell, D. J. (2000). "The Proactive Employee: Managing Workplace Initiative". *Academy of Management Executive*, 14, 52-66.
- \*Casimir, G., Waldman, D. A., Bartram, T. and Yang, S. (2006). "Trust and the Relationship between Leadership and Follower Performance: Opening the Black Box in Australia and China". *Journal of Leadership and Organizational Studies*, 12, 68-84.
- Challagalla, G. N and Shervani, T. A. (1996). "Dimensions and Types of Supervisory Control: Effects on Salesperson Performance and Satisfaction". *Journal of Marketing*, 60, 89-105.
- \*Chang, H. and Chi, N. (2007). "Human Resource Managers' Role Consistency and HR Performance Indicators: The Moderating Effect of Interpersonal Trust in Taiwan". *International Journal of Human Resource Management*, 18, 665-683.
- \*Chiaburu, D. S. and Byrne, Z. S. (2009). "Predicting OCB Role Definitions: Exchanges with the Organization and Psychological Attachment". *Journal of Business Psychology*, 24, 201-214.

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\*Child, J. and Möllering, G. (2003). "Contextual Confidence and Active Trust Development in the Chinese Business Environment". *Organization Science*, 14, 69-80.

\*Choi, N. H., Dixon, A. L. and Jung, J. M. (2004). "Dysfunctional Behavior among Sales Representatives: The Effect of Supervisory Trust, Participation, and Information Controls". *Journal of Personal Selling and Sales Management*, 14, 181-198.

\*Clapp-Smith, R., Vogelgesang, G. and Avey, J. (2009). "Authentic Leadership and Positive Psychological Capital: The Mediating Role of Trust at the Group Level of Analysis". *Organizational Studies*, 15, 227-240.

\*Colquitt, J. A., Scott, B. A. and LePine, J. A. (2007). "Trust, Trustworthiness, and Trust Tropensity: A Meta-Analytic Test of their Unique Relationship with Risk Taking and Job Performance". *Journal of Applied Psychology*, 92, 909-927.

\*Colquitt, J. A., Scott, B. A., Judge, T. A. and Shaw, J. C. (2006). "Justice and Personality: Using Integrative Theories to Derive Moderators of Justice Effects". *Organizational Behavior and Human Decision Processes*, 100, 110-127.

\*Connel, J., Ferres, N. and Travaglione, T. (2003). "Engendering Trust in Manager-Subordinate Relationships: Predictors and Outcomes". *Personnel Review*, 32, 569-587.

Cook, J. and Wall, T. (1980). "New Work Attitude Measures of Trust, Organizational Commitment and Personal Need Non-Fulfilment". *Journal of Occupational Psychology*, 53, 39-52.

Costigan, R. D., Ilter, S. S. and Berman, J. J. (1998). "A Multi-Dimensional Study of Trust in Organizations". *Journal of Managerial Issues*, 10, 303-317.

\*Costigan, R. D., Insinga, R. C., Berman, J. J., Ilter, S. S., Kranas, G. and Kureshov, V. A. (2006). "The Effect of Employee Trust of the Supervisor on Enterprising Behavior: A Cross-Cultural Comparison". *Journal of Business and Psychology*, 21, 273-291.

\*Davis, J., Schoorman, F. D., Mayer, R. C. and Tan, H. (2000). "The Trusted General Manager and Business Unit Performance: Empirical Evidence of a Competitive Advantage". *Strategic Management Journal*, 21, 563-576.

\*Dirks, K. T. (2000). "Trust in Leadership and Team Performance: Evidence from NCAA Basketball". *Journal of Applied Psychology*, 85, 1004-1012.

\*Dirks, K. T. and Ferrin, D. L. (2002). "Trust in Leadership: Meta-Analytic Findings and Implications for Research and Practice". *Journal of Applied Psychology*, 87, 611-628.

Dirks, K. T. and Ferrin, D. L. (2001). "The Role of Trust in Organizational Settings". *Organization Science*, 12, 450-467.

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

Dirks, K. T. and Skarlicki, D. P. (2004). "Trust in Leaders: Existing Research and Emerging Issues". (Ed: Roderick M. Kramer and Karen S. Cook), *Trust and Distrust in Organizations: Dilemmas and Approaches*, New York: Russell Sage Foundations, pp. 21-40.

\*Ergeneli, A., Ari, G. S. and Metin, S. (2007). "Psychological Empowerment and its Relationship to Trust in Immediate Managers". *Journal of Business Research*, 60, 41-49.

\*Ertürk, A. (2007). "Increasing Organizational Citizenship Behaviours of Turkish Academicians: Mediating Role of Trust in Superiors on the Relationship between Organizational Justice and Citizenship Behaviours". *Journal of Managerial Psychology*, 22, 257-270.

\*Ferres, N., Travaglione, A. and Connel, J. (2002). "Trust: A Precursor to the Potential Mediating Effect of Transformational Leadership?" *International Journal of Organisational Behavior*, 6, 242-263.

\*Gilder, D. (2003). "Commitment, Trust and Work Behavior". *Personnel Review*, 32, 588-604.

\*Gomez, C. and Rosen, B. (2001). "The Leader-Member Exchange as a Link between Managerial Trust and Employee Empowerment". *Group and Organization Management*, 26, 53-69.

\*Goris, J. R., Vaught, B. C. and 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.

\*Hartog, D., Shippers, M. C. and Kopman, P. L. (2002). "The Impact of Leader Behavior on Trust in Management and Co-workers". *SA Journal of Industrial Psychology*, 28, 29-34.

Hofstede, G. (1980). *Understanding Cultural Differences*. Beverly Hills, CA: Sage.

\*Holtz, B. and Harold, C. M. (2008). "When Your Boss Says No! The Effects of Leadership Style and Trust on Employee Reactions to Managerial Explanations". *Journal of Occupational and Organizational Psychology*, 81, 777-802.

\*Huff, L. and Kelley, L. (2003). "Levels of Organizational Trust in Individualist versus Collectivist Societies: A Seven-Nation Study". *Organization Science*, 14, 81-90.

\*Jung, D. and Avolio, B. J. (2000) "Opening the Black Box: An Experimental Investigation of the Mediating Effects of Trust and Value Congruence on Transformational and Transactional Leadership". *Journal of Organizational Behavior*, 21, 949-964.

Kramer, R. M. (1999). "Trust and Distrust in Organizations: Emerging Perspectives, Enduring Questions". *Annual Review of Psychology*, 50, 569-598.

\*Lapierre, L. M. (2007). "Supervisor Trustworthiness and Subordinates' Willingness to Provide Extra-Role Efforts". *Journal of Applied Social Psychology*, 37, 272-297.

Luthans, F. (2002). "Positive Organizational Behavior: Developing and Managing Psychological Strengths". *Academy of Management Executive*, 16, 57-72.

Luthans, F., Youssef, C. M. and Avolio, B. J. (2007). *Psychological Capital*. New York: Oxford University Press.

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\*Macky, K. and Boxall, P. (2007). "The Relationship between 'High-Performance Work Practices' and Employee Attitudes: An Investigation of Additive and Interaction Affects". *The International Journal of Human Resource Management*, 18, 537-567.

Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995). "An Integrative Model of Organizational Trust". *Academy of Management Review*, 20, 709-734.

\*Mayer, R. C. and 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.

McAllister, D. J. (1995). "Affect- and Cognition-Based Trust as Foundations for Interpersonal Cooperation in Organizations". *Academy of Management Journal*, 38, 24-59.

McCauley, D. P. and Kuhnert, K. W. (1992). "A Theoretical Review and Empirical Investigation of Employee Trust". *Public Administration Quarterly*, 16, 265-285.

\*Mengüç, B. (2000). "An Empirical Investigation of a Social Exchange Model of Organizational Citizenship Behaviors Across Two Sales Situations: A Turkish Case". *The Journal of Personal Selling and Sales Management*, 20, 205-214.

Mishra, A. K. (1996). "Organizational Responses to Crisis: The Centrality of Trust". (Ed: Roderick M. Kramer and Tom R. Tyler), *Trust in Organizations: Frontiers of Theory and Research*, California: Sage Publications, pp. 261-287.

Möllering, G., Bachmann, R. and Lee, S. H. (2004). "Understanding Organizational Trust – Foundations, Constellations, and Issues of Operationalisation". *Journal of Managerial Psychology*, 19, 556-570.

\*Poon, J. M. (2006). "Trust-in-Supervisor and Helping Coworkers: Moderating Effect of Perceived Politics". *Journal of Managerial Behavior*, 21, 518-532.

Rousseau, D. M., Sitkin, S. B., Burt, R. S. and Camerer, C. (1998). "Not So Different After All: A Cross-Discipline View of Trust". *Academy of Management Review*, 23, 393-404.

Schoorman, F. D., Mayer, R. C. and Davis, J. H. (2007). "An Integrated Model of Organizational Trust: Past, Present, and Future". *Academy of Management Review*, 32, 344-354.

\*Shamir, B. and Lapidot, Y. (2003). "Trust in Organizational Superiors: Systemic and Collective Considerations". *Organization Studies*, 24, 463-491.

Sheppard, B. H. and Sherman, D. M. (1998). "The Grammers of Trust: A Model and General Implications". *Academy of Management Review*, 23, 422-437.

\*Shockley-Zalabak, P., Ellis, K. and Winograd, G. (2000). "Organizational Trust: What it Means, Why it Matters". *Organizational Development Journal*, 18, 35-48.

Spreitzer, G. M. (1995). "Psychological Empowerment in the Workplace: Dimensions, Measurement, and Validation". *Academy of Management Journal*, 38, 1442-1465.

\*Stinglhamber, F., Cremer, D. D., and Mercken, L. (2006). "Perceived Support as a Mediator of the Relationship between Justice and Trust". *Group and Organizational Management*, 31, 442-468.

\*Tan, H. H. and Tan, C. S. (2000). "Toward the Differentiation of Trust in Supervisor and Trust in Organization". *Genetic, Social, and General Psychology Monographs*, 126, 241-260.

\*Thau, S., Crossley, C., Bennett, R. J., and Sczesny, S. (2007). "The Relationship between Trust, Attachment, and Antisocial Work Behaviors". *Human Relations*, 60, 1155-1179.

\*Van den Berg, P. T. and Van der Velde, M. E. (2005). "Relationships of Functional Flexibility with Individual and Work Factors". *Journal of Business and Psychology*, 20, 111-129.

\*Wat, D. and Shaffer, M. A. (2005). "Equity and Relationship Quality Influences on Organizational Citizenship Behaviors: The Mediating Role of Trust in the Supervisor and Empowerment". *Personnel Review*, 34, 406-422.

\*Whitener, E. M. (2001). "Do "High Commitment" Human Resource Practices Affect Employee Commitment? A Cross-level Analysis Using Hierarchical Linear Modelling". *Journal of Management*, 27, 515-535.

\*Yang, J., Mossholder, K. W. and Peng, T. K. (2009). "Supervisor Procedural Justice Effects: The Mediating Roles of Cognitive and Affective Trust". *The Leadership Quarterly*, 20, 143-154.

Youssef, C. M. and Luthans, F. (2007). "Positive Organizational Behavior in the Workplace". *Journal of Management*, 33, 774-800.

\*Zacharatos, A., Barling, J. and Iverson, R. (2005). "High-Performance Work Systems and Occupational Safety". *Journal of Applied Psychology*, 90, 77-93.

Zand, D. E. (1972). "Trust and Managerial Problem Solving". *Administrative Science Quarterly*, 17, 229-239.

Way, S. A. (2002). "High Performance Work Systems and Intermediate Indicators of Firm Performance within the U.S. Small Business Sector". *Journal of Management*, 28, 765-785.

\*Wong, Y., Wong, C. and Ngo, H. (2002). "Loyalty to Supervisor and Trust in Supervisor of Workers in Chinese Joint Ventures: A Test of Two Competing Models". *International Journal of Human Resource Management*, 13, 883-900.

Wood, S. and Wall, T. D. (2002). "Human Resource Management and Business Performance". (Ed: Peter Warr), *Psychology at work*, London: Penguin, pp. 351-374.