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WHAT MAKES THE GLUE STICKY? A QUALITATIVE META-ANALYSIS OF ANTECEDENTS AND CONSEQUENCES OF TRUST IN SUPERVISOR-SUBORDINATE RELATIONSHIPS

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Abstract

Purpose - Interpersonal trust is often considered as the 'glue' that binds supervisors together with their subordinates, and creates a positive organisational climate. This study investigates factors affecting subordinates' trust to their supervisor, and the consequences of such a trusting relationship are.

Design/methodology/approach - We conducted a qualitative meta-analysis of the trust literature between 1995 and 2011, to identify 73 articles and review 37 theoretical propositions, 139 significant model parameters and 58 further empirical findings.

Findings- Four distinct clusters of trust antecedents are found: supervisor attributes; subordinate attributes; interpersonal processes and organisational characteristics. Similarly, we identify three categories of trust consequences: subordinates' work behaviour; subordinates' attitude towards the supervisor; and organisational level effects.

Research implications — We find a bias towards studying supervisor attributes and interpersonal processes, yet a dearth of attention on subordinate attributes and organisational characteristics. Similarly, the conceptual attention on trust between supervisors and subordinates has been limited, with empirical work reporting predominantly significant findings. Social exchange has dominated as the theoretical perspective, and cross-section as the main research approach. In order to advance this important field more heterogeneity is needed, utilising a range of different theoretical schools and employing different methodologies.

Originality/value – This seems to be the first qualitative meta-analysis explicitly directed to understanding trust between supervisors and subordinates. We contribute to the field of trust by revealing current gaps in the literature and highlighting potential areas of future research.

Introduction

Interpersonal trust between supervisors and subordinates has been an intensively debated topic (e.g. Clark and Payne, 1997; Rich, 1997), with clear consensus regarding its relevance to organisations (e.g. Schoorman *et al.*, 2007). Trust forms the basis of a desirable work climate between supervisors and subordinates, ensures enhanced performance of subordinates, and increases an organisation's competitive advantage (Barney and Hansen, 1994; Kramer, 1999; Konovsky and Pugh, 1994).

Over the last fifteen years, there has been an exponential increase in interest in this topic (for reviews see: Dirks and Ferrin, 2002; Fulmer and Gelfand, 2012), with attention tending to focus on certain aspects or facets of the relationship, such as comparing leadership styles - e.g. transformational vs. transactional leadership (Pillai *et al.*, 1999) – or particular subordinate beliefs - e.g. the perception of justice and support by the supervisor (DeConinck, 2010). While some studies consider the reasons to trust in certain organisational contexts (e.g. Blunsdon and Reed, 2003), others emphasize the consequences of trust, investigating its impact on performance and on employees' job satisfaction (e.g. Rich, 1997) Further research has investigated trust in specific cultural contexts (e.g. Costigan *et al.*, 2011), and within specific work relationships – e.g. between sales employees and managers (Brashear *et al.*, 2003).

This attention has culminated in a quantitative (Dirks and Ferrin, 2002), and a qualitative (Fulmer and Gelfand, 2012) review of trust. Yet, both reviews did not focus explicitly on trust between subordinates and their direct supervisor. In that regard, our motivation is to illuminate inconsistencies and gaps in the literature and to offer insights through a clear focus on trust between supervisor and subordinate.

We begin by identifying all relevant studies and explain our coding procedures. We then consider the main theoretical and methodological positions adopted, identify the central antecedents and consequences of trust between supervisors and subordinates and outline an agenda for future research for each of these categories.

Theoretical foundations

Trust is defined as the willingness of one person to be vulnerable to the actions of another party (Mayer *et al.*, 1995). This definition assumes that despite the risk of being harmed, the trustor can trust the trustee based on a positive expectation that the other party will not exploit the situation on his behalf (Rousseau *et al.*, 1998). Hence, trust brings together two essential concepts: vulnerability and positive expectations. Scholars have distinguished different approaches to trust, one seeing trust as a psychological state while another regards trust a choice behaviour (Kramer, 1999). When considered as a multidimensional psychological state, trust encompasses cognitive processes as well as affective and motivational components, while in contrast when viewed from an economic perspective as choice behaviour, it can be expressed as either a rational, efficient choice or as relational behaviour. Rousseau *et al.* (1998) however argue that trust is neither a behaviour nor a choice, but instead the underlying psychological precondition. Conceptual work argues that over time the basis of trust may develop from calculus-based trust, which is more cognitive and based on cost-benefit analysis, to relational trust that is more affective and derived from shared experiences and values (Lewicki and Bunker, 1996; McAllister, 1995; Rousseau *et al.*, 1998). In our analysis we examine whether the relational or the rational view on trust prevails.

Trust in the relationship between supervisors and subordinates works reciprocally, and comprises both the subordinate's trust towards his supervisor and vice versa. As there has been a plethora of studies on the subordinate-to-supervisor dimension of this relationship, our interest is to discern what constitutes and results from the trust a subordinate holds towards his supervisor. We also, however, include the supervisor's perspective if applicable.

The supervisor-subordinate relationship is characterized by certain asymmetries: the supervisor has higher status, more power, information and the possibility to exercise control. As a result, subordinates face greater uncertainty and dependency. They often depend on their supervisors in regard to promotions, pay rises or in terms of job security (Sitkin and Roth, 1993). This renders trust a very salient issue in this relationship. Nevertheless, the subordinate does have some freedom in whom, and to what degree he trusts. He can decide not to reciprocate a supervisor's trust or to reduce his level of effort. Thus, subordinates' trust has important impacts on organisations and managers. Our purpose is to enhance the understanding of what factors specifically induce trust between supervisor and subordinates, and to outline specific interpersonal and organisational consequences.

Data collection and Methodology

We followed the guidelines for systematic reviews by Tranfield *et al.* (2003) and Pittaway *et al.* (2004): First, we clarified the aims of this literature review and identified business, management, psychology applied, behavioural science and industrial relations labor as relevant search categories. The Web of Science database was then used for that search. Second, we agreed on 1995, the year of Mayer, Davis and Schoorman's seminal paper on trust, as our starting point. Third, we identified the following key words for our search: "trust and work", or, "trust and job". Fourth, we agreed on following inclusion criteria:

- 1) Investigating interpersonal trust in business contexts;
- 2) sufficient academic rigour (so we included peer-reviewed articles rather than practitioner-oriented articles, such as Harvard Business Review);
 - 3) sufficient scope for generalizability (excluding those studying narrow contexts)
 - and 4) trust in the supervisor, rather than trust in top management or trust in the employer.

For the *trust and work* search 1,160 search hits were identified of which 32 studies met our inclusion criteria described above. The *trust and job* search yielded 369 hits of which an additional 10 met our criteria. Following this, we conducted further searches using the following terms specifically concerned with the supervisor-subordinate relationship: *trust* in combination with *manager*, *supervisor*, *superior*, *leader*, *employee*, *subordinate*, *sales person* and *personnel*. Those search term combinations culminated in 2,684 hits, of which 20 additional studies matched our criteria.

Each paper was assessed independently by two of the authors as A (should be in shortlist), B (uncertain), or C (should not be in shortlist). B listed papers were further discussed and then sorted as A or C listed papers. This resulted in a preliminary list comprising 62 papers. As a final step, we manually undertook a forward and backward search from the identified studies which yielded an additional 11 compatible studies. This search was based on key references which had been missed by the systematic search process, which is important to compensate for the rigidity of 'mechanistic'

searches (Denyer and Neely, 2004). Overall, 73 articles were identified spanning the period between 1995 and 2011.

Two of the authors independently read and coded the antecedents and consequences of trust. We used an inductive approach to coding derived from Oreg et al.'s (2011). Coding began using a schema based on existing trust reviews (Mayer et al., 1995; Dirks and Ferrin, 2002). However, because previous reviews did not focused on the issue of interpersonal trust between supervisors and subordinates, we modified this schema in order to develop or delete categories as necessary. Where there was disagreement, the coders discussed the issue until agreement was reached, and revisited previously coded papers again in the light of these discussions. Specifically, we analysed 37 theoretical propositions, 139 significant model parameters and 58 further empirical findings.

Results

We begin by considering the conceptual perspectives which our identified studies utilise, before synthesising trust antecedents and consequences. For each subsection we first present the results of our review and then discuss corresponding avenues for future research.

Conceptual frameworks

Our systematic review reveals the variation in conceptual perspectives utilised to study trust (Figure 1). Based on Kramer (1999), these theories can be placed along a continuum ranging from rationalchoice lenses (e.g. economic cost) at one end, to psychological and sociological conceptualisations that emphasise the relational aspects (e.g. network theory). The dominant paradigm deployed in this area of trust research is social-exchange. Blau (1964) defines social exchange as "the voluntary actions of individuals that are motivated by the returns they are expected to bring and typically do in fact bring from others" (p. 91). Hence, this perspective combines aspects of the relational view (voluntary action) with the rational view (expected return) on trust. It forms the basis of studies tackling important topics for business, including transformational leadership, leader-memberexchange and a variety of motivation theories (DeConinck, 2010). In contrast, few studies use socialidentity and social-cognitive related theories which focus on the relational side of trust (Kramer, 1999). Similarly, little attention has been given to more rational organisational theories such as stewardship (Davis et al., 1997) or stakeholder theory (Pirson and Malhotra, 2011).

Insert Figure 1 around here

Directions for future research

Social exchange theory is used in over 60% of the identified studies. As the theoretical lens determines the types of research questions, the dominance of any single approach can produce a potential myopia which may result in a potential stagnation of the field. Evidence shows significant strides could be made through either the adoption of multiple theoretical perspectives, as demonstrated by Colquitt and Rodell (2011) in their study of trust and justice which combined three perspectives (social exchange theory, the relational model and fairness heuristic theory), or from utilising underdeveloped conceptual lenses to consider trust in this context, such as through using stewardship or stakeholder theory.

¹ Online Appendix A contains an overview of the 73 studies in terms of methodology, trust antecedents and consequences.

Antecedents of trust

Our analysis identified four categories of trust antecedents: supervisor attributes, subordinate attributes, interpersonal processes between supervisor and subordinates and organisational characteristics.

Supervisor attributes

The category 'supervisor attributes' can be further subdivided into three. First, the supervisor's benevolence describes the degree to which he takes into account his subordinates' needs and well-being (Mayer *et al.*, 1995). Many studies have confirmed the theoretical relevance of this topic (e.g. Mayer *et al.*, 1995), or reported significant effects of a supervisor's benevolence on subordinates' trust (e.g. Knoll and Gill, 2011).

Supervisors' ability and competence, is the next sub-category and subsumes all the knowledge and qualifications a supervisor might hold in order to have "influence within a specific domain" (Mayer *et al.*, 1995 p. 717). Only Knoll and Gill (2011) failed to find a significant direct effect of supervisors' ability on trust. Specifically, the supervisors' structural competency (Burke *et al.*, 2007), their ability as a knowledge builder (Lee *et al.*, 2010) and their efficient usage of resources (Caldwell *et al.*, 2010) have been identified as competences that increase subordinates' trust.

The final category comprises the supervisors' integrity (Mayer *et al.*, 1995; Colquitt *et al.* 2007; Knoll and Gill, 2011; Mayer and Gavin, 2005) and subordinates' perceptions of organisational justice (Whitener, 1997). All three facets of justice (distributive, procedural and interactional) are relevant to the establishment of trust in this relationship (e.g. Pillai *et al.*, 1999). However, interactional justice seems to be the most relevant dimension (e.g. DeConinck, 2010), while distributive justice appears the least relevant (Pillai *et al.*, 1999). Ambrose and Schminke (2003) investigated the impacts of procedural and interactional justice and show both effects to be significant while interactional justice has the stronger impact. Other studies do not distinguish between distinct justice dimensions and confirm positive effects of general fairness (Lau and Tan, 2006) and respect (Brashear *et al.*, 2003) on trust.

Related to the topic of justice, some studies consider the supervisors' general demeanour and show how the predictability of supervisors' actions is positively related to trust (McKnight *et al.*, 1998). When there is consistency between supervisors' behaviour and organisational values, subordinates' trust increases (Podsakoff *et al.*, 1996; Rich, 1997). Further, the supervisors' honest and moral behaviour, combined with their loyalty towards their subordinates enhances trust (Chen *et al.*, 2011). A theoretical relationship is posited with supervisors' accountability through increases in subordinates' perceptions of their leader's integrity, which in turn boosts trust levels (Caldwell *et al.*, 2008).

Directions for future research

There is already a solid conceptual and empirical foundation for this facet of the supervisor-subordinate relationship. Current work highlights the significance of supervisors' attributes on trust. The subordinates' perception of supervisor attributes, however, dominates studies. Further work is encouraged to examine whether the same or different factors drive supervisors' trust towards

subordinates. Future research should also look at these elements within a more dynamic context, to reveal more about to whom, but also when, why and how such dimensions of trustworthiness and justice might matter most.

Subordinate attributes

Subordinate character traits are an important area of research, with subordinates' high propensity to trust significantly and positively impacting trust towards the supervisor (e.g. Knoll and Gill, 2011). In contrast, a low tolerance for uncertainty and risk is negatively related to trust, while perceptions of structural certainty are positive for trust development (McKnight *et al.*, 1998). Subordinates with higher commitment to organisational change are more likely to trust a new supervisor (Neves and Caetano, 2009), but only affective commitment to change seems to be related to trust towards the supervisor.

Directions for future research

Compared to the first category, subordinate attributes have received less attention. We propose two specific areas for future development: First, a more careful scrutiny of the role of propensity to trust. Although both conceptual and empirical studies conclude that trust propensity is universally positive, we wonder whether it may follow a reversed u-form with first having positive effects on outcome variables but for higher levels of trust propensity having negative effects as for high levels of trust propensity the probability of being betrayed increases. Second, more research is required to reveal how past experiences can shape future trust decisions.

Interpersonal processes between supervisor and subordinates

Leadership style plays an important role for the level of trust between supervisors and subordinates (Caldwell *et al.*, 2008; Whitener, 1997) and consequently has received considerable attention. Transformational leadership behaviours are prominent, as these emphasize an active orientation towards the subordinate, and the involvement of the subordinates in the decision-making process, which significantly influences the development of trust (e.g. Gillespie and Mann, 2004; Podsakoff *et al.*, 1996). Some distinguish sub-facets of trust with transformational leadership linked to cognition-based trust, while servant leadership leads to affect-based trust (Schaubroeck *et al.*, 2011). Others consider either supervisors' sharing of control with subordinates as positively related to trust (Brashear *et al.*, 2005), or subordinate perceived autonomy as enhancing trust (Cho and Park 2011).

In terms of leadership style, transactional leadership puts less emphasis on the relationship towards subordinates; rather it focuses on the exchange of performance and rewards. Here, research found that contingent reward and contingent punishment can enhance trust levels, while trust declines through non-contingent punishment (Rubin *et al.*, 2010). Yet, these results are not universal as some studies produced mixed results for these factors (e.g. Holtz and Harold, 2008). Finally, those studies of other leadership styles, including active-corrective, laissez-faire or passive-corrective leadership, produced a non-significant effect, or a decline of trust (Gillespie and Mann, 2004).

The quality of the exchange between supervisor and subordinate is an important expression of leadership behaviour and ought to be connected to trust (Whitener, 1997). Empirical studies show that high levels of open communication and a steady information flow are significantly positively related to trust (e.g. Cho and Park, 2011). Specifically, supervisors' trust is found to be triggered by

higher levels of subordinates' communication, both with other peers and with the supervisor (Ruppel and Harrington, 2000).

Congruence, the active support of subordinates through encouragement, intellectual stimulation and coaching is significant in establishing a trusting relationship (Burke et al., 2007). Empirical evidence confirms that trust is enhanced in situations where the subordinate perceives supervisor support (DeConinck, 2010), and where task feedback and training is available (Podsakoff et al., 1996). Finally, the degree of similarity between supervisor and subordinates is crucial for trust, with high value congruence (e.g. Brashear et al., 2003) and sharing the same perspective (Levin et al., 2006) being positively related to the level of trust. Interestingly, in new supervisor-subordinate relationships, obvious demographic similarities are a significant positive factor, while in established relationships sharing the same perspective is more important (Levin et al., 2006). Relationship length does not have an influence on trust, indicating that trust does not automatically increase over time (e.g. Levin et al., 2006). As a result, when subordinates perceive that their expectations have not been met by the supervisor, trust may decline (Dirks and Ferrin, 2002). Positive experiences with former supervisors have an effect on the level of trust with the current supervisor: if the subordinate perceives the departure of his former supervisor as something positive, his level of trust towards his new supervisor will be raised, while negative evaluations depress the new trust level (Ballinger et al., 2009). If there is existing information gathered about the designated supervisor (if he has a positive reputation), this also affects the development of trust (Ballinger et al., 2009).

Directions for future research

Four distinct areas are ripe for further study: First, the interrelationship between trust and supervisory control or monitoring warrants more attention; two studies suggest this relationship is negative, i.e. that the sharing of control and more autonomy leads to higher levels of trust (Brashear *et al.*, 2005; Cho and Park, 2011). However, considerable conceptual and empirical work suggests otherwise (c.f. Bijlsma-Frankema and Costa, 2005). Further attention is required to this aspect of the supervisor-subordinate relationship.

Second, given that this field is maturing, we encourage a more nuanced view on trust, for example by investigating how leadership attributes might affect different sub-facets of trust (Schaubroeck *et al.*, 2011), such as cognitive vs. affective, or knowledge-based vs. identification-based trust. Also, how these perceptions may change over the duration of the relationship might be explored.

The third suggestion for future research concerns the impact of unmet expectations. Meta-analytic evidence identifies a negative relationship with trust (Dirks and Ferrin, 2002), yet we were unable to find primary studies for this. We surmise such evidence may concern trust in top-management, i.e. trust in the organisation, not in the supervisor. Therefore, more studies on the impact of unmet expectations by the direct supervisors should be undertaken, with psychological contracts (Rousseau, 1989) offering a useful theoretical framework.

Lastly, more attention is required to discern how, when and why earlier experiences with supervisors might transfer to trust in the current supervisor. This would be critical for an improved understanding of the dynamic nature of trust.

Organisational factors

Our remaining antecedent category captures organisational characteristics and reveals how a positive organisational climate, with ethical norms that are shared and respected among the organisational members, has a positive effect on trust (e.g. DeConinck, 2011). Interestingly, this is true for both the trust a subordinate holds towards his supervisor and vice versa (Ruppel and Harrington, 2000). In particular, the psychological safety within work groups affects the level of trust towards the supervisor (Burke *et al.*, 2007). A closely related topic here is perceived organisational support, which increases trust because the subordinate recognizes that the organisation cares for him (Dirks and Ferrin, 2002).

Structural factors also matter, including the organisation of the workplace, technical conditions at work, and workflows. The implementation of new office technology is critical for trust, while new plant and equipment is not significant (Morgan and Zeffane, 2003). The occupational composition of the workplace also impacts trust, with a higher proportion of white collar workers positively affecting the general level of workplace trust (Blunsdon and Reed, 2003). Further, a positive effect is found for the fair implementation and execution of Human Resource Management policies (Blunsdon and Reed, 2003). Lastly, the general organisational setting, such as industry type, might have an impact (Blunsdon and Reed, 2003), while changing hierarchical levels or restructuring of business units has negative effects (Morgan and Zeffane, 2003).

Directions for future research

Three future research agendas are evident: First, organisational support, as only Dirks and Ferrin's (2002) meta-analysis shows the positive effect that organisational support can play. Second, following a contingency theoretical approach, how do different industry settings influence trust between supervisors and subordinates? Which industry characteristics enhance the development of trust? Third, a fusion is required between organisational change and trust literatures. Although both have grown exponentially over recent years, they remain quite separate; insights from both would raise understanding as to how trust affects organisational change, but also how change alters trust.

Consequences of trust

Turning now to the consequences of trust, three categories are found: subordinate work-related consequences, consequences in the supervisor-subordinate relationship, and consequences on the organisational level.

Subordinate work-related consequences

A higher level of trust towards the supervisor is argued to positively affect the subordinates' job performance (Burke *et al.*, 2007). While overall there is empirical support for this theory (e.g. Brower *et al.*, 2009), our review reveals some interesting contingencies. Yang and Mossholder (2010) found a significant relationship of affective trust in the supervisor for in-role and extra-role behaviour, yet a non-significant relationship for cognitive trust in the supervisor. Huang *et al.* (2010) found a significant direct relationship for trust on performance for non-managerial, but not for managerial subordinates. Further, Jung and Avolio (2000) found a significant effect of trust on performance regarding quality, but not quantity.

Subordinates' job satisfaction is influenced by trust towards the supervisor (e.g. Mulki, 2006), with trust accounting for increases in job satisfaction beyond the effect of job characteristics

(Cunningham and MacGregor, 2000). As with findings for job performance, Yang and Mossholder (2010) show job satisfaction as being significantly increased not by affective trust but by cognitive trust. Finally, in addition to subordinates' trust itself affecting job satisfaction (and performance), whether subordinates perceive that they are trusted by their supervisor also has an influence (Lester and Brower, 2003).

Trust affects the subordinates' level of motivation at work (Mayer *et al.*, 1995); it increases the acknowledgement of goals stated by the supervisor and intrinsic motivation, subordinates' willingness, and ability to work independently and their self-initiative, e.g. in regard to job related training (Costigan *et al.*, 2006). Trust promotes subordinates' willingness to take risks (Colquitt *et al.*, 2007) and participate in strategic decision making processes (Pappas and Flaherty, 2008). Costigan *et al.* (1998) investigated supervisor-subordinate-co-worker triads and found significant correlations between trust and subordinates' self-ratings of risk-taking, assertiveness and motivation, and supervisors' ratings of risk-taking and motivation.

A further research stream explores how subordinates cope with negative aspects at work. Trustworthy managerial behaviour reduces the subordinates' intent to attribute negative events to the supervisor personally (Korsgaard *et al.*, 2002). Higher levels of trust lead to positive changes in perceptions of stress, such as headache and fatigue (Liu *et al.*, 2010). The same holds true for job tensions (Lau and Tan, 2006).

Directions for future research

Our review reveals two directions for future work. First, further consideration has to be paid to the potential negative effects of trust on outcome variables, such as performance. Langfred (2004), for example, found that high trust in teams can be detrimental to performance, but does the same reversed u-form effect of trust hold for supervisor-subordinate relationships, and also across different settings? We contend that high levels of subordinates' trust might lead to disproportionally greater reductions in satisfaction and motivation where trust levels are not reciprocated by the supervisor. Second, to date, no study has simultaneously gathered data on supervisors' and subordinates' estimation of the subordinates' performance rates; only Costigan *et al.* (1998) attempted to assess motivation at work that way, but this study has considerable limitations because it utilised self-developed unvalidated measures with a small sample size. A more rigorous study might indicate whether trust influences the accuracy with which subordinates evaluate their own performance, and whether this mediates the effect trust has on other outcome variables, such as satisfaction and motivation.

Attitude towards the supervisor

Trust has consequences for the attitudes subordinates hold towards their supervisor, with increases in subordinates' trust leading to increased satisfaction with this supervisor (e.g. Jung and Avolio, 2000). Likewise, trust elevates perceptions of supervisors' effectiveness (Gillespie and Mann, 2004). The same is found for perceptions of supervisors' interactional justice (Holtz and Harold, 2008). Generally, higher trust leads to an overall increase in the perceived exchange quality with the supervisor (e.g. Wong et al., 2002). Scandura and Pellegrini (2008) suggest a more nuanced view regarding the effect of trust on satisfaction, and show that identification-based trust has a positive linear relationship, but for calculus-based trust the effect is non-linear and cubic, which suggests that trust "may be fragile even in high-quality exchanges" (p. 107). Where a subordinate has high

supervisor trust, he is more likely to follow, support and demonstrate his loyalty (Wong *et al.*, 2002). More specifically, trust has a bearing on the direct communication between the two parties (Burke *et al.*, 2007): Subordinates with high trust are more willing to disclose information to supervisors, which enhances the supervisors' insights into subordinates' work, making error detection easier. Further, subordinates with high trust are willing to rely on information provided by the supervisor (Dirks and Ferrin, 2002; Holtz and Harold, 2008) and perceive that they have a voice (Gao *et al.*, 2011). Such subordinates also rate their perceptions of their supervisors' interactional justice more highly (Holtz and Harold, 2008).

Directions for future research

There is merit in conducting more research into consequences related to perceptions of leaders' effectiveness and subordinates' satisfaction. Attention should focus on replicating the few positive effects found so far and test whether these effects hold across different organisational and cultural settings. We contend that cultural factors, such as power distance may have an impact. In addition, more nuanced work should be conducted in order to enhance the investigation of the different dimensions of trust, as well as to identify non-linear effects (Scandura and Pellegrini, 2008).

Organisational level

This remaining subcategory captures general effects of trust between supervisor and subordinate for the organisation (e.g. Whitener, 1997). Specifically, consistent results emerged across three different countries for the spill-over effects from trust in the supervisor to trusting the CEO and the whole organisation (Costigan et al., 2004). Trust between subordinate and supervisor enhances perceptions of procedural (Holtz and Harold, 2008) and distributive justice (Brashear et al., 2005), and organisational support (Byrne et al., 2011). One of the most often articulated effects in the literature is the relationship between trust in the supervisor-subordinate relationship and organisational citizenship behaviour (OCB) (e.g. Brower et al., 2009). Specifically, support emerges for both OCB-Individual (citizenship behaviour directed towards other members of the organisation, e.g. willingness to help) and OCB-Organisation (citizenship behaviour directed towards the organisation, e.g. willingness to engage in company suggestion schemes). Evidence reveals that high trust leads to higher levels of altruism, virtue, conscientiousness and fairness (Dirks and Ferrin, 2002). However, some interesting contingencies are revealed: Wong et al. (2006) identify a significant effect of trust on OCB in a joint venture sample, but not in a state-owned enterprise, while Huang et al. (2010) show a significant direct relationship for trust on OCB-O only among non-managerial but not for managerial subordinates. Similarly, Yang and Mossholder (2010) identify a significant relationship between affective trust in the supervisor and extra-role behaviour, yet a non-significant result for cognitive trust.

Beyond OCB, higher levels of trust alter the subordinates' attitude towards the organisation and increase organisational commitment (e.g. DeConinck, 2011). Again, some interesting contingencies should be noted: Yang and Mossholder (2010) confirmed a significant relationship of affective trust in the supervisor on organisational commitment, yet for cognitive trust it is a non-significant relationship. Ruppel and Harrington (2000) found a significant effect for supervisors' trust in subordinates on perceptions of subordinates' commitment, but the effects of supervisors' perception of general trust atmosphere on subordinates' commitment is not significant. Trust towards the supervisor also enhances subordinates' willingness to remain with the organisation (e.g. Costigan et

al., 2011). As a result, organisations benefit directly from the knowledge and skills of talented employees they retain, and have low recruitment and selection costs (Burke *et al.*, 2007). Trust also influences how knowledge is managed within the organisation, as trust enhances the willingness to document existing knowledge (Renzl, 2008) and disseminate knowledge sharing within teams (Lee *et al.*, 2010). Finally, trust between supervisors and subordinates is argued to increase overall organisational performance, with employees producing higher quality and quantity of goods and services (Burke *et al.*, 2007). However, this may only emerge at the team level, and improves quality but not quantity of output (Jung and Avolio, 2000).

Directions for future research

Two key areas for future work are evident: First, more evidence is required on the potential direct effect of trust on generic organisational performance. For example, to discern whether organisations with higher levels of trust between subordinates and supervisors also enjoy higher levels of customer loyalty, higher share prices etc.? Finally, more nuanced work is required concerning the relationship between trust, and perceptions of organisational justice building on Colquitt and Rodell's (2011) study. We contend that high levels of subordinates' trust might elevate perceptions of interactional justice, such that even shortcomings in other justice dimensions might be overcome. This would have important implications for organisations undergoing restructuring, or downsizing.

Discussion

Our literature review gives a unique insight into the current status quo regarding research on trust between supervisor and subordinate. Figure 2 shows the aggregated categories of trust antecedents and consequences together with the corresponding number of effects found. Several aspects are noteworthy:

Insert Figure 2 around here

First, there is an evident bias in the distribution of findings across the different categories; some categories (e.g. leadership style, organisational justice or OCB) appear already well researched, while other topics (e.g. experiences with former supervisors, industry factors or perceived effectiveness of the supervisor) have received less attention. Further, scholars need to design more nuanced studies which disaggregate distinct facets of trust in these more developed research topics.

Second, there is a dearth of conceptual work on trust between supervisor and subordinates. For example, in examining the antecedent dimension "leadership style", only two theoretical propositions were found in relation to 16 empirical findings. Similar ratios exist in regard to "justice, fairness and respect" and to "increased level of organisational commitment". There are even several categories without *any* pure theoretical work, e.g. "increased level of job satisfaction", "increased level of motivation at work" and "satisfaction with the supervisor". Conceptual efforts by Burke *et al.* (2007), McKnight *et al.* (1998) and Whitener (1997) show the type of solid conceptual work that is of greatest impact.

Furthermore, the trust literature in this field is over-reliant on a single theoretical perspective, social exchange theory (together with related perspectives such as leader-member-exchange and transformational leadership), and one research design, 'cross-sectional empirical work'. Even though a fraction of the cross-sectional work collected data from different sources, this research design fails

to extent our understanding of the dynamic nature of trust. More heterogeneous studies of trust between supervisors and subordinates are now needed, both in terms of theoretical perspectives and methodological designs.

Finally, a strong preference is evident for reporting significant rather than non-significant results; in the case of trust consequences, there is a ratio of 15 non-significant effects to 89 significant effects, with similar levels for trust antecedents. While this reflects the general tendency of journal editors to conceive just significant results as being worthy for publication, we suggest trust is a field where non-significant results might actually offer interesting insights, too.

Limitations

This review contains some limitations. First, we only included published peer-reviewed articles. We did, however, consider a range of impact factors in the journals we covered with our search (0.85 to 6.17), including several articles from journals without impact factor, to enhance the publication variance of our sample. Second, in analysing the direct relationship between supervisor and subordinate we did not explicitly address moderator and mediator effects in the primary studies. Attention to this issue may have revealed additional details and should be added to any future literature review on trust. Finally, we concentrated on those factors which influence the trust a subordinate holds towards his supervisor and the respective consequences. While this skew does nevertheless reflect the bias in primary work, it offers a partial view, and so we recommend future attention be directed towards those factors which drive the supervisor's trust towards his subordinate and the respective consequences.

Managerial implications

Our literature review elucidates the importance of the relationship between subordinates and their supervisor for trust. The evidence attests to the significance of both parties to realise positive trust dividends including: task performance, job satisfaction and motivation, and the improvement of relationship quality through influencing the attitude towards authority figures in organisations. This is clearly a two way relationship, where trust does not automatically depend on the duration of the relationship, rather there is a role for individual traits and hierarchical positions, past experiences, and organisational context in shaping trust.

Conclusion

This paper offers relevant insights into the trust relationship between supervisor and subordinates, which has not been considered in earlier reviews. Through investigating the current state of research, we are able to present a systematic overview of the central antecedents and consequences that influence the trust relationship between supervisors and subordinates. We identify relevant gaps in the current literature, and outline an exhaustive agenda for future research. Specifically, we reveal the dearth of conceptual work in almost any category and a strong bias towards particular conceptual lenses. Indeed, almost no use is made of studies which do not favour social-exchange approaches, and little attention is paid to non-significant effects, which may indicate interesting facets or inconsistencies. We conclude that this field of trust research appears potentially myopic, being currently too homogeneous in both its theoretical approaches and methodological designs. We contend that greater understandings could emerge from the inclusion of theories, such as social

ANTECEDENTS AND OUTCOMES OF TRUST BETWEEN SUPERVISOR AND SUBORDINATE

identity theory, attribution theory, economic cost theory, and methodologies, including critical incident, vignette studies and case studies, but also through more dynamic approaches to this topic.

The following list contains only those references that appear in the text. A full list of all studies included in the qualitative meta-analysis can be obtained upon request.

References

- Ambrose, M. L. and Schminke, M. (2003), "Organization structure as a moderator of the relationship between procedural justice, interactional justice, perceived organizational, support, and supervisory trust", *Journal of Applied Psychology*, Vol. 88 No. 2, pp. 295-305.
- Ballinger, G. A., Schoorman, F. D. and Lehman, D. W. (2009), "Will you trust your new boss? The role of affective reactions to leadership succession", *Leadership Quarterly*, Vol. 20 No. 2, pp. 219-232.
- Barney, J. B. and Hansen, M. H. (1994), "Trustworthiness as a source of competitive advantage", *Strategic Management Journal*, Vol. 15, pp. 175-190.
- Bijlsma-Frankema, K. and Costa, A. C. (2005), "Understanding the Trust-Control Nexus", *International Sociology*, Vol. 20 No.3, pp. 259-282.
- Blau, P. (1964), Exchange and power in social life, Wiley, New York.
- Blunsdon, B. and Reed, K. (2003), "The effects of technical and social conditions on workplace trust", *International Journal of Human Resource Management*, Vol. 14 No.1, pp. 12-27.
- Brashear, T. G., Boles, J. S., Bellenger, D. N. and Brooks, C. M. (2003), "An empirical test of trust-building processes and outcomes in sales manager-salesperson relationships", *Journal of the Academy of Marketing Science*, Vol. 31 No. 2, pp. 189-200.
- Brashear, T. G., Manolis, C. and Brooks, C. M. (2005), "The effects of control, trust, and justice on salesperson turnover", *Journal of Business Research*, Vol. 58 No. 3, pp. 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*, Vol. 35 No. 2, pp. 327-347.
- Burke, C. S., Sims, D. E., Lazzara, E. H. and Salas, E. (2007), "Trust in leadership: a multi-level review and integration", *Leadership Quarterly*, Vol. 18 No. 6, pp. 606-632.
- Byrne, Z., Pitts, V., Chiaburu, D. and Steiner, Z. (2011), "Managerial trustworthiness and social exchange with the organization", *Journal of Managerial Psychology*, Vol. 26 No. 1-2, pp. 108-122.
- Caldwell, C., Hayes, L. A., Karri, R. and Bernal, P. (2008), "Ethical stewardship implications for leadership and trust", *Journal of Business Ethics*, Vol. 78 No. 1-2, pp. 153-164.
- Caldwell, C., Hayes, L. A. and Long, D. T. (2010), "Leadership, trustworthiness, and ethical stewardship", *Journal of Business Ethics*, Vol. 96 No. 4, pp. 497-512.
- Chen, X.-P., Eberly, M. B., Chiang, T.-J., Farh, J.-L. and Cheng, B.-S. (2011), "Affective trust in chinese leaders: linking paternalistic leadership to employee performance", *Journal of Management*, first published on June 10.
- Cho, Y. J. and Park, H. (2011), "Exploring the relationships among trust, employee satisfaction, and organizational commitment", *Public Management Review*, Vol. 13 No. 4, pp. 551-573.
- Clark, M. C. and Payne, R. L. (1997), "The nature and structure of workers' trust in management", Journal of Organizational Behavior, Vol. 18 No. 3, pp. 205-224.
- Colquitt, J. A. and Rodell, J. B. (2011), "Justice, trust, and trustworthiness: a longitudinal analysis integrating three theoretical perspectives", *Academy of Management Journal*, Vol. 54 No. 6, pp. 1183-1206.
- Colquitt, J. A., Scott, B. A. and 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*, Vol. 92 No. 4, pp. 909-927.
- Costigan, R. D., Ilter, S. S. and Berman, J. J. (1998), "A multi-dimensional study of trust in organizations", *Journal of Managerial Issues*, Vol. 10 No. 3, pp. 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*, Vol. 21 No. 2, pp. 273-291.
- Costigan, R. D., Insinga, R. C., Berman, J. J., Kranas, G. and Kureshov, V. A. (2011), "Revisiting the relationship of supervisor trust and CEO trust to turnover intentions: a three-country comparative study", *Journal of World Business*, Vol. 46 No. 1, pp. 74-83.
- Costigan, R. D., Insinga, R. C., Kranas, G., Kureshov, V. A. and Ilter, S. S. (2004), "Predictors of employee trust of their ceo: a three-country study", *Journal of Managerial Issues*, Vol.16 No. 2, pp. 197-216.
- Cunningham, J. B. and MacGregor, J. (2000), "Trust and the design of work: complementary constructs in satisfaction and performance", *Human Relations*, Vol. 53 No. 12, pp. 1575-1591.
- Davis, J. H., Schoorman, F. D. and Donaldson, L. (1997), "Toward a stewardship theory of management", *Academy of Management Review*, Vol. 22 No. 1, pp. 20-47.
- Deconinck, J. B. (2010), "The effect of organizational justice, perceived organizational support, and perceived supervisor support on marketing employees' level of trust", *Journal of Business Research*, Vol. 63 No. 12, pp. 1349-1355.
- Deconinck, J. B. (2011), "The effects of ethical climate on organizational identification, supervisory trust, and turnover among salespeople", *Journal of Business Research*, Vol. 64 No. 6, pp. 617-624.
- Denyer, D. and Neely, A. (2004), "Introduction to the special issue: innovation and productivity performance in the UK.", *International Journal of Management Reviews*, Vol. 5/6 No. 3/4, pp. 131-135.
- Dirks, K. T. and Ferrin, D. L. (2002), "Trust in leadership: meta-analytic findings and implications for research and practice", *Journal of Applied Psychology*, Vol. 87 No. 4, pp. 611-628.
- Fulmer, C. A. and Gelfand, M. J. (2012), "At what level (and in whom) we trust: trust across multiple organizational levels", *Journal of Management*, Vol. 38 No. 4, pp. 1167-1230.
- Gao, L. P., Janssen, O. and Shi, K. (2011), "Leader trust and employee voice: the moderating role of empowering leader behaviors", *Leadership Quarterly*, Vol. 22 No. 4, pp. 787-798.
- Gillespie, N. A. and Mann, L. (2004), "Transformational leadership and shared values: the building blocks of trust", *Journal of Managerial Psychology*, Vol. 19 No. 6, pp. 588-607.
- Holtz, B. C. 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*, Vol. 81, pp. 777-802.
- Huang, X., Iun, J., Liu, A. and 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*, Vol. 31 No. 1, pp. 122-143.
- Jung, D. I. 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*, Vol. 21 No. 8, pp. 949-964.
- Knoll, D. L. and Gill, H. (2011), "Antecedents of trust in supervisors, subordinates, and peers", *Journal of Managerial Psychology*, Vol. 26 No. 4, pp. 313-330.
- Konovsky, M. A. and Pugh, S. D. (1994), "Citizenship behavior and social-exchange", *Academy of Management Journal*, Vol. 37 No. 3, pp. 656-669.
- Korsgaard, M. A., Brodt, S. E. and Whitener, E. M. (2002), "Trust in the face of conflict: the role of managerial trustworthy behavior and organizational context", *Journal of Applied Psychology*, Vol. 87 No. 2, pp. 312-319.
- Kramer, R. M. (1999), "Trust and distrust in organizations: emerging perspectives, enduring questions", *Annual Review of Psychology*, Vol. 50 No. 1, pp. 569-598.
- Langfred, C. W. (2004), "Too much of a good thing? Negative effects of high trust and individual autonomy in self-managing teams", *Academy of Management Journal*, Vol. 47 No. 3, pp. 385-399.

- Lau, C. M. and Tan, S. L. C. (2006), "The effects of procedural fairness and interpersonal trust on job tension in budgeting", *Management Accounting Research*, Vol. 17 No. 2, pp. 171-186.
- Lee, P., Gillespie, N., Mann, L. and Wearing, A. (2010), "Leadership and trust: their effect on knowledge sharing and team performance", *Management Learning*, Vol. 41 No. 4, pp. 473-491.
- Lester, S. W. and Brower, H. H. (2003), "In the Eyes of the Beholder: the relationship between subordinates' felt trustworthiness and their work attitudes and behaviors", *Journal of Leadership & Organizational Studies*, Vol. 10 No. 2, pp. 17-33.
- Levin, D. Z., Whitener, E. A. and Cross, R. (2006), "Perceived trustworthiness of knowledge sources: the moderating impact of relationship length", *Journal of Applied Psychology*, Vol. 91 No.5, pp. 1163-1171.
- Lewicki, R. J. and Bunker, B. B. (1996), "Developing and maintaining trust in work relationships", in: Kramer, R. M. and Tyler, T. R. (Eds.) *Trust in organizations: frontiers of theory and research,* Sage, Thousand Oaks, pp. 114-139
- Liu, J. Y., Siu, O. L. and Shi, K. (2010), "Transformational leadership and employee well-being: the mediating role of trust in the leader and self-efficacy", *Applied Psychology an International Review-Psychologie Appliquee-Revue Internationale*, Vol. 59 No. 3, pp. 454-479.
- Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995), "An integrative model of organizational trust", *Academy of Management Review*, Vol. 20 No. 3, pp. 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*, Vol. 48 No. 5, pp. 874-888.
- McAllister, D. J. (1995), "Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations", *Academy of Management Journal*, Vol. 38 No. 1, pp. 24-59.
- McKnight, D. H., Cummings, L. L. and Chervany, N. L. (1998), "Initial trust formation in new organizational relationships", *Academy of Management Review*, Vol. 23 No. 3, pp. 473-490.
- Morgan, D. E. and Zeffane, R. (2003), "Employee involvement, organizational change and trust in management", *International Journal of Human Resource Management*, Vol. 14 No. 1, pp. 55-75.
- Mulki, J. P. J., Fernando; Locander, William B. (2006), "Effects of ethical climate and supervisory trust on salesperson's job attitudes and intentions to quit", *Journal of Personal Selling and Sales Management*, Vol. 26 No. 1 pp. 19-26
- Neves, P. and Caetano, A. (2009), "Commitment to change: contributions to trust in the supervisor and work outcomes", *Group & Organization Management*, Vol. 34 No. 6, pp. 623-644.
- Oreg, S., Vakola, M. and Armenakis, A. (2011), "Change recipients' reactions to organizational change: a 60-year review of quantitative studies", *Journal of Applied Behavioral Science*, Vol. 47 No. 4, pp. 461-524.
- Pappas, J. M. and Flaherty, K. E. (2008), "The effect of trust on customer contact personnel strategic behavior and sales performance in a service environment", *Journal of Business Research*, Vol. 61 No. 9, pp. 894-902.
- Pillai, R., Schriesheim, C. A. and Williams, E. S. (1999), "Fairness perceptions and trust as mediators for transformational and transactional leadership: a two-sample study", *Journal of Management*, Vol. 25 No. 6, pp. 897-933.
- Pirson, M. and Malhotra, D. (2011), "Foundations of organizational trust: what matters to different stakeholders?", *Organization Science*, Vol. 22 No. 4, pp. 1087-1104.
- Pittaway, L., Robertson, M., Munir, K., Denyer, D. and Neely, A. (2004), "Networking and innovation: a systematic review of the evidence", *International Journal of Management Reviews*, Vol. 5/6 No. 3/4, pp. 137-168.
- Podsakoff, P. M., MacKenzie, S. B. and Bommer, W. H. (1996), "Transformational leader behaviors and substitutes for leadership as determinants of employee satisfaction, commitment, trust, and organizational citizenship behaviors", *Journal of Management*, Vol. 22 No. 2, pp. 259-298.

- Renzl, B. (2008), "Trust in management and knowledge sharing: the mediating effects of fear and knowledge documentation", *Omega*, Vol. 36 No. 2, pp. 206-220.
- 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*, Vol. 25 No. 4, pp. 319-328.
- Rousseau, D. M. (1989), "Psychological and implied contracts in organization", *Employee Responsibilities and Rights Journal*, Vol. 2 No. 2, pp. 121-139.
- 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*, Vol. 23 No. 3, pp. 393-404.
- Rubin, R. S., Bommer, W. H. and Bachrach, D. G. (2010), "Operant leadership and employee citizenship: a question of trust?", *Leadership Quarterly*, Vol. 21 No. 3, pp. 400-408.
- Ruppel, C. P. and Harrington, S. J. (2000), "The relationship of communication, ethical work climate, and trust to commitment and innovation", *Journal of Business Ethics*, Vol. 25 No. 4, pp. 313-328.
- Scandura, T. A. and Pellegrini, E. K. (2008), "Trust and leader—member exchange: a closer look at relational vulnerability", *Journal of Leadership & Organizational Studies*, Vol. 15 No. 2, pp. 101-110.
- Schaubroeck, J., Lam, S. S. K. and Peng, A. C. Y. (2011), "Cognition-based and affect-based trust as mediators of leader behavior influences on team performance", *Journal of Applied Psychology*, Vol. 96 No. 4, pp. 863-871.
- Schoorman, F. D., Mayer, R. C. and Davis, J. H. (2007), "An integrative model of organizational trust: past, present, and future", *Academy of Management Review*, Vol. 32 No. 2, pp. 344-354.
- Sitkin, S. B. and Roth, N. L. (1993), "Explaining the limited effectiveness of legalistic "remedies" for trust/distrust", *Organization Science*, Vol. 4 No. 3, pp. 367-392.
- Tranfield, D.R., Denyer, D. and Smart, P. (2003), "Towards a Methodology for Developing Evidence-Informed Management Knowledge by Means of Systematic Review", *British Journal of Management*, Vol. 4 No. 3, pp. 207-222.
- Whitener, E. M. (1997), "The impact of human resource activities on employee trust", *Human Resource Management Review*, Vol. 7 No. 4, pp. 389-404.
- Wong, Y. T., Ngo, H. Y. and Wong, C. S. (2006), "Perceived organizational justice, trust, and OCB: a study of chinese workers in joint ventures and state-owned enterprises", *Journal of World Business*, Vol. 41 No. 4, pp. 344-355.
- Wong, Y. T., Wong, C. S. and Ngo, H. Y. (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*, Vol. 13 No. 6, pp. 883-900.
- Yang, J. X. and Mossholder, K. W. (2010), "Examining the effects of trust in leaders: a bases-and-foci approach", *Leadership Quarterly*, Vol. 21 No. 1, pp. 50-63.

Figure 1 Overview

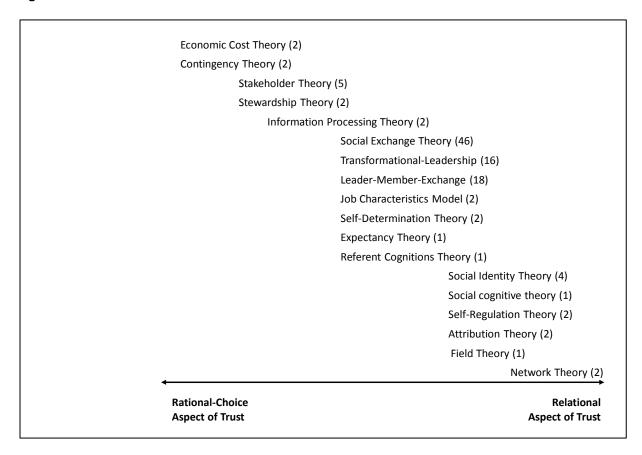


Figure 2: Overview

