

Handbook of Trust Research

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13 On the complexity of organizational trust: a multi-level co-evolutionary perspective and guidelines for future research

Steven C. Currall and Andrew C. Inkpen

During the past decade, scholars have made significant progress in the study of trust in organizational settings. For instance, significant theoretical advances have been achieved (e.g. Rousseau et al., 1998), as have empirical developments such as those published in special trust issues of *Organization Science* (McEvily et al., 2003) and *Organization Studies* (Bachmann et al., 2001). Despite this progress, however, ‘trust remains an under-theorized, under-researched, and, therefore, poorly understood phenomenon’ (Child, 2001: 274). The aim of this chapter is to spur research that moves beyond current theoretical and empirical approaches by using a multi-level and co-evolutionary framework for studying trust. We believe that trust researchers should devote greater attention to the complexity of trust and particularly its evolutionary nature. Our chapter is an attempt to explore the complexities of how trust evolves over time and how it is impacted by organizational context. This idea is consistent with the view of others such as Koza and Lewin (1998), who have argued that trust should not be viewed as a static construct. Also, we have argued elsewhere (Inkpen and Currall, 2004) that a co-evolutionary approach is useful for studying trust. We expand on those themes in this chapter.

Our thesis is this: it is possible to grasp the complexity of trust at one level (e.g. the interpersonal level) by examining trust at another level (e.g. the intergroup or inter-organizational level). As we will discuss in more detail later, Hackman (2003) recently argued that insights about a construct can be obtained when the researcher conducts analyses at one or more levels above or below the focal construct. With respect to trust, we suggest that the subtleties of the trust construct can be unearthed by understanding the organizational context of trust, which can involve, for example, explicating the impact of trust at one level of analysis on trust at another level of analysis. Indeed, we posit that trust at one level serves as the organizational context of trust at another level.

The plan of the chapter is as follows. We lay the foundation for our discussion based on a definition of trust that is suitable for exploring trust across the interpersonal, intergroup and inter-organizational levels. We then discuss a framework that can be used to think about trustors and trustees at different levels. The core of our argument comes next, where we posit linkages among trust at different levels and how trust at one level can affect trust at an adjacent level. We will refer frequently to the literature on joint ventures (JVs) and strategic alliances because a number of authors working in this area have addressed issues of trust at the interpersonal, intergroup and inter-organizational levels. And we will draw upon work that we have published on trust and JVs and alliances (e.g. Currall and Inkpen, 2002; Inkpen and Currall, 2004). Lastly, we conclude the chapter with several ideas that are intended to serve as guidelines for future research on trust.

A definition of trust that ‘travels’ across levels

As we have discussed elsewhere (Currall, 1992; Currall and Judge, 1995; Inkpen and Currall, 1997; Currall and Inkpen, 2002; 2003; Currall and Epstein, 2003), trust involves two principal concepts: reliance (Giffin, 1967; Rotter, 1980) and risk (Mayer et al., 1995; Rousseau et al., 1998). Therefore, we define trust as the decision to rely on another party (i.e. person, group, or organization) under a condition of risk. Reliance is action through which one party permits its fate to be determined by another. Reliance is based on positive expectations of, or confidence in, the trustworthiness of another party (Rousseau et al., 1998). Risk is the potential that the trusting party will experience negative outcomes, that is, ‘injury or loss’ (March and Shapira, 1987; Sitkin and Pablo, 1992), if the other party proves untrustworthy. Thus, risk creates the opportunity for trust (Rousseau et al., 1998).

Most conceptualizations of trust focus on the interpersonal level (Rousseau et al., 1998). Yet our definition of trust can be applied to persons, groups and organizations because all three entities make trust decisions and exhibit the measurable actions that follow from such decisions. In fact, it is common for organizational researchers to study decision-making by individuals (e.g. Bazerman, 2001), groups (e.g. Bar-Tal, 1990; Hackman, 2003), and organizations (e.g. Huber, 1990). Because persons, groups and organizations all are capable of making trusting decisions, our conceptualization of trust ‘travels’ (Osigweh, 1989) from the interpersonal to the intergroup to the inter-organizational level. So, the conceptual equivalence across levels is the following: under a condition of risk, a person’s, group’s, or organization’s trust is signified by a decision to engage in action that allows its fate to be determined by another person, group or organization.

When referring to the parties involved in an interpersonal, intergroup or inter-organizational relationship, we find it useful to use the terms ‘trustor’ and ‘trustee’. Designation of the trustor answers the question ‘Who trusts?’ Designation of the trustee answers the question ‘Who is trusted?’ Distinguishing between trustors and trustees has the advantage of avoiding confusion regarding levels of analysis and who is trusting versus who is being trusted (Mayer et al., 1995). We now turn to a presentation of a multilevel model of trust. After discussing this model, we will address linkages among trust at the interpersonal, intergroup and inter-organizational levels.

A multilevel perspective on trust

Some research on trust at multiple levels has been conducted in literature on inter-organizational relationships. For example, in writing on JVs, Barney and Hansen (1994) suggested that discrepancies can exist between interpersonal trust and inter-organizational trust within a JV because trust between partner organizations’ managers may be strong although trust between partner firms is weak. Doz (1996) examined how alliances evolve and how trust at one organizational level impacts the development of trust at another level. Doney and Cannon (1997) empirically studied buyer–seller relationships and found that inter-organizational trust differed from interpersonal trust. Also in the buyer–supplier setting, Zaheer et al. (1998) empirically examined distinctions between inter-organizational and interpersonal trust. Jeffries and Reed (2000) focused on relational contracting among firms and explored the interaction between inter-organizational and interpersonal trust for the performance of inter-organizational

relationships. Overall, however, the issue of trust and organizational levels has been under-explored and issues of similarities and differences in trust at the person, group and organization levels have received only limited attention (Currall and Inkpen, 2002).

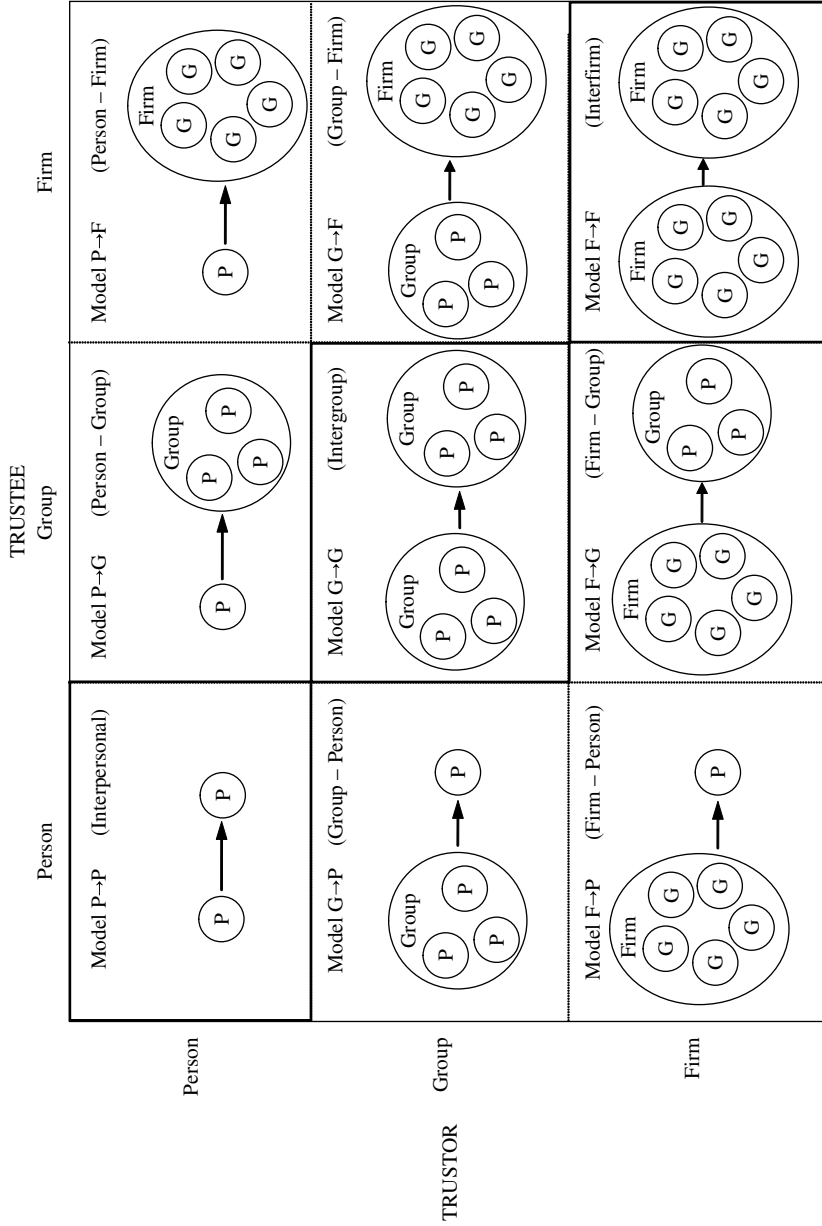
Levels terminology

Before proceeding with a discussion of trust at multiple levels, a bit of terminology is in order. ‘Level of theory’, ‘level of measurement’ and ‘level of analysis’ are fundamental concepts in cross-level research (e.g. Klein et al., 1994; Rousseau, 1985). ‘Level of theory’ refers to the unit (person, group, or organization) the researcher seeks to explain and about which attributions and generalizations are made. For example, if one examines how trust between JV parent organizations may affect the JV’s financial performance, then the unit of theory is the organization. Alternatively, if the focus is on trust as a factor affecting negotiations between individuals, then the unit of theory is the person. Level of measurement refers to the source of information such as individual interviews, group surveys, or organization-level archival records of organizational performance. Levels of analysis concern the statistical processing of empirical data.

A multilevel framework

We now return to trust and multiple levels. Currall and Inkpen (2002) proposed a three-level model of interpersonal, intergroup and inter-organizational relations. The aim of the model was to articulate the level of theory, as well as trustors and trustees, at the person, group and organizational levels. By articulating the level of theory, our aim in Currall and Inkpen (2002) was to provide for researchers a foundation for considerations regarding the level of measurement and the level of analysis in multilevel empirical research on trust.

An updated and amended version of the Currall and Inkpen (2002) framework is presented in Figure 13.1. The framework shows the three levels of trust. As depicted in the figure, model P→P refers to both the trustor and trustee as individual persons. Take, for example, the case of a JV or strategic alliance, in which a complex web of trust relations operates at the interpersonal, intergroup and inter-organizational levels. For example, in JVs three types of persons tend to be involved: business development executives in the parent organizations; operations managers in the JV itself; and the JV’s board of directors, most of whom are top executives from the parent organizations. Relations among these individuals are important in shaping the partnership agreement between firms as well as in implementing and monitoring the JV. Variations of the interpersonal model are Model P→G. Using again the example of a JV, this is expressed in the form of a trustor as a single person and the trustee as a group of managers from the partner organization. Model P→F reflects a manager’s trust in the partner organization as an entity. The figure shows that one can also envision trust between groups; on the diagonal of Figure 13.1, model G→G defines one group of managers from a JV partner firm as the trustor and another group of managers from a partner organization as the trustee. Model F→F represents inter-organizational trust, a common conceptualization in previous empirical studies of interfirm relations such as JVs and strategic alliances. Other variations of the P→P, G→G and F→F representations are shown in the off-diagonal cells of Figure 13.1.



Source: Adapted from Currall and Inkpen (2002).

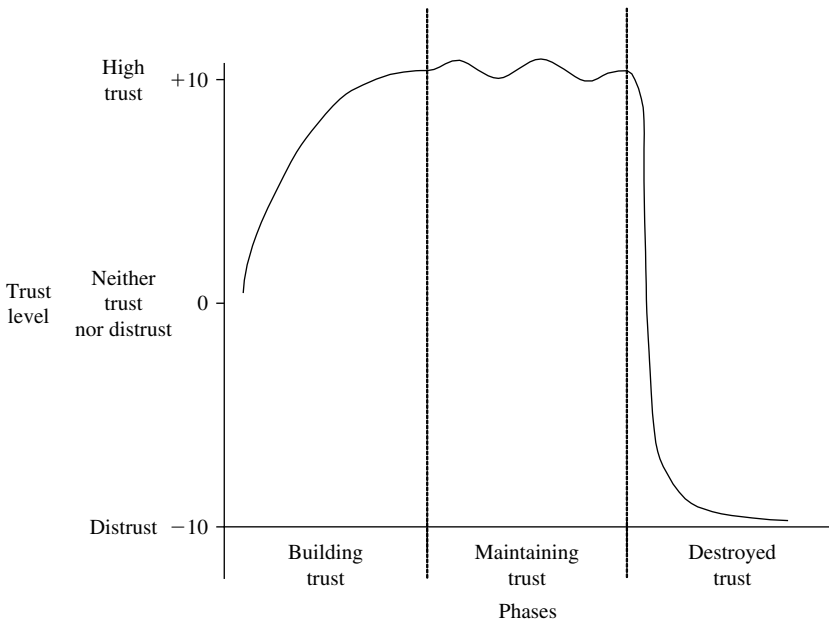
Figure 13.1 A multilevel perspective on trust

Development of trust and co-evolution of trust across levels

Much of the interplay of trust at the interpersonal, intergroup and inter-organizational levels takes place during the development of trust. Currall and Epstein (2003) proposed trust’s evolutionary phases as shown in Figure 13.2. The diagram shows that early in a relationship trust starts around the zero point of neither trust nor distrust because the parties lack information about the trustworthiness of their counterpart. Development of trust is often slow and incremental because parties tend to be reticent about trusting. This is especially true of those whom we do not know or about whom we have uncertainty. Trust building therefore follows an incremental pattern; one may trust in small ways first, observe whether trust is upheld or violated, and then proceed with caution in trusting one step at a time.

Over time, if trust-building actions are taken, the level of trust grows until it begins to level off during the ‘maintaining trust’ phase. During this stage, the level of trust stays roughly constant, if neither party takes actions that erode trust. If trust-violating events occur, however, then the overall level of trust plummets into the ‘destroyed trust’ phase. Herculean trust-building efforts must take place simply to return to the zero point and even further efforts are then required to move into the positive trust domain.

Our main interest is the way that trust at one level may impact trust at another level during the ‘developing trust’ phase. In this sense, trust serves as the organizational context for trust at another level. This involves the co-evolution of trust at different levels, to which we now turn.



Source: Currall and Epstein (2003).

Figure 13.2 Evolutionary phases of trust

The co-evolution of trust across levels

What is ‘co-evolution’? Lewin and Volberda (1999) identified five properties of co-evolutionary models of organizations: (1) multilevelness; (2) multidirectional causalities; (3) nonlinearity of relations among constructs; (4) feedback and interdependence between organizations; and (5) history dependence. In the present discussion, we focus primarily on multilevelness, multidirectional causalities (i.e. reciprocal relations) and history interdependence. In terms of multilevelness, we previously explained our multi-level framework for trust. With respect to multidirectional causalities, we will discuss in a moment how interpersonal, intergroup and inter-organizational trust affect each other in reciprocal ways. And, concerning history dependence, the interplay of interpersonal, intergroup and inter-organizational trust transpires over time. For example, interpersonal trust may develop as time passes to form intergroup trust, which may eventually expand to inter-organizational trust.

We believe that trust at one level can serve as an organizational contextual factor impacting the degree of trust at another level. A number of authors have written recently about organizational context (e.g. Heath and Sitkin, 2001; Johns, 2001; Rousseau and Fried, 2001). Johns (2001) has explained that organizational context ‘can be characterized as cross-level effects in which a stimulus or phenomenon at one level or unit of analysis has an impact at another level or unit of analysis’ (p. 32). Johns (2001, pp. 31–2) added:

Cappelli and Sherer (1991, p. 56) define context in organizational behavior as the ‘surroundings associated with phenomena which help to illuminate that [*sic*] phenomena, typically factors associated with units of analysis above those expressly under investigation.’ Mowday and Sutton (1993, p. 198) define context as ‘stimuli and phenomena that surround and thus exist in the environment external to the individual, most often at a different level of analysis’.

Central to our conceptualization is the interplay of interpersonal, intergroup and inter-organizational trust, especially during the developing trust phase. The linkages of the three levels are depicted in Figure 13.3, which posits, for example, that interpersonal trust between leaders from two organizations may serve as the organizational context for the development of trust between groups or trust between organizations. Conversely, a historical context of trust and partnerships between two organizations may foster the emergence of trust between groups of managers representing their respective organizations or interpersonal trust between two managers from the two firms. This reciprocal interplay of trust at the interpersonal, intergroup and inter-organizational levels over time is what we mean by the ‘co-evolution of trust’. In other words, trust at one level will evolve over time and, in so doing, will serve as the organizational context for trust dynamics at other levels.

Fundamental to the ideas depicted in Figure 13.3 is the reciprocity of relations among interpersonal, intergroup and inter-organizational trust. Therefore, we return for a moment to the definitions of organizational context by Cappelli and Sherer (1991) and Mowday and Sutton (1993). We observe that they referred mainly to lower-level constructs being influenced by higher-level constructs. On the one hand, this makes sense, as in the case of the impact of organizational culture (an organizational-level construct) on the extent to which individual managers trust each other. On the other hand, however, we believe that a bi-directional emphasis is important whereby lower-level dynamics (e.g. the level of trust between CEOs of two companies contemplating a merger) also can influence higher-level relations (e.g. the legal structure of the terms of a merger contract).

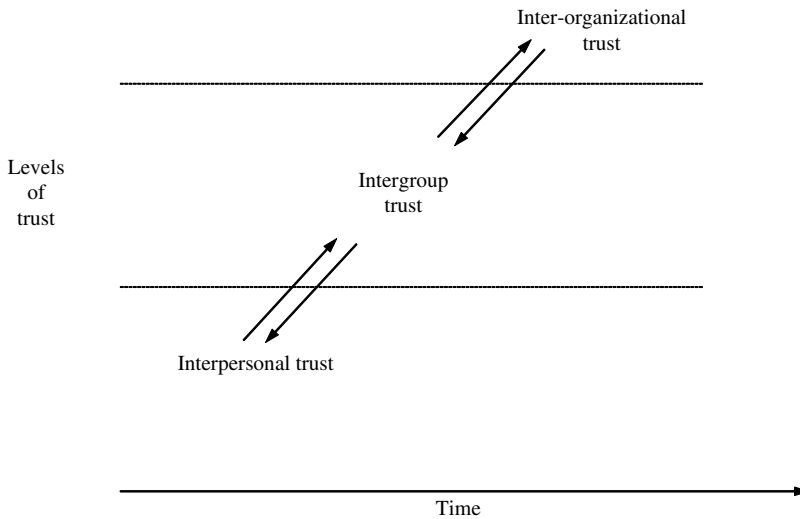


Figure 13.3 The co-evolution of trust across levels

Thus, we posit the existence of a bi-directional and reciprocal relationship among trust at the interpersonal, intergroup and inter-organizational levels, which is depicted in Figure 13.3. As further anecdotal support for the bi-directionality of lower-level to higher-level constructs, Johns (2001) cites the example of an individual whistleblower having a dramatic impact on an organization as a whole. Such instances have been observed in recent history, such as the case of Sherron Watkins, the whistleblower at Enron.

What determines the movement of trust across levels?

Numerous factors determine the movement of trust across levels. For example, trust at the interpersonal level can impact trust at the intergroup level, which, in turn, may influence trust at the inter-organizational level. Indeed, developmentally speaking, trust may have its origins in one-on-one relationships between managers but, over time, such trust may diffuse within an organization by fostering trust among groups. Furthermore, when individual JV managers trust one another, the strength of their relationship can lead to inter-organizational trust because these managers influence other managers, group dynamics (e.g. group cohesion or effective conflict management), and organizational structures and routines. Additional support for this logic is the fact that when a new JV is formed, information about the partner firm and its managers will be incomplete. A manager may be aware of prior relationships between the partner firms and may have been told 'our organization and the other organization have a strong relationship' (Inkpen and Currall, 2004). Also, controls such as legal recourse can create structural assurance beliefs about the managers involved in the JV (McKnight et al., 1998). For example, the specific language of the JV shareholder agreement may provide for legal action if the partner violates certain provisions. If a manager believes that legal recourse for the organization provides safeguards about the partner's future action, the manager will be more likely to trust counterpart managers (Inkpen and Currall, 1998; 2004). And intergroup trust may lay the foundation for

inter-organizational collaboration and partnerships. Conversely, distrust at the intergroup level may contaminate trust between two individuals or retard development of inter-organizational trust (Currall and Inkpen, 2002; Currall and Epstein, 2003).

Another factor that may cause trust to diffuse or travel from one level to another is that trust is an 'evidentiary' construct (Currall and Epstein, 2003). By that, we mean that it changes with evidence in favor of, or against, further trust. For example, Currall and Judge (1995) studied several psychological predictors of behavioral intentions to engage in trusting behavior such as one's attitude toward the trustee, social norms for (or against) trust, the extent to which the trustor has a trusting personality, and the degree to which the trustor believes that the trustee has been trustworthy in the past. Of these predictors, the perceived past trustworthiness of the trustee was the most significant determinant of intentions to engage in trusting behavior. This finding suggested that trustors are especially sensitive to evidence regarding a trustee's behavior and its impact on our assessment of his/her trustworthiness from one moment to another. Indeed, trustors are quite vigilant to the trustee's behavior and are constantly updating and recalibrating judgments regarding the degree to which another party can be trusted. In fact, when risk is great (i.e. when we have much at stake based on the trustee's trustworthiness or untrustworthiness), we may be hyper-vigilant regarding his/her behavior and its implications for our assessment of trustworthiness.

The implication of this dynamic is that trust between two individuals may be impacted by developments and information regarding the level of trust between two groups representing the partner firms, such that, if a counterpart group takes action that violates trust, this may sour the one-on-one relationship between two persons representing different firms. Along similar lines, if the board of directors of one partner firm issues a policy that is designed to withhold information from the other partner firm, groups or individuals may see this decision by the counterpart firm as evidence of untrustworthiness; hence intergroup or interpersonal trust may be contaminated.

Therefore, trust will move, or fail to move, from one level to another based on evidence regarding the trustworthiness of a trustee person, group, or organization. This is what makes trust a dynamic construct. It is not static because there is a constant flow of trust-related evidence based on a counterpart person's, group's, or organization's behavior. This information leads the counterpart to constantly update and recalibrate their assessment of the trustworthiness of the trustee.

What other factors might drive the downward flow from inter-organizational trust to intergroup or interpersonal trust? When inter-organizational trust exists in a new JV, the level of institutional resource commitment should play a key role in moving trust from organizations to groups to persons (Doz, 1996; Inkpen and Currall, 1998; 2004). Institutional commitment demonstrates the JV's legitimacy and strategic importance in the eyes of managers assigned to its operations (Inkpen and Currall, 1998). Such commitment may take the form of information technology infrastructure to foster communication among those working on the JV, dedication of stand-alone facilities to house JV personnel and operations, or dedicated facilitators (e.g. consultants) to mediate disputes between the firms or their representatives. These commitments facilitate the formation of trust between groups or persons because of the effective flow of information or because of munificence of resources available to groups or individuals. The idea of institutional commitment is akin to Zucker's (1986) notion of institution-based trust.

The movement of trust across levels also may be blocked (Inkpen and Currall, 2004). For example, in a situation of high competitive overlap between JV partner firms, the firms may feel compelled to write detailed contracts or policies that dictate terms and procedures concerning aspects of JV operations, which are designed to prevent diffusion of knowledge outside the JV. When knowledge flow is inhibited, it may have the unintended side effect of arresting trust development among groups of JV managers or between individual managers (Inkpen and Currall, 1998; 2004). Moreover, JV contracts and policies may involve the compartmentalization of information in certain domains (e.g. proprietary technology or marketing information). These 'don't tell' policies regarding certain types of information may inhibit the development of trust between managers from the JV partner firms because the act of withholding some information from their counterparts may raise suspicions in the counterpart regarding what else is being withheld.

Guidelines for future trust research

We conclude by suggesting several guidelines for trust researchers to consider in future theoretical and empirical work. Our hope is that these guidelines will prompt others to study the intricacies of the trust construct and how trust at the interpersonal, intergroup and inter-organizational levels co-evolve over time.

1. Study the organizational context of trust by studying trust at other levels

There are several specific ways to explore the impact of organizational context on trust. First, attaining a deep understanding of the organizational setting in which we are studying trust will facilitate the development of hypotheses that tap the subtleties and complexities of trust. A deep knowledge of organizational context also facilitates the interpretation of empirical findings. Second, trust researchers should provide for readers details about the historical conditions and circumstances underlying trust between persons, groups and organizations. This will shed light on how strong or weak trust came to be. For instance, weak interpersonal trust between JV managers may be understood in the historical context of conflictual and acrimonious transactions between the JV parent firms. In this way, distrust at the inter-organizational level may explain why trust at the interpersonal level has failed to develop. Moreover, knowledge of historical conditions can assist the reader of research findings in drawing conclusions about the generalizability of empirical findings.

2. 'Bracket' trust by studying trust below or above it

In urging organizational researchers to conduct multilevel empirical analyses of organizational phenomena, Hackman (2003) drew upon the logic of the eminent physicist Freeman Dyson:

Except in trivial cases, you can decode the truth of a [mathematical] statement only by studying its meaning and its context in the larger world of mathematical ideas . . . The progress of science requires the growth of understanding in both directions, downward from the whole to the parts, and upward from the parts to the whole. (Dyson, 1995, p. 32)

Applying this to the study of organizations, Hackman suggested that elusive explanations for empirical findings often can be found by conducting analyses at one level up or one level down from the phenomenon of interest, an approach Hackman refers to as 'bracketing'. Indeed, there is no guarantee that the most powerful explanatory variables

operate at the same level of the phenomenon being studied; without a bracketing strategy, deeper explanations for a phenomenon may lie undetected.

But, how does the organizational researcher go about empirically mining for explanations at levels outside the level of the focal phenomenon? For example, how does one discover how intergroup trust impacts interpersonal trust? Here, Hackman (2003) advocates ‘informed induction’ whereby the researcher uses both qualitative and quantitative methods to study specific settings or cases as a way to formulate more general explanatory factors that may operate above or below the focal construct. (For discussions of the integration of qualitative and quantitative methods see, e.g., Cresswell, 1994; Lee, 1999; Currall et al., 1999; and Currall and Towler, 2002.) For instance, in seeking to uncover the historical origins of trust between two persons, the researcher might conduct interviews with members of groups to which the two persons belong. It may be that by studying group norms or rituals the researcher uncovers the reasons why two individuals from different groups trust, or do not trust, each other.

3. Triangulate trust measures

Currall and Inkpen (2002) provided a detailed discussion of different approaches to measurement of trust at the person, group and organizational levels. We will not repeat that material here. Suffice it to say, however, that the complex nature of trust should be captured through simultaneous assessment at multiple levels – that is, by triangulating measures of trust. Triangulation involves use of multiple operational measures of a construct to better understand its properties. The use of triangulation enables researchers to examine the convergent and discriminant validity of trust measures. For example, when aiming to characterize an overall degree of trust within an organization, one may wish to assess both interpersonal and intergroup trust. Such analyses can shed light on the nature of trust by identifying similarities and distinctions across levels, which enhances the methodological rigor of our empirical work. By identifying where trust is strong and where it is weak, multiple measurements across levels will sharpen our knowledge of the role of trust in various organizational outcomes, such as collaboration, flexibility and financial performance.

4. Use longitudinal research designs to examine the co-evolution of trust across levels

Many different organizational context factors can affect trust, such as communication effectiveness among individuals, demographic similarity among groups of managers, or resource complementarity among organizations. Yet our main thesis in this chapter was that an aspect of the organizational context of trust is the degree of trust or distrust operating at an adjacent level of analysis. Thus understanding organizational context involves cross-level relationships, namely, the interaction of the interpersonal, intergroup and inter-organizational and bi-directional linkages among them. Therefore, in addition to triangulating trust assessments by using measures at multiple levels, a fundamental element of understanding the co-evolution of trust is the use of longitudinal research designs whereby the researcher explores how trust dynamics at one level may, over time, be responsible for producing degrees of trust at adjacent levels.

Conclusion

We began this chapter by arguing that trust research should move beyond single snapshots of interpersonal, intergroup, or inter-organizational trust. Such reductionistic

approaches do not do justice to the intricacies of trust or the degree to which it changes over time. Therefore, we call for a new era of trust research that shifts attention toward multilevel analyses of trust and the co-evolution of trust over time from one level to another. In other words, we have argued for a conceptualization of trust that incorporates the reciprocal and bi-directional linkages whereby trust at the interpersonal level may lead to intergroup trust, which may, in turn, spawn inter-organizational trust or vice versa. Such explorations of the co-evolution of trust across levels will yield a textured understanding of the intricacies of the trust construct, which, ultimately, will lead to more precise knowledge of the impact of trust on individual, group and organizational outcomes.

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