

Measures for Dealing with Competence and Integrity Violations of Interorganizational Trust at the Corporate and Operating Levels of Organizational Hierarchy

Martyna Janowicz-Panjaitan and Rekha Krishnan

Tilburg University; Simon Fraser University

ABSTRACT We examine how partners in an interorganizational relationship can repair violated trust, and if that is impossible, how they can preserve the collaborative relationship. We also consider under what circumstances exit from the relationship is the only viable option. We propose that the effectiveness of legalistic and non-legalistic measures in response to a trust violation is a function of the hierarchical level at which the violation occurred (corporate vs. operating), the character of the violation (competence vs. integrity), the frequency and severity with which it occurred, the organizational context in which boundary spanners are embedded, and the degree of dependence between the partners. Based on these factors, we explore how the way in which violation of trust is dealt with at one hierarchical level might affect trust at the other level. Our theoretical model reveals that prior findings on trust repair in inter-personal context may not hold in the interorganizational context.

INTRODUCTION

Extant literature views interorganizational trust as a key factor contributing to alliance success (e.g. Aulakh et al., 1996; Dyer and Chu, 2003; Frvxcll et al., 2002). We have an understanding of the benefits of trusting relationships between alliance partners and of how trust can be fostered in such relationships (e.g. Dyer and Chu, 2000, 2003; Parkhe, 1998; Zahcer et al., 1998). But our knowledge about trust violations (Zucker, 1986) and ways of dealing with them remains limited (Bell et al., 2002). A trust violation is in essence the failure of one party to perform in line with the expectations of the other; an occurrence quite frequent in interorganizational contexts (cf. Bies and Tripp, 1996; Kim et al., 2004; Sitkin and Roth, 1993). Additionally,

Address for reprints: Martyna Janowicz-Panjaitan, Department of Organization Studies, Tilburg University, PO Box 90153, Tilburg, The Netherlands (M.Janowicz@uvt.nl).

repairing violated trust calls for substantively different strategies than those required for building it in the first place (Kim et al., 2004). In some cases, trust cannot be repaired at all.

The question arises therefore: Is it possible for partners in an interorganizational relationship to repair violated trust, and if so, how? And if repair is impossible, can the relationship at least be preserved? The few studies that tackle the issue of dealing with trust violations focus primarily on the inter-personal context (e.g. Lewicki and Bunker, 1996; Sitkin and Roth, 1993) or alternatively on the societal context (e.g. Shapiro, 1987; Zuckcr, 1986). To the best of our knowledge, the issue of dealing with trust violations in an interorganizational context has not so far been addressed. We build on research on trust violations in interpersonal relationships, and argue that the expectations, perceptions and possible behaviours of individuals - which affect how a violation can be dealt with - are determined largely by their role in the organization and the type of violation that has occurred. Such roles are particularly pronounced in interorganizational relationships as those who frame the strategic intentions of such organizations, i.e. corporate-level managers, have a distinctly different role than those who implement policy, i.e. the operating level (cf. Floyd and Lane, 2000). As for the *type* of trust violation, Kim et al. (2004) have shown that the effectiveness of different reparatory measures depends on the type of trust violation that has occurred.

Accordingly, our analysis of effective measures for dealing with trust violations looks at factors that capture the 'how' of a violation (Schoorman et al., 2007). We posit that the effectiveness of measures for dealing with trust violations is determined by the distinct roles played by boundary spanners at the corporate and operating levels, and by whether the violation of trust is related to the trustee's competence or integrity. Also, we argue that three additional factors, violation frequency and severity, the degree of organizational constraint on boundary spanners, and the level of the trustor's dependence on the trustee, may have a moderating effect on the effectiveness of different measures. Taking into consideration the five factors, we draw on research in organizational psychology and organizational behaviour, to identify measures for repairing violated trust, and measures that partners can adopt when trust repair is not possible. Our work responds to the call of Schoorman et al. (2007, p. 349) for 'further, theoretical work ... to understand the conditions under which various repair strategies are effective'. Indeed, we go beyond this in that we not only look at those conditions, but also at circumstances where trust is irreparable.

Our contribution is twofold. First, we present a coherent theoretical argument on how actors in interorganizational relationships can effectively deal with trust violations, depending on the location and type of the trust violation. Second, we show that prior findings on interpersonal trust violations and repair may not necessarily hold in inter-organizational contexts. We begin by discussing our model and the constructs depicted in it, interorganizational trust, the five dimensions of trust violations in the interorganizational context, and repair measures as identified in the extant literature. Next, we look at the two levels of interorganizational relationships and analyse which measures are appropriate for dealing with different types of trust violations. Finally, we discuss the implications of our analysis.

THEORETICAL MODEL AND CONSTRUCTS

There are many benefits to sustaining trusting relationships between organizations (e.g. Becerra et al., 2008; Das and Teng, 1998; Krishnan et al., 2006; Mohr and Spekman, 1994; Parkhe, 1998; Percz-Nordtvedt et al., 2008; Saxton, 1997; Zaheer and Venkatraman, 1995; Zaheer et al., 1998). These benefits, however, can materialize only if both parties honour the trust. Partners who believe that their trust has been violated may call the entire relationship into question and even consider exiting it (Tomlinson et al., 2004). If the relationship does survive, the partners may try to repair trust and if that is impossible take measures that will allow for the continuation of the collaboration with violated trust. Our model addresses precisely these issues.

A number of different measures for dealing with trust violations have been identified in extant literature. The most prevalent distinction draws the line between legalistic and non-legalistic measures. While legalistic measures encompass formal mechanisms for preventing future violations of trust or alleviating their consequences, non-legalistic measures involve some form of social account on the trust violator's part that aims to affect the perception of the trust violator's responsibility for the violation, irrespective of whether the trustee accepts responsibility for the violation or not. Depending on the circumstances, these measures may be used to repair trust or preserve the relationship. Exit from the relationship is another possible measure for responding to a trust violation (Tomlinson et al., 2004). We propose that the way a violation is dealt with is a function of: (1) the hierarchical level at which the violation occurred (corporate vs. operating); (2) the character of the violation (competence vs. integrity); (3) the frequency and severity of the violation; (4) the degree of constraint placed on boundary spanners by the organization; and (5) the degree of trustor's dependence on the trustee. We summarize our arguments in Figure 1.

Interorganizational Trust and Violation

For the purpose of this paper we adopt the definition of trust proposed by Mayer et al. (1995, p. 712) who see it as 'the willingness ... to be vulnerable to the actions of another party based on the expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party'.¹¹ One can speak of organizations trusting each other only because they are made up of, and managed by, individuals (Aulakh et al., 1996; Blois, 1999) and it is through them that inter-firm relationships come into effect (Blois, 1999; Inkpen and Currall, 1997; Nooteboom et al., 1997). It is not the organization itself, but rather the individuals who constitute it, that trust. In line with that, we conceptualize interorganizational trust as an attitude held collectively by members of a given organization towards the partner organization (Dyer and Chu, 2000; Jeffries and Reed, 2000; Zaheer et al., 1998). Such conceptualization accounts for the fact that trust is an inherently individual level phenomenon, which can be attributed to an organization only by virtue of it being made up of individuals. By aggregating the attitudes of the individuals in an organization, we can ascribe trust to the organization as a whole.

Yet not all organizational members are equally involved in enacting the interorganizational collaboration. In this paper, we focus in particular on those individuals who are

		Low frequency/severity of violation	High frequency/severity of violation
OPERATING LEVEL	Competence-related violation	P1: NON-LEGALISTIC MEASURE WITH INTERNAL ATTRIBUTION (Repairs trust)	P2: LEGALISTIC MEASURE (Repairs trust)
	Integrity-related violation	<i>Constraining context</i>	P5: LEGALISTIC MEASURE (Preserves the relationship, does not repair trust)
		<i>Un-constraining context</i>	
CORPORATE LEVEL	Competence-related violation	P6: LEGALISTIC MEASURE (Repairs trust)	P7: EXIT
	Integrity-related violation	<i>High dependence</i>	P8: LEGALISTIC MEASURE (Preserves the relationship, does not repair trust)
		<i>Low dependence</i>	P8: EXIT

Figure 1. Conceptual model: measures for dealing with trust violations under different conditions

responsible for processing information from the partner organization and representing their organization in the relationship, commonly referred to as boundary spanners (Aldrich and Herker, 1977; Perrone et al., 2003). However, boundary spanners in organizations perform different functions and consequently play different roles, which also affect the development of trust between them (cf. Ring and Van de Ven, 1994). In particular, extant literature stresses the systematically different roles and modus operandi of top managers compared to their colleagues at lower levels in the corporate hierarchy (e.g. Bower, 1986; Ring and Van de Vcn, 1994; Zaheer et al, 2002). Therefore, we

Dealing with Violations of Trust

distinguish between boundary spanners at two levels of the organizational hierarchy: the operating level and the corporate level and accordingly also between interorganizational trust at the corporate level and interorganizational trust at the operating level.

In light of the above, we define corporate-level trust as the shared attitude of a company's corporate-level boundary spanners^[2] towards their counterparts in the partner organization. In keeping with this, trust violation at the corporate level occurs when the willingness of corporate-level boundary spanners to make themselves vulnerable to their counterparts from the partner organization is in some way disrupted (cf. Mayer et al., 1995). Conversely, we conceptualize operating-level trust between organizations as trust shared by the operating-level boundary spanners of one organization towards their counterparts at the partner organization. Correspondingly, trust violation at the operating level occurs when the willingness of operating-level boundary spanners to make themselves vulnerable to their counterparts from the partner organization is in some way disrupted (cf. Mayer et al., 1995).

As reflected above, trust violation^[3] can be defined as a situation where a trustor perceives^[4] that a trustee has failed to meet the expectations (Bies and Tripp, 1996). Violation of trust can occur along a number of different dimensions in which the perception of trustworthiness is rooted (Bell et al., 2002); the most common sources of trust include competence, integrity and benevolence (Mayer et al., 1995). Violations of trust vary also in terms of frequency and severity. Violations that occur rarely or that are of little severity will be treated differently than those that occur regularly or that are severe (Tomlinson et al., 2004). Severity and frequency with which the violation occurs affect the magnitude of the trust violation, which has a bearing on the effectiveness of various measures for handling such a violation. Of key importance to our analysis is the hierarchical level at which a violation occurs, i.e. corporate or operating (Salk and Simonin, 2003). All three dimensions of a violation, type, frequency and severity, and hierarchical level of occurrence, are specific to the violation itself. Two other contextual factors are also likely to affect the way of dealing with a violation of trust: the extent of the trustor's dependence on the trustee; and the degree of constraint that the organizational context imposes on the boundary spanners. We discuss different kinds of violations of trust and the appropriate measures for dealing with them in the following section of this paper.

Before we do that, however, we make three assumptions. First, we assume that the trustor is able to determine whether his or her expectations were unmet (i.e. trust violated) by actions of boundary spanners at the corporate level or at the operating level. This assumption is necessary, since in line with our definition, whether trust is violated at the corporate or operating level depends on whose expectations have not been met by the actions of their *counterparts* in the partner organization. Thus, we talk of corporate-level violation of trust when the expectations of corporate-level boundary spanners have in some way not been met by their counterparts from the partner organization. The same holds of operating-level violations. This conceptualization excludes the possibility of trust of corporate-level boundary spanners being violated by unmet expectation of partner's operating-level boundary spanners. In essence then, the assumption that the trustor can determine whose actions were trust violating, allows us to focus exclusively on trust violations at each hierarchical level separately.

Second, we assume that following a violation, the trustor at a given level determines whether a failure to perform in line with expectations is because the partner was not able to do so (competence violation), or rather he/she was not willing to do so (integrity violation), as well as whether such violation is a unique occurrence or one in a series of repeated violations and how severe in consequences is the violation. In short, throughout the remainder of this paper, we assume that the trustor has attributed the violation to either lack of competence or lack of integrity,^[5] and has assigned to it a certain level of frequency and severity. The point of departure for our analysis then is the moment when a violation of a particular type (competence or integrity) as well as frequency and severity has occurred at a given hierarchical level.

Third, in line with attribution theory, we assume that following an occurrence of trust violation, the trustor will engage in a sense-making process 'to determine whether the actor *or* some other external factor caused the negative outcome' (Bradfield and Aquino, 1999, p. 612; emphasis added). Based on the sense-making process, the trustor concludes 'how much responsibility to attribute to the actor' and thus, whether trust is negatively affected or not and to what extent (Bradfield and Aquino, 1999, p. 612; Korsgaard et al., 2002; Lewicki and Bunker, 1996). We take up our analysis at the point where the trustor has completed the sense-making process and, as a result, has attributed some portion of responsibility for the trust violating occurrence to the trustee, i.e. a trust violation has occurred. Starting from these three assumptions, our aim in this paper is to explore how partners deal with violated trust.

Measures for Dealing with Trust Violations

As we have said, two general types of measures for dealing with trust violations can be identified in extant literature: legalistic and non-legalistic.^[6] Although the literature refers to them as trust remedies, we prefer to call them measures for dealing with trust violations as, depending on the type of violation, they might be used for repairing trust, or for preserving the relationship, or even, if trust is damaged beyond the point of reparability, for just protecting the interests of the trustor. Extant literature suggests that legalistic and non-legalistic measures do not have the same effectiveness in dealing with violations of trust related to competence as those related to integrity. This is due, as we will explain later, to different attribution mechanisms that are at work with respect to the two types of trust. [7] We show that the effectiveness of legalistic and non-legalistic measures for dealing with trust violations also depends on the hierarchical level at which the violation occurs, the frequency and severity with which it takes place, and the contextual factors identified above. The final strategy for dealing with trust violation that we will consider is the most drastic, as it involves exiting from the collaborative relationship. We will analyse under what circumstances that is the trustor's best option. Before we proceed, we offer a definition of the legalistic and non-legalistic measures.

Legalistic measures encompass a range of bureaucratic techniques that mimic legal forms and include such mechanisms as formalization or standardization (Sitkin and Roth, 1993). This implies that legalistic measures include a formal mechanism for preventing future violations of trust, or alleviating their consequences. A legalistic measure might involve, for example, adding a contractual clause that stipulates negative

Dealing with Violations of Trust

consequences (e.g. some kind of restitution) for the trustee should there be a subsequent trust violation. There are various other measures mentioned in the literature that involve no bureaucratic techniques. They include such measures as excuse, justification, and apology (Lewicki and Bunker, 1996; Schlenker and Darby, 1981; Sitkin and Bies, 1993; Weiner et al., 1991). These measures involve some form of social account or an explanation on the part of the trustee that aims to affect the perception of the trust violator's responsibility for the violation (cf. Sitkin and Bies, 1993; Weiner et al., 1991). Although such measures have been considered from various analytical angles, we cluster them under non-legalistic measures. As we will later show, we believe that whether or not a measure is legalistic in character is a crucial distinction which translates into its perceived power to assure that a violation will not occur in the future.

We distinguish further between non-legalistic measures with internal attribution and those with external attribution. Internal attribution implies that the trust violator accepts responsibility for the violation. On the other hand, trust violators may attempt to attribute to forces independent of them some part of the responsibility for the violation. By blaming the violation on factors or influences which left the violator no choice other than to take the action or make the decision as done, they may reduce their perceived guilt (Kim et al., 2006; cf. Sitkin and Bies, 1993). In all three non-legalistic measures we listed above - excuse, justification, and apology — the violator admits the untoward act but may or may not accept personal blame for it (Weiner et al., 1991, p. 282). Offering an excuse involves 'blaming the act on external causes ... or on internal factors over which the actor has no control', and justification involves 'appealing to higher moral principles'; thus in neither case does the trust violator accept responsibility for the violation (Weiner et al., 1991, p. 283). In contrast, making an apology 'assumes ... the acceptance of responsibility' (Weiner et al., 1991, p. 283). Importantly, external attribution does not necessarily mean that the trust violator did not commit the violation, rather it implies that the violator cannot be blamed, or can be blamed only partially, thus mitigating the violator's responsibility. In other words, if alleged trust violators can show that at least part of the responsibility can be attributed to situational factors, then only part of it can be attributed to dispositional factors of the violators (Kim et al., 2006).

PROPOSITIONS

Dealing with Violations of Trust at the Operating Level

Since the roles of organizational actors vary significantly between hierarchical levels, it stands to reason that the ways of dealing with trust violations at each of those levels would also vary. Different positions in the organizational hierarchy are associated with different, specific expectations and thus with different roles of their incumbents (Floyd and Lane, 2000). Whereas it might be assumed that top managers are predominately involved in decision-making tasks, middle and operating managers' roles involve primarily communicating information and reacting to it (Floyd and Lane, 2000). The role of operating-level employees is crucial because they are the ones responsible for implementing the collaboration (Doz, 1996) and the efficient execution of everyday tasks of the

interorganizational relationship (Zaheer et al., 2002). Competent, timely and accurate execution of tasks is of crucial importance at this level. Delays or failures to deliver, be they due to lack of competence or lack of integrity, can have negative consequences for each of the organizations as well as for the collaboration as a whole.

Prior research suggests that the extent to which trust is repairable and how effective different reparatory measures are likely to be depends on which trustworthiness factor has been negatively affected by the violation (Kim et al., 2004; Schoorman et al., 2007). Three primary factors of trustworthiness have been identified: (1) the 'competence one needs to achieve expected performance, such as abilities, skills, and knowledge needed' (Nooteboom, 2002, p. 50); (2) integrity, which is a 'trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable' (Mayer et al., 1995, p. 719); and (3) benevolence, which captures the 'intentions of the actor, which includes his aims [and] motives' reflecting his/her commitment to the collaboration partner (cf. Nooteboom, 2002, p. 50). Since perceptions of trustworthiness are rooted in a trustee's competence, integrity and benevolence, trust violations can also be related to the partner's competence, integrity (Kim et al., 2004; Sitkin and Roth, 1993) or benevolence accordingly.

While competence and integrity seem to be the acknowledged sources of trust in interorganizational relationships, this is not the case for benevolence (Schoorman et al., 2007). Regarding a partner 'company's interests as highly important' and wanting 'to do good to the trusting party, apart from the egocentric profit motive' is not part of the traditional view of interorganizational relations 'wherein each company is motivated primarily by its own financial interest' (Schoorman et al., 2007, p. 345). If this is indeed the case, benevolence can be seen as a less important source of interorganizational trust (Schoorman et al., 2007). This is not to say that acts of benevolence cannot help to build trust in an interorganizational relationship, still benevolence can be considered less relevant in interorganizational relationships (Schoorman et al., 2007).^[8] Finally, prior studies on trust violations in interorganizational relationships have also drawn the line between competence- and integrity-related violations and omitted violations related to benevolence (Kim et al., 2004, 2006; Sitkin and Roth, 1993). In light of this, and in line with prior literature, we focus throughout this paper on trust violations related to competence and integrity.

Competence-related violations at the operating level. We turn now to violations of competence-based trust at the operating level. Both legalistic measures and non-legalistic measures have been argued to be appropriate for dealing with violations of this type (e.g. Kim et al., 2004; Sitkin and Roth, 1993^[9]). We propose that frequency and severity with which the competence-related violation occurs, affects the relative effectiveness of the two measures for handling competence-related violations. While a single competence-related violation is likely to have a detrimental effect on trust, the effect of repeated violations is likely to be much greater. Also, if the competence-related violation is infrequent, and yet of considerable severity, the trustor's propensity to attribute blame to the offender will be higher and, consequently, the willingness to forgive lower (Bradfield and Aquino, 1999). 'The more severe the harm of damage experienced by the victim, the greater the responsibility attributed to the perpetrator' (Bradfield and Aquino, 1999,

p. 613). Conversely, even frequent competence-related violations, in the absence of severe consequences for the trustor, may be forgiven relatively easily. As the trustor's reactions to various measures may vary depending on frequency, and also on the severity of harm (Sitkin and Bies, 1993; Tomlinson et al., 2004), we posit that the strategies for dealing with violations will need to be adjusted as the frequency and severity of violations increase.[10]

It has been argued that when the consistency of an individual's behaviour is perceived to be low, the causal attribution of the behaviour to the person's character is unlikely (McArthur, 1972). We can apply similar thinking to competence-related violations of low severity. To the extent that a competence-related violation is seen as an isolated or random event, or that it is of minor consequence, the trustor's perception of the trustee's trustworthiness is unlikely to be strongly affected (Sitkin and Roth, 1993). This is because individuals tend to assign greater significance to positive rather than to negative competence-related information (Martijn et al., 1992). While it is likely that a single successful performance will lead a trustor to the conclusion that a trustee is competent, a single or rare and relatively minor failure to perform will not be interpreted as a sign of incompetence (cf. Kim et al., 2004). This is based on the logic that an incompetent trustee would not be able to achieve such high level of performance, while under particular circumstances, both a competent as well as an incompetent trustee can perform below expectations (Martijn et al., 1992).

It is intuitively reasonable that those of high skill are expected to be capable of altering their performance across a wide range of difficulty levels, depending on motivation and task demands. Persons of lesser skill, however, may be expected to achieve performances commensurate with their ability level, or of lower difficulty, but are not expected to achieve at levels above their aptitude. (Reeder and Brewer, 1979, p. 68)

Competence-based trust thus has a certain level of resilience to erosion, as trustors tend to 'seek evidence that apparent trust violations are "abnormal behaviour" for the trustee and should be discounted' (cf. Bell and Anderson, 2000, p. 68). Therefore, we argue that when a competence-related violation is not severe and is rare, it is likely to be considered an anomaly. We propose that in dealing with such a violation a non-legalistic measure will suffice as partners will not perceive the need to formally safeguard against future possible violations of trust (i.e. with a legalistic measure).

However as we have said, a non-legalistic measure may involve an acceptance of the responsibility by trust violators (internal attribution) or alternatively, violators may attempt to mitigate their responsibility by attributing some of the responsibility to factors beyond their control (external attribution) (Kim et al., 2006). It has been found that when a 'violation concerned matters of competence . . . trust was repaired more successfully when the mistrusted party apologized with an internal attribution' rather than with an external attribution (Kim et al., 2006, p. 59), because atonement that internal attribution signals outweighs the information about guilt. Even though internal attribution does confirm that a trustee is responsible for a violation, such confession in cases of less severe and rare competence-related violations would be compensated by the positive effect of

implied redemption and so in the end it is unlikely to devalue the perception of the trustee's general competence (Kim et al., 2004). For these reasons, we propose the following:

Proposition 1: When the frequency and/or severity of competence-related violation are low, non-legalistic measures with internal attribution are effective in repairing competence-based trust violated at the operating level.

However, as incidents of violation of trust become more frequent, they produce 'increasing evidence that trust violation is the trustee's "normal" rather than aberrant behavior' (Bell et al., 2002, p. 68) and may lead to a rapid decline in competence-based trust. Increasing violation frequency is likely to lead the trustor to conclude that the trustee is incompetent and that violations will occur in the future (Sitkin and Roth, 1993). Such situations call for legalistic measures. Similarly, if a violation is rare but very severe, the trustor may not be willing to risk another violation in the future. Some kind of legalistic measure is called for in this situation as well.

Legalistic measures are effective in repairing recurrent or severe competence-based trust violations to the extent that they address context-specific problems and promote competent performance within that context. Competence-based trust, and thus violations thereof, tend to be just that: context specific and variable across the domains of a relationship (Schoorman et al., 2007). Therefore, we posit that legalistic measures are effective in repairing chronic or severe competence-related violations as they comprehensively specify requirements and contingencies related to a specific task (cf. Sitkin and Roth, 1993).

In light of the definition of trust we have adopted, and which excludes control as a basis for trust, legalistic measures should have no place in fostering or repairing trust in a relationship [11] We argue, however, that legalistic measures can be effective in repairing competence-based trust violations, provided they are implemented voluntarily. Nakayachi and Watabe (2005) show that the effectiveness of hostage posting, that is provisions for monitoring and self-sanctions, in repairing relationships after a trust-violating event, depends on it being done voluntarily. 'The results . . . demonstrate that voluntary hostage posting raised participants' perceptions of the trustworthiness of organizations that had caused incidents, whereas imposed or involuntary hostage posting did not result in more positive evaluations' (Nakayachi and Watabe, 2005, p. 1). Legalistic measures introduced by trust violators of their own accord signal their trustworthiness in that they voluntarily restrict their own interests in order to prevent future violations (cf. Nakayachi and Watabe, 2005). On the other hand, should a trust violator merely consent to the imposition of a legalistic measure demanded by a trustor, the perception of the trustee's trustworthiness will not be affected (cf. Nakayachi and Watabe, 2005). Legalistic measures that are imposed do not repair trust; they simply give the injured party a sense of security that makes it possible for the relationship to continue.

Importantly, legalistic measures which, as mentioned above, are bureaucratic in character and encompass formalization and standardization and frequently require modifications or additions to the collaborative agreement, cannot be introduced by the operating-level boundary spanners. Rather, it is the corporate-level boundary spanners

who, by virtue of their organizational role, are in a position to introduce legalistic measures. Such initiatives, undertaken voluntarily following a competence-related violation of trust, not only have a reparative effect at the operating level, but also demonstrate the integrity of the corporate management at the offending organization. Thus, voluntary introduction of a legalistic measure at the corporate level not only repairs competence-based trust at the operating level but also may prevent deterioration of integrity-based trust at the corporate level. Accordingly we propose the following:

Proposition 2: When the frequency and/or severity of competence-related violations are high, legalistic measures voluntarily introduced by the corporate level are effective in repairing competence-based trust at the operating level and in preserving integrity-based trust at the corporate level.

Integrity-related violations at the operating level. In contrast to competence-related violations of trust at the operating level where our arguments parallel to a large extent those proposed in the extant literature, this is not so in the case of integrity-related violations of trust at that level. Extant research assumes that a single act of dishonesty will cause trustors to conclude that trustee is inherently dishonest (Reeder and Brewer, 1979). It is believed that 'those with high integrity will refrain from dishonest behaviors in any situation, whereas those with low integrity may exhibit either dishonest or honest behaviors depending on their incentives and opportunities' (Kim et al., 2004, p. 106). Thus, one dishonest act, even a relatively trivial one, would suffice to cast doubt on the integrity of the partner. Empirical research supports this in finding that in judging the morality of others, individuals weigh more heavily negative behaviour than positive behaviour (Kim et al., 2004; Martijn et al., 1992).

Contrary to received knowledge, we argue that individuals in organizational contexts may evaluate integrity-related violations differently. Operating level boundary spanners are subject to rules and regulations set by their respective organizations that affect their trustworthy behaviour (Perrone et al., 2003). The more constraining the rules and regulations, the less a trustee can be held responsible for a violation. Perrone et al. (2003) argue that when boundary spanners are embedded in a highly constraining organizational context, they are less likely to meet their obligations as they are driven by the need to adhere to rules originating from other functional areas. Under such circumstances, a single or relatively inconsequential integrity-related violation need not lead to a violation of integrity-based trust. Thus, when operating-level boundary spanners embedded in constraining organizational contexts violate integrity-based trust, their responsibility may be mitigated by the fact that they are not totally free in their actions, i.e. they may not be 'free to be trusted' (cf. Perrone et al., 2003).

Thus, when operating-level boundary spanners are embedded in organizational contexts that constrain their actions, the effective way of dealing with integrity-related violations is to attribute it to their circumstances (i.e. the constraining organizational context), that is to use a non-legalistic measure with external attribution (Kim et al., 2006). Such measure preserves the perception of non-culpability of trustees, and keeps trustors from attributing violations to a general lack of integrity on their part.^[12] Therefore, we propose the following:

Proposition 3: At the operating level, when the trust violator is embedded in a constraining organizational context, and the integrity-related violation is of low frequency and/or severity, non-legalistic measures with external attribution are effective in repairing integrity-based trust.

However, when operating-level boundary spanners are not constrained by the organizational context, they are considered free to perform their tasks as they see fit. Therefore they can be held fully accountable for any violation of trust as there are no obvious factors mitigating their responsibility. Perrone et al. (2003) argue that when the boundary spanners are not constrained by their organizational contexts, they are more likely to meet the positive expectations of trustors. Therefore, in a 'free' organizational context, when operating level boundary spanners violate integrity-based trust, the would-be advantage of an unconstrained organizational context becomes a liability as deviations from expectations cannot be attributed to organizational constraints.

Under such circumstances, a non-legalistic measure with internal attribution, for example a boundary spanner offering an apology, is likely to be effective in repairing trust violated with an integrity-related violation. Such an acceptance of personal responsibility may defuse anger the trustor might feel and increase the trustor's pardon (Weiner et al., 1991). By voicing regret, violators show respect for the norms that were violated, and so lay a basis for re-establishing their moral position (Blumstein et al., 1974; Weiner et al., 1991). The trust violator 'asserts his own guilt for the act and accepts the momentary blow to his moral character, while at the same time reaffirms his overriding righteousness (awareness of the rules)' (Blumstein et al., 1974, p. 552). In this way, a non-legalistic measure with internal attribution weakens the link between the transgression and the inference of the transgressor's unfavourable character or disposition (Weiner et al., 1991). Therefore, we propose the following:

Proposition 4: At the operating level, when the trust violator is embedded in an un-constraining organizational context, and the integrity-related violation is of low frequency and/or severity, non-legalistic measures with internal attribution are effective in repairing integrity-based trust.

Yet, should the frequency or severity of integrity-related violations increase at the operating level, non-legalistic measures either with internal or external attribution are no longer likely to be effective, irrespective of the organizational context. Even when operating-level boundary spanners are embedded in a constraining organizational context, a high frequency of violation only suggests that 'the organization's values embody, tolerate, or even promote opportunism' (Perrone et al., 2003, p. 436). Similarly, when operating-level boundary spanners operate in un-constraining organizational contexts and so are free to make decisions pertaining to their actions, frequent violations of trust are seen as a reflection of 'organizational values [that] are weakly developed and poorly internalized by organizational members', as the boundary spanners may 'behave in ways that further their own self-interest rather than that of the organization and that of its exchange partner' (Perrone et al., 2003, p. 436).

In an effort to compel operating-level boundary spanners to conform to desired norms, corporate-level boundary spanners may impose legalistic measures on operating-level boundary spanners who violate integrity-based trust. If they fail to impose such measures, the partner, whose trust has been violated, is likely to perceive the integrity-related trust violations at the operating level as a reflection of lack of integrity at the corporate level. For the same reasons we outlined earlier when discussing measures for repairing competence-based trust violations at the operating level, the use of such legalistic measures must be initiated voluntarily at the corporate level of the organization where the violation of trust occurred. Such legalistic measures voluntarily introduced by the corporate level would preserve trust in the integrity of the corporate level as the trustor is likely to see the integrity-related trust violations as confined to the operating level. Further legalistic measures imposed by the corporate level on the operating-level boundary spanners will be seen as an effort to protect the trustor from such violations in the future.

Yet, such voluntary legalistic measures, even if they do preserve integrity-based trust at the corporate level, would not repair integrity-based trust at the operating level, but rather they would simply allow for the continuation of the collaborative relationship. While legalistic measures can safeguard against future violations of integrity-based trust by compelling operating-level boundary spanners to conform to set values, they cannot force them to commit to the values. In fact, their imposition implicitly assumes that there is an underlying lack of trust (cf. Ghoshal and Moran, 1996) and that the partners want to put safeguards in place against possible future violations. Thus, legalistic measures (voluntarily) introduced by the corporate level assure the trustor that operating-level boundary spanners will behave in line with expectations, but they cannot affirm that it is because of internalized values. Additionally, imposition of a legalistic measure makes it more difficult to (re-)assess the inherent integrity of the trustee and repair trust, as the trustor has no way of knowing whether trustworthy behaviour is based on the trustee's disposition or rather a result of the imposed legalistic measure. In line with attribution theory 'the inference of personal dispositions from behavior [can only] be made . . . in the absence of strong contextual pressures indicating the enactment of such behavior' (Kruglanski, 1970, p. 216). A trustor can only be sure of the loyalty of a trustee if the trustee has had an opportunity to be disloyal (cf. Strickland, 1958). In line with the above, we propose:

Proposition 5: At the operating level, when frequency and/or severity of the violation is high, legalistic measures voluntarily introduced by the corporate level are effective in making it possible for the interorganizational relationship to continue despite violated integrity-based trust at the operating level and in preserving integrity-based trust at the corporate level.

Dealing with Violations of Trust at the Corporate Level

Top executives are responsible for instigating and directing the strategic actions of their organizations, and as such they are able to influence their cooperation policies. They initiate interorganizational collaborations (cf. Larson, 1992; Zaheer et al., 2002), shape

their structural context (cf. Burgelman, 1983; Zaheer et al., 2002), and are responsible for their outcomes. On the other hand, their involvement in the day-to-day implementation of alliance tasks is limited. From this perspective 'the trust of either the dominant coalition or the management team is critical to understanding organizational trust, since it is this level of trust that will govern the strategic actions of the organization' (Schoorman et al., 2007, p. 346). The strategy-making role played by corporate level boundary spanners affects the way they deal with trust violations which, like at the operating level, may involve competence and integrity.

Competence-related violations at the corporate level. We defined corporate-level trust as the attitude of corporate-level boundary spanners towards their counterparts. This implies that the object of competence-based trust at the corporate level is the competence of the counterpart corporate-level boundary spanners, i.e. the strategy makers of the partner organization whose job is to make sure that the organization as a whole delivers in keeping with the agreements they have made. The failure of an organization to deliver according to expectations is therefore an indication that the corporate managers are incapable of coordinating the organizational resources so as to deliver the expected outcome. Competence-related violations at the corporate level include, therefore, events that lead corporate-level boundary spanners to perceive their counterparts as lacking competence in managing their organizations which may lead to the organization as a whole being unable to deliver according to expectations.

We have argued that at the operating level, when violation is of low severity and frequency, competence-based trust is effectively repaired with non-legalistic measures with internal attribution. This is unlikely to be the case at the corporate level. Considering the strategic nature of the decisions made at the corporate level, the severity of every competence-related violation can be expected to be high. A partner's failure to deliver, resulting from lack of competence among top managers, can result in severe consequences for the partner organization. Given the inherent severity of violations at that level, non-legalistic measures would unlikely be sufficient to assure the partner that similar violations will not occur in the future. Not only will a non-legalistic measure with internal attribution not repair trust, but it may make the problem worse if trustors find it so incommensurate with the severity of the violation, that they perceive it as a trivialization of the consequences they suffered.

Moreover, due to the inherently high severity of competence-related violations of trust at the corporate level, the assumption that an incompetent trustee is not able to achieve high performance, while under particular circumstances, both a competent as well as an incompetent trustee can fail to perform at the expected level (Martijn et al., 1992) is unlikely to hold for the corporate level. Even though failure to meet competence-related expectations at this level might not automatically lead to perception of incompetence, trustors are unlikely to take a chance on there being another trust violation. Consequently, we argue, even an infrequent competence-related violation of trust at the corporate level will require a legalistic measure. The exact requirements and contingencies spelled out in legalistic measures provide the harmed partner with confidence that no violations will occur in the future (Brouthers and Bamossy, 2006), assuming that the corporate-level boundary spanners are still perceived to be capable of competent

performance. Because legalistic measures address context-specific problems and promote competent performance and thereby reduce the probability of future violations, which is not the case for non-legalistic measures, they are effective in repairing competence-based trust at the corporate level. As is the case at the operating level, at the corporate level legalistic measures are only successful when introduced voluntarily by the trust violator. Hence, we propose the following:

Position 6: At the corporate level, when the competence-related violations are of low frequency, legalistic measures voluntarily introduced by the corporate level are effective in repairing competence-based trust.

However, if the frequency of competence-related violations, which as we argued above tend to be inherently severe, increases along with the conviction that the corporate management does not have the expected competence, the trustor is likely to opt to exit from the collaborative relationship. Once trust in the competence of the corporate level is lost, it is virtually impossible to regain it. While at the operating level there are steps that a trust-violating partner can take to repair a perceived lack of competence, for example by committing to training for operating-level boundary spanners or outsourcing expertise, there are no similar solutions available at the corporate level.^[13] While a lack of competence at the partner's corporate level is not something that the partner can be blamed for — unless the true competence level of the organization was intentionally misrepresented — it still precludes the possibility of continued collaboration. Firms collaborate with partners they believe have the competence to help them achieve their own strategic goals. If the corporate-level boundary spanners do not have that competence, the organization as a whole will be unable to deliver as expected and there will be no reason for the focal organization to remain in the collaborative relationship. In fact, doing so might even imply working against the interests of their own organization.

Proposition 7: At the corporate level, when the frequency of competence-related violations is high, exit from the collaborative relationship is the only effective measure for dealing with a violated competence-based trust at the corporate level.

Integrity-related violations at the corporate level. As mentioned above, according to received knowledge, a single dishonest act on the trustee's part is enough to attribute dishonesty to the trustee (Reeder and Brewer, 1979). Accordingly, when integrity-related trust is violated, even once or at low severity, the trustor is likely to assume that the violation is representative of the trustee's general character. Contrary to the operating level, at the corporate level when trust has been violated, non-legalistic measures with external attribution are likely to be less effective. This is mainly because these measures involve attribution of responsibility for the violation to factors independent of the trustee. As we argued, at the operating level, boundary spanners are often constrained by the organizational context but this is much less true at the corporate level. Of course, corporate-level boundary spanners may also be subject to external pressures (e.g. related to the regulatory environment or various types of uncertainties). However, since they are the ones making decisions, they also carry ultimate responsibility for those decisions despite

any external pressures. This makes it less legitimate to attribute an integrity-related violation at the corporate level to some external factor or influence than it was the case at the operating level. For example, attributing to some external factor or pressure a decision to enter into a concurrent relationship with a firm that happens to be in competition with the collaboration partner is likely to have only limited mitigating effect on an integrity-related violation of trust.

Furthermore, non-legalistic measures with internal attribution are unlikely to be effective at the corporate level. Even though they do involve acceptance of responsibility (Weiner et al., 1991), they would not weaken the link between the transgression and inferences made about the transgressor's unfavourable character (cf. Weiner et al., 1991). This is because at the corporate level, considerations of the boundary spanners are more instrumental and calculative. Corporate level boundary spanners are expected to have a clear strategic rationale for their decisions and to be able to defend them to the board of directors. Profit and growth are considered to be the primary drivers behind strategic choices made by top executives (cf. Barringer and Harrison, 2000), therefore there is little justification for pardoning a trust violation based on the strength of an apology (i.e. a non-legalistic measure with internal attribution). Furthermore, ignoring indications of a partner's lack of integrity could turn out to be costly for the organization and so could harm the performance appraisal of the managers themselves. All of this implies that non-legalistic measures with internal attribution would not be effective in repairing violated integrity-based trust at this level.

It is clear then that since even a single and relatively minor violation of integrity-based trust at the corporate level leads to an irreversible damage of trust, no non-legalistic measure will be sufficient to deal with the violation. There are two alternative strategies to consider: one is a legalistic measure, and the other is exit from the collaborative relationship. First, as mentioned above, legalistic measures have been found to be ill-suited to dealing with integrity-related violations of trust (Sitkin and Roth, 1993, p. 370). Considering that one violation of integrity-based trust has a bearing on the overall perception of the partner's character, imposition of such legalistic measures is an indication that the trustee has been found to be dishonest, otherwise such safeguards would not have been imposed in the first place. Legalistic measures are also ineffective in repairing violated integrity-based trust because, while institutionalized cultural norms and values rest to a large extent on them being tacit, legalistic measures by definition make the values one is expected to adhere to explicit (Sitkin and Roth, 1993). When a trust violation is related to perceived integrity, legalistic measure regulating integrity may magnify the sense of distance between the partners, even when objectively the differences are relatively minor and the similarities substantial (Sitkin and Stickel, 1996).

Yet, although legalistic measures cannot repair the trust in a partner's integrity at the corporate level, they can make it possible for the relationship to continue. In contrast to dealing with instances of competence-based trust at the corporate level, which if damaged, precludes the possibility of continued collaboration, a relationship with damaged integrity-based trust can survive as long as some form of legalistic measures are put in place as safeguards. The second possible strategy, exit from the collaboration, obviously is not an attempt to repair trust or to preserve the relationship; however it does protect the trustor from the consequences of possible future violations of trust. We argue

that the measure which the trustor will opt for, continuation of the relationship with damaged corporate level integrity-based trust or exit from the relationship, is a function of the level of dependence between the partners, or more specifically, the dependence of the trustor on the trust-violating trustee.

In a collaborative relationship each partner depends on the other for contributions, both tangible and intangible, which when joined with their own can lead to a successful venture and achievement of the partners' goals (Child and Rodrigues, 2004; Emerson, 1962). When the trustor's dependence on the trustee is high, i.e. the trustor has high motivational investment in the goals that the trustee can help the trustor achieve or when availability of other partners, who can allow achievement of those goals is low (Emerson, 1962), the trustor is likely to opt for a legalistic measure rather than exit to deal with an integrity-related violation. Thus, the greater the dependence on the trustee, the greater the trustor's propensity to remain in the relationship even when trust in the integrity of the partner is damaged, assuming that conformance to particular values can be safeguarded with legalistic measures. On the other hand, the lower the trustor's dependence on the trustee, be it because of lower motivational investment in the goals that the trustee mediates, or because of greater availability of alternative partners who can contribute to those goals (Emerson, 1962), the more likely the aggrieved party is to opt for exit. Under such circumstances the trustor may not be inclined to take the risk of repeated integrity-related violations, even if there is an attempt to safeguard against them. We therefore propose the following:

Proposition 8: At the corporate level, the higher the trustor's dependence on the trustee, the more likely that the trustor will opt for a legalistic measure to allow for continuation of the relationship rather than for exit from the relationship in response to integrity-related trust violation.

It is worth noting that while the level of dependence on a trustee affects the choice between a legalistic measure and exit for dealing with integrity-related violations, this is not so for competence-related violations. As we argued, once trust in competence is lost, the only viable strategy for the trustor is to exit from the collaborative relationship - regardless of the level of dependence. Dependence does however affect the magnitude of violation at which the trust in a partner's competence is lost beyond repair. For example, if the dependence stems from a knowledge gap between the trustor and the trustee, it will take a greater degree of trust violation for the trustor to realize that the trustee is not sufficiently competent. If, on the other hand, dependence is based on relative scarcity of some knowledge believed to be held by the trustee, the trustor would be reluctant to admit that the trustee is not sufficiently competent. In short, for competence-related violations, higher dependence is likely to affect the magnitude of violation which yields trust irreparable.

DISCUSSION AND CONCLUSIONS

In this paper we have undertaken to develop a theoretical framework for understanding the responses of partners in an interorganizational relationship when a violation- of trust

has occurred. We distinguished between trust and trust violations at the operating level and the corporate level and argued that at both hierarchical levels violations can be related to the perception of a partner's competence or integrity. We then investigated the effectiveness of legalistic and non-legalistic measures, as well as the option of an exit strategy, for dealing with both types of trust violations at each of the levels, taking into account the frequency and severity of violations, the extent of constraints imposed by the organizational context on operating level boundary spanners, and the level of dependence of the trustor organization on the partner.

Our analysis contributes to existing literature in a number of ways. First, our framework captures trust violations at two distinct hierarchical levels in interorganizational relationships. According to Schoorman et al. (2007, p. 345), 'one of the weaknesses in much of the current trust research is that it is limited to relationships at a single level of analysis, considering either dyadic trust relationships within organizations or trust between organizations'. Our analysis addresses this weakness in that we analyse interpersonal relationships of organizational boundary spanners in an interorganizational context. Thus, while we do not distinguish between the two perspectives mentioned by Schoorman et al. (2007), we do synthesize them.

The delineation of the two hierarchical levels of interorganizational relationships has interesting implications for our analysis. The difference in roles played by actors at both levels has consequences not only for the effectiveness of a given repair measure but also for the level at which certain measures can be initiated. For example, given the nature of legalistic measures, they can only be introduced by corporate-level boundary spanners. This implies that the repair of repeated or severe violations of competence-based trust at the operating level, which requires legalistic measures, must be initiated at the corporate level, as it is corporate-level boundary spanners who have the power to design and change the collaborative interface of the interorganizational relationship. Lower level boundary spanners, in contrast, have little influence on the collaborative policies of their organizations, but rather operate within the boundaries set by those that do (Zaheer et al., 2002). This latter fact is related to the constraints imposed by the organizational context on operating level boundary spanners and thus has consequences for the effectiveness of a given measure for dealing with lesser frequency or severity violations of integrity-based trust at that level.

Obviously our analysis of the inter-relationships of the two levels is far from exhaustive. It is plausible, for example, that violation of trust at one level may lead to violation of trust at another level, independent of the ability of one level to undertake a specific repair effort or not. We consider exploration of this and similar issues to be a direction for future research. The contribution we hope to have made with this paper is to show how consideration of trust violations at two levels may be a relevant variable in identifying effective trust repair measures in interorganizational relationships. We believe we are thus able to capture some of the richness and complexity of interorganizational trust, its violation and repair. Several authors have previously recognized the differences in the levels of trust held by a single organizational member towards trustees at different levels of organizational hierarchy (e.g. Cook and Wall, 1980; Driscoll, 1978; Schoorman et al., 2007; Scott, 1980; Six and Sorge, 2008), but to the best of our knowledge none of these contributions has distinguished between trust held by trustors at different hierarchical

levels. By presenting a coherent theoretical argument of how effectiveness of responses to trust violations of a similar kind are likely to vary across the two hierarchical levels we demonstrate their uniqueness and the usefulness of the proposed perspective.

Third, our analysis goes beyond existing treatments of trust violation and repair in that we include in our perspective not only measures for repairing trust, but also measures for dealing with trust violations, when repair of trust is not possible. While legalistic measures have been argued to be effective for repairing competence-related violations, and ineffective, even trust-destroying, when used to repair integrity trust, we show that whether this is true in interorganizational context or not depends on a number of factors, like the hierarchical level at which the violation occurs or the frequency with which it occurs. More importantly, however, we demonstrate that although legalistic measures may be ineffective in repairing integrity trust, they may be effective in allowing for the continuation of the collaboration. Rather than repairing trust, a legalistic measure may be used to substitute for trust and so allow for continued collaboration. Nevertheless, such collaborative relationship would lack the advantages that a trusting relationship brings, i.e. resilience to external and internal shocks, lower transaction costs, higher information and knowledge flows, etc.

Finally, our discussion suggests that compared to operating level, violations of corporate-level trust are potentially much more severe in consequence. This is reflected in exit being the sole option for two sets of circumstances at this level. This is due to the unique organizational role of corporate-level actors: (1) these actors are responsible for making the decisions for the organization as a whole and so they must answer to the owners of the organization and be ready to set-out how those decisions ensure the organization's long term success, and (2) inherent in the position of a corporate-level boundary spanner is the power to make decisions which can result in direct and severe consequences for the collaboration as a whole but also for each of the partners, e.g. termination of the collaboration. From this perspective, corporate level trust is more fragile than operating level trust, not in terms of its resilience, but rather by virtue of the fact that a single violation can potentially lead to termination of the collaborative relationship.

Obviously, the conclusions flowing from our work would be significantly strengthened by empirical verification. Also, future research might examine factors that are likely to moderate the effectiveness of various measures for dealing with particular types of violations. For example, when organizational size of one or both partners is small, the distinction between corporate and operating levels blurs as the same individual(s) may be responsible for both the strategic decisions as well as the everyday implementation of the collaborative tasks. Another interesting moderating factor that future research might examine is the existence of prior ties between partners and its implications for dealing with violated trust. It can be expected that prior ties are likely to make a trusting relationship more resilient to shocks caused by trust violations and consequently ease the trust repair efforts of the partners.

ACKNOWLEDGMENTS

We thank the editor and the three anonymous reviewers for their useful suggestions.

NOTES

- [1] Such conceptualization of trust excludes control as a basis for trust (Nooteboom, 2002). We fully subscribe to the view of Schoorman et al. (2007, p. 346) and other scholars who posit that trust and control systems should be considered to be alternative mechanisms 'for dealing with risk in relationships' (McEvilly et al., 2003; Schoorman et al., 2007, p. 346; Sitkin and George, 2005).
- [2] In interorganizational trust, it is the attitudes of boundary spanning individuals, rather than all organizational members, that are the better predictor of collaborative behaviour (Janowicz and Noorderhaven, 2006).
- [3] Although prior literature has distinguished between the cognitive aspect of broken trust, i.e. perceived breach, and the emotional aspect of broken trust, i.e. violation (cf. Morrison and Robinson, 1997), this distinction is not crucial for our analysis. Throughout the paper we will use the term 'violation'.
- [4] As trust is based more on subjective perceptions rather than objective assessments, we assume that the trustor's perception of violations matters equally or even more than 'objective reality' (Bell et al., 2002).
- [5] We thank an anonymous reviewer for suggesting that we make this assumption explicit.
- [6] Although the term 'non-legalistic' is not used in prior literature, we choose it for measures that are not legalistic in character, and yet involve the trust violator's attempt to evoke forgiveness or understanding, or to diminish the anger of the trustor.
- [7] The way that trust violations and post-violation actions (i.e. measures) are perceived, and the impact they have on trust between partners, might also depend on the nature of prior beliefs about each other's trustworthiness (Pillutla and Davidson, 2006; cf. Nakayachi and Watabe, 2005). This issue is beyond the scope of our analysis. We assume the pre-violation level of trust to be constant.
- [8] Arguably, benevolence might be of more relevance in interorganizational relationships of longer duration (Mayer et al., 1995), or if partners had prior ties with one another. However, our model does not explicitly take into account the duration of an alliance nor the collaboration history of partners. Hence, we consider our model to be primarily applicable to interorganizational relationships that do not have long collaborative histories making it difficult for partners to gauge the extent of the other's benevolence.
- [9] Sitkin and Roth (1993) do not refer to competence-based trust, but rather to task-reliability which they define as 'an employee's ability to complete task assignments reliably'. This coincides with our definition of trustee competence.
- [10] The level of tolerance for violations of certain frequency and severity is likely to vary between different trustors. In the same way that the propensity to trust has been argued to vary across individuals (Schoorman et al., 2007), propensity to repair trust is likely to vary. A detailed analysis of the factors that affect the tolerance of organizational actors for a given combination of frequency and severity of violations as well as the threshold at which a shift in response will occur, lies beyond the scope of this paper.
- [11] We defined trust as 'the willingness . . . to be vulnerable to the actions of another party based on the *expectation that the other will perform a particular action important to the trustor, irrespective of the ability to monitor or control that other party*' (Mayer et al., 1995, p. 712; emphasis added). As we mention in note 2, such conceptualization of trust excludes control as a basis for trust (Nooteboom, 2002) and thus also legalistic measures as a means of fostering or repairing trust in a relationship.
- [12] The issue of whether the trustee was indeed not responsible for the violation is outside the scope of our analysis. We focus only on the extent to which the trustee is able to convince the trustor that this indeed was the case. The ethical aspect of the trustee potentially misleading the trustor in this respect is beyond the scope of this paper.
- [13] This is due to the fact that the decision to enter a collaborative relationship is based on person-specific mutual trust of corporate-level boundary spanners who engage in the negotiations. Loss of trust in the competence of a specific individual or a team of individuals at the corporate level would undermine the very basis on which the collaboration is founded.

APPENDIX: OPERATIONALIZATION CONSIDERATIONS

- *Violations of competence- and integrity-based trust:* Mayer and Davis's (1999) scale of competence- and integrity-based trust can be adapted to capture whether and to

what extent that type of trust is perceived to have been violated by the boundary spanners at the corporate and operating levels in inter-organizational relationships. *Trust repair measures (legalistic, non-legalistic)*: For legalistic measures, it is important to recall that they can by definition be introduced only by the corporate-level managers. Nevertheless, as such measures may be instituted as a response to a violation either at the operating or at the corporate level, they may take on different forms.

Legalistic measures at the operating level can be measured by developing a scale capturing the extent to which formal procedures are adopted to ensure reliability of output and performance of the boundary spanner(s) that violated trust (Sitkin and Roth, 1993) (e.g. such procedures might include *provisions for* sanctions such as denying promotion or salary hikes in case of unmet expectations, as well as adopting monitoring mechanisms). Besides deterrents, corporate-level managers may contractually commit to providing training to their operating-level employees, be it in the area of technical expertise or time management for example, or in extreme cases, commit to replacing the trust-violating individual(s) with a more competent one(s).

At the corporate level, legalistic measures can be captured by examining whether contract renegotiation has ensued following the trust disrupting event. As in Reuer and Arifio (2002), contract renegotiation can be a dummy variable taking a value of 1 if contract has been renegotiated following the event and 0 in the absence of a contract renegotiation. A more fine-grained measure for legalistic measures at this level can also involve introduction to the contract of stipulations imposing sanctions on the trust violator in case of subsequent, repeated violations.

Non-legalistic measures can be operationalized by developing a scale that captures whether the trustee dealt with the trust disrupting event by means of accepting responsibility for and expressing regret for the harm caused to the trustor by the violation (apology) accompanied by some sort of promise that the trust disrupting act will not be repeated (Kim et al., 2004), or by means of an explanation or excuse, in which case the trust violating party points to factors that affected his or her decision or behaviour, or alternatively by explaining the reasons underlying the violation, which may increase pardon (e.g. good intentions resulting in poor outcomes or 'honest mistake' caused by human frailty) (Sitkin and Bies, 1993).

Functional interdependence may be captured by organizational constraints resulting from functional interdependence and measured by means of a scale developed by Perrone et al. (2003).

Dependence of the trustor on the trustee can be measured by adapting the scales developed by Bucklin and Sengupta (1993) and Gulati and Stych (2007).

Severity and frequency of violation: Severity of the violation can be measured by adapting the measures developed by Tomlinson et al. (2004) and Brockner et al. (1994) for the interorganizational context. The measure would capture the extent of financial losses (e.g. Tomlinson et al., 2004) and opportunity cost suffered by the trustor due to the trustee's trust-violating act. Frequency of violation can be measured by the number of times the trustee violated the trustor's trust within a given time period or whether the trustor perceives this number to be of high or low frequency.

REFERENCES

- Aldrich, H. and Herker, D. (1977). 'Boundary spanning roles and organization structure'. *Academy of Management Review*, 2, 217-30.
- Aulakh, P., Kotabe, M. and Sahay, A. (1996). 'Trust and performance in cross-border marketing partnerships: a behavioral approach'. *Journal of International Business Studies*, 27, 1005-32.
- Barringer, B. R. and Harrison, J. S. (2000). 'Walking a tightrope: creating value through interorganizational relationships'. *Journal of Management*, 26, 367-404.
- Becerra, M., Lunnan, R. and Huemer, L. (2008). 'Trustworthiness, risk, and the transfer of tacit and explicit knowledge between alliance partners'. *Journal of Management Studies*, 45, 691-713.
- Bell, G. G. and Anderson, M. (2000). *Trust, Positional Security, and Information Transfer in Four Network Ideal-Types: Exploring the Linkages Between Forms of Social Capital*. Academy of Management Meeting, Toronto, Ontario, Canada.
- Bell, G. G., Oppenheiner, R. J. and Bastien, A. (2002). 'Trust deterioration in an international buyer-supplier relationship'. *Journal of Business Ethics*, 36, 65-78.
- Bics, R. J. and Tripp, T. M. (1996). 'Beyond distrust: "getting even" and the need for revenge'. In Kramer, R. M. and Tyler, T. R. (Eds), *Trust in Organizations: Frontiers of Theory and Research*. Thousand Oaks, CA: Sage, 246-60.
- Blois, K. J. (1999). 'Trust in business to business relationships: an evaluation of its status'. *Journal of Management Studies*, 36, 197-215.
- Blumstein, P. W., Garssow, K. G., Hall, J., Hawkins, B., Hoffman, R., Ishem, E., Maurer, C. P., Spens, D., Taylor, J. and Zimmerman, D. L. (1974). 'The honoring of accounts'. *American Sociological Review*, 39, 551-66.
- Bower, J. L. (1986). *Managing the Resource Allocation Process*. Boston, MA: Harvard Business School Press.
- Bradfield, M. and Aquino, K. (1999). 'The effects of blame attributions and offender likableness on forgiveness and revenge in the workplace'. *Journal of Management*, 25, 607-31.
- Brockner, J., Konovsky, M., Cooper-Schneider, R., Folger, R., Martin, C. and Bies, R. J. (1994). 'Interactive effects of procedural justice and outcome negativity on victims and survivors of job loss'. *Academy of Management Journal*, 37, 397-409.
- Brouthers, K. D. and Bamosy, G. J. (2006). 'Post-formation processes in Eastern and Western European joint ventures'. *Journal of Management Studies*, 43, 203-29.
- Bucklin, L. P. and Sengupta, S. (1993). 'Organizing successful co-marketing alliances'. *Journal of Marketing*, 57, 32-46.
- Burgelman, R. A. (1983). 'A process model of internal corporate venturing in the diversified major firm'. *Administrative Science Quarterly*, 28, 223-44.
- Child, J. and Rodrigues, S. B. (2004). 'Corporate governance in international joint ventures: toward a theory of partner preferences'. In Grandori, A. (Ed.), *Corporate Governance and Firm Organization. Microfoundations and Structural Forms*. Oxford: Oxford University Press, 89-112.
- Cook, J. and Wall, B. (1980). 'New work attitude measures of trust, organizational commitment and personal need non-fulfillment'. *Journal of Occupational Psychology*, 53, 39-52.
- Das, T. K. and Teng, B. (1998). 'Between trust and control: developing confidence in partner cooperation in alliances'. *Academy of Management Review*, 23, 491-512.
- Doz, Y. L. (1996). 'The evolution of cooperation in strategic alliances: initial conditions or learning processes?'. *Strategic Management Journal*, 17, 55-83.
- Driscoll, J. W. (1978). 'Trust and participation in organizational decision making as predictors of satisfaction'. *Academy of Management Journal*, 21, 44-56.
- Dyer, J. H. and Chu, W. (2000). 'The determinants of trust insupplier-automaker relationships in the U.S., Japan, and Korea'. *Journal of International Business Studies*, 31, 259-85.
- Dyer, J. H. and Chu, W. (2003). 'The role of trustworthiness in reducing transaction costs and improving performance: empirical evidence from the United States, Japan, and Korea'. *Organization Science*, 14, 57-68.
- Emerson, R. M. (1962). 'Power-dependence relations'. *American Sociological Review*, 27, 31-41.
- Floyd, S. W. and Lane, P. J. (2000). 'Strategizing throughout the organization: managing role conflict in strategic renewal'. *Academy of Management Review*, 25, 154-77.
- Fryxell, G. E., Dooley, R. S. and Vryza, M. (2002). 'After the ink dries: the interaction of trust and control in US-based international joint ventures'. *Journal of Management Studies*, 39, 865-86.
- Ghoshal, S. and Moran, P. (1996). 'Bad for practice: a critique of the transaction cost theory'. *Academy of Management Review*, 21, 13-47.

- Gulati, R. and Stych, M. (2007). 'Dependence asymmetry and joint dependence in interorganizational relationships: effects of embeddedness on a manufacturer's performance in procurement relationships'. *Administrative Science Quarterly*, 52, 32–69.
- Inkpen, A. C. and Currall, S. C. (1997). 'International joint venture trust. An empirical examination'. In Beamish, P. W. and Kiling, J. P. (Eds), *Cooperative Strategies. North American Perspectives*. San Francisco, CA: The New Lexington Press, 308–34.
- Janowicz, M. and Noorderhaven, N. G. (2006). 'Levels of inter-organizational trust: conceptualization and measurement'. In Bachman, R. and Zaheer, A. (Eds), *Handbook of Trust Research*. Cheltenham: Edward Elgar, 264–79.
- Jeffries, F. L. and Reed, R. (2000). 'Trust and adaptation in relational contracting'. *Academy of Management Review*, 25, 873–82.
- Kim, P. H., Ferrin, D. L., Cooper, C. D. and Dirks, K. T. (2004). 'Removing the shadow of suspicion: the effects of apology versus denial for repairing competence- versus integrity-related trust violations'. *Journal of Applied Psychology*, 89, 104–18.
- Kim, P. H., Dirks, K. T., Cooper, C. D. and Ferrin, D. L. (2006). 'When more blame is better than less: the implications of internal vs. external attributions for the repair of trust after a competence- vs. integrity-related trust violation'. *Organizational Behavior and Human Decision Processes*, 99, 49–65.
- 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*, 87, 312–19.
- Krishnan, R., Martin, X. and Noorderhaven, N. G. (2006). 'When does trust matter to alliance performance?'. *Academy of Management Journal*, 49, 894–917.
- Kruglanski, A. W. (1970). 'Attributing trustworthiness in supervisor-worker relations'. *Journal of Experimental Social Psychology*, 6, 214–32.
- Larson, A. (1992). 'Network dyads in entrepreneurial settings: a study of the governance of exchange relationships'. *Administrative Science Quarterly*, 37, 76–104.
- 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*. Thousand Oaks, CA: Sage, 115–39.
- Martijn, C., Spears, R., Van der Pligt, J. and Jakobs, E. (1992). 'Negativity and positivity effects in person perception and inference: ability versus morality'. *European Journal of Social Psychology*, 22, 453–63.
- Mayer, R. C. and Davis, J. H. (1999). 'The effect of the performance appraisal system on trust for management: a field quasi-experiment'. *Journal of Applied Psychology*, 84, 123–36.
- Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995). 'An integrative model of organizational trust'. *Academy of Management Review*, 20, 709–34.
- McArthur, L. A. (1972). 'The how and what of why: some determinants and consequences of causal attribution'. *Journal of Personality and Social Psychology*, 22, 171–93.
- McEvily, B., Perrone, V. and Zaheer, A. (2003). 'Trust as an organizing principle'. *Organization Science*, 14, 91–103.
- Mohr, J. and Spckman, R. (1994). 'Characteristics of partnership success: partnership attributes, communication behavior and conflict resolution techniques'. *Strategic Management Journal*, 15, 135–52.
- Morrison, E. W. and Robinson, S. L. (1997). 'When employees feel betrayed: a model of how psychological contract violation develops'. *Academy of Management Review*, 22, 226–56.
- Nakayachi, K. and Watabe, M. (2005). 'Restoring trustworthiness after adverse events: the signaling effects of voluntary "hostage posting" on trust'. *Organizational Behavior and Human Decision Processes*, 97, 1–17.
- Nooteboom, B. (2002). *Trust. Forms, Foundations, Functions, Failures and Figures*. Cheltenham: Edward Elgar.
- Nooteboom, B., Berger, H. and Noorderhaven, N. G. (1997). 'Effects of trust and governance on relational risk'. *Academy of Management Journal*, 40, 308–38.
- Parkhe, A. (1998). 'Building trust in international alliances'. *Journal of World Business*, 33, 417–37.
- Perez-Nordtvedt, L., Kedia, B. L., Datta, D. K. and Rasheed, A. A. (2008). 'Effectiveness and efficiency of cross-border knowledge transfer: an empirical examination'. *Journal of Management Studies*, 45, 714–44.
- Perrone, V., Zaheer, A. and McEvily, B. (2003). 'Free to be trusted? Organizational constraints on trust in boundary spanners'. *Organization Science*, 14, 422–39.
- Pillutla, M. M. and Davidson, J. (2006). *The Effect of Transgressions and Post-transgressions on Ability- and Integrity-based Trust*. Paper presented at the Academy of Management Annual Meeting in Atlanta.
- Reeder, G. D. and Brewer, M. B. (1979). 'A schematic model of dispositional attribution in interpersonal perception'. *Psychological Review*, 86, 61–79.
- Reuer, J. J. and Arino, A. (2002). 'Contractual renegotiations in strategic alliances'. *Journal of Management*, 28, 47–68.

- Ring, P. S. and Van de Ven, A. H. (1994). 'Developmental processes of cooperative interorganizational relationships'. *Academy of Management Review*, **19**, 90–118.
- Salk, J. E. and Simonin, B. L. (2003). 'Beyond alliances: towards a meta-theory of collaborative learning'. In Easterby-Smith, M. and Lyles, M. A. (Eds), *The Blackwell Handbook of Organizational Learning and Knowledge Management*. Oxford: Blackwell, 253-77.
- Saxton, T. (1997). 'The effects of partner and relationship characteristics on alliance outcomes'. *Academy of Management Journal*, **40**, 443-60.
- Schlenker, B. R. and Darby, B. W. (1981). 'The use of apologies in social predicaments'. *Social Psychology Quarterly*, **44**, 271-8.
- 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*, **32**, 344–54.
- Scott, D. (1980). 'The causal relationship between trust and the assessed value of management by objective'. *Journal of Management*, **6**, 157–75.
- Shapiro, S. P. (1987). 'The social control of impersonal trust'. *American Journal of Sociology*, **93**, 623–58.
- Sitkin, S. B. and Bies, R. J. (1993). 'Social accounts in conflict situations: using explanations to manage conflict'. *Human Relations*, **46**, 349-70.
- Sitkin, S. B. and George, E. (2005). 'Managerial trust-building through the use of legitimating formal and informal control mechanisms'. *International Sociology*, **20**, 307–38.
- Sitkin, S. B. and Roth, N. L. (1993). 'Explaining the limited effectiveness of legalistic "remedies" for trust/distrust'. *Organization Science*, **4**, 367-92.
- Sitkin, S. B. and Stickel, D. (1996). 'The road to hell. The dynamics of distrust in an era of quality. In Kramer, R. M. and Tyler, T. R. (Eds), *Trust in Organizations: Frontiers of Theory and Research*. Thousand Oaks, CA: Sage, 196-215.
- Six, F. and Sorge, A. (2008). 'Creating a high-trust organization: an exploration into organizational policies that stimulate interpersonal trust building'. *Journal of Management Studies*, **45**, 857-84.
- Strickland, L. H. (1958). 'Surveillance and trust'. *Journal of Personality*, **24**, 200-15.
- Tomlinson, E. C., Dineen, B. R. and Lewicki, R. J. (2004). 'The road to reconciliation: antecedents of victim willingness to reconcile following a broken promise'. *Journal of Management*, **30**, 165–87.
- Werner, B., Graham, S., Peter, O. and Zmudinas, M. (1991). 'Public confession and forgiveness'. *Journal of Personality*, **59**, 281-312.
- Zaheer, A. and Venkatraman, N. (1995). 'Relational governance as an interorganizational strategy: an empirical test of the role of trust in economic exchange'. *Strategic Management Journal*, **16**, 373-92.
- Zaheer, A., McEvily, B. and Perrone, V. (1998). 'Does trust matter? Exploring the effects of interorganizational and interpersonal trust on performance'. *Organization Science*, **9**, 141–59.
- Zaheer, A., Lofstrom, S. and George, V. (2002). 'Interpersonal and interorganizational trust in alliances'. In Contractor, F. J. and Lorange, P. (Eds), *Cooperative Strategies and Alliances*. Amsterdam: Pergamon, 347-77.
- Zucker, L. G. (1986). 'Production of trust: institutional sources of economic structure 1840–1920'. In Staw, B. M. and Cummings, L. L. (Eds), *Research in Organizational Behavior*. Greenwich, CT: JAI Press, **8**, 53-111.