

Trust in Difficult People: A Social Network Perspective

Sonja Opper^a  and Na Zou^b 

^a*Bocconi University*; ^b*Goethe University Frankfurt*

ABSTRACT We all know people we find difficult to deal with. Some we trust despite major past transgressions, others we do not. What explains the difference? Rather than looking for explanations inside the trustor–trustee dyad, we focus on the embedding social structure. Our argument focuses on two features: network closure around the trustor and the embeddedness of the difficult contact. We test and confirm our argument using data from 384 Chinese managers. Our results show that managers who cite colleagues as difficult following a major transgression report higher trust the more the difficult contact is embedded within the manager’s network. The effect is smaller (larger) if the manager is surrounded by a rather closed (open) social network. At a practical level, our study helps distinguish between social situations that facilitate trust and those that impede trust once interpersonal conflicts have tainted a relationship.

Keywords: difficult contacts, social embeddedness, social network, trust

INTRODUCTION

We know far more about the sources of emerging trust than about strategies to survive a major crisis of interpersonal trust. Yet most work teams, departments, organizations, and broader business networks frequently encounter interpersonal conflict and negative sentiment (Harrigan et al., 2020), all with the potential to undermine interpersonal trust and, as a consequence, commitment and cooperativeness (Lo and Aryee, 2003). While most employees and collaborators seek to conform despite mismatched values, negative performance effects are still to be expected (Hewlin et al., 2017). The crucial question is under which conditions trust will be bestowed despite what one person perceives as a major transgression. When do people continue to deal with an alleged transgressor (henceforth referred to as the ‘difficult contact’), and even report a certain level of trust,

Address for reprints: Na Zou, Department of Management and Microeconomics, Goethe University Frankfurt, Frankfurt am Main, Germany (zou@wiwi.uni-frankfurt.de).

This is an open access article under the terms of the [Creative Commons Attribution-NonCommercial-NoDerivs](#) License, which permits use and distribution in any medium, provided the original work is properly cited, the use is non-commercial and no modifications or adaptations are made.

if a natural response is to excise the evil or to withdraw? Answers are critical, especially for team managers seeking to maintain harmonious and cooperative work relations.

Trust research has focused on explanations rooted in the trustor's personal attributes (Haselhuhn et al., 2015), situational factors describing the incident and reconciliation efforts (Kim et al., 2004), and combinations of both (Ferrin et al., 2007; Krylova et al., 2018; Lount Jr and Pettit, 2012). These studies share an interest in trust antecedents situated inside the trustor–trustee dyad, while abstracting from the social situation around the dyad. Even the most recent literature review identifies no work engaging the social structure around the trustor–trustee dyad as an explanatory factor (Sharma et al., 2023; for earlier reviews and conceptual work see Kramer and Lewicki, 2010; Lewicki and Brinsfield, 2017; Tomlinson and Mryer, 2009).

The social network literature, in contrast, has long treated interpersonal trust as a 'social construct' (Coleman, 1988; Granovetter, 1985), bringing the structural embedding of trustor and allegedly difficult person to the analytical fore (Mayer et al., 1995; Rousseau et al., 1998; for recent reviews see McEvily et al., 2021; Schilke et al., 2021). Numerous studies have confirmed social embeddedness as an antecedent of dyadic trust (Burt and Burzynska, 2017; Burt and Knez, 1995; Chua et al., 2008; Ferrin et al., 2006). Yet despite growing research interest in the role of negative ties within social groups, trust in contacts associated with serious transgressions has received limited attention (for review, see Yang et al., 2020). While several studies refer to trust in such difficult contacts (Burt, 1999; Burt and Knez, 1995; Burt and Luo, 2019), the analytical focus was on character assassination. Trust was not operationalized.

At the core of our relational framework are two mutually related mechanisms linking the social structure around the trustor (ego) and the difficult contact with ego's trust response: (1) network behaviour and (2) information access. We expect a behavioural component because social structure operates as a forcing function of individual skills, capabilities, and behavioural preferences (Burt, 2010; for review see Tasselli et al., 2015). As individuals embedded in closed (open) networks are less (more) familiar with different perspectives, interpretations, and opinions, they are also likely to be more (less) adamant in their perception of what is right and wrong, and less (more) likely to trust those they perceive as difficult. Ego's information access, in turn, depends on the specific position of the difficult contact in ego's network (Burt, 2005; Friedkin, 1999). The higher the embeddedness of the difficult contact, the greater ego's chance to come across balancing third-party views, which may alleviate ego's trust response. Building on both mechanisms, we expect managers to report higher trust in difficult contacts with whom they share third-party ties, though less (more) so if the manager is embedded in a rather closed (open) network.

To test these predictions, we use network data from a random sample of 384 Chinese CEOs. As in most non-experimental research on trust, our focus is on absolute levels of trust (Lewicki and Brinsfield, 2017). The managers (egos) were asked to describe their business network, to offer short descriptions of what the contact had done that made things difficult during the ongoing business year, and to assess to what extent they trusted their cited business contacts, including the difficult contact. We have two key findings: First, closure around ego has no independent effect on trust in the allegedly difficult contact. Second, managers trust difficult contacts with whom they

share more other contacts, though the effect is smaller (larger) if ego is embedded in a rather closed (open) network. Briefly, while behavioural preferences cultivated in closed networks do not affect trust independently, they operate as a filter when processing third-party information.

We contribute to two lines of research. First, our work complements prior trust research, which has explored personal and situational explanations inside the trustor–trustee dyad (Haselhuhn et al., 2015; Kim et al., 2004; Kramer and Lewicki, 2010; Lewicki and Brinsfield, 2017) while abstracting from the surrounding social situation. Holding constant several personal and situational factors, our results encourage a broader network perspective on trust that situates dyadic trustor–trustee relations within the trustor’s social structure. Second, we add to the network perspective on interpersonal trust. More specifically, we focus on the way social structure influences how interpersonal conflicts are addressed (Ellickson, 1991; Granovetter, 1985; Greif, 1989). Earlier research suggests that information access codetermines which network contact is likely to be seen as difficult (Burt, 2005). We extend this line of research by showing how structural features influence trust in difficult contacts.

DIFFICULT CONTACTS, SOCIAL STRUCTURE, AND TRUST

It is well known in economics (e.g., Greif, 1989), law (e.g., Ellickson, 1991) and sociology (e.g., Coleman, 1988; Granovetter, 1985) that closed networks facilitate trust by creating reputation costs for bad behaviour (Burt, 2005, Chps. 3–4, for review). Granovetter (1992) terms this ‘structural embedding’ to refer to a relationship embedded in a network of mutual contacts. But trust can also result from a history of positive experience with someone (Granovetter, 1992, on ‘relational embedding’) or positive behaviour in a significant event (Burt and Burzynska, 2017). Close mutual ties and high contact frequency increase the likelihood that gossip will spread, exposing those regarded as difficult and enabling others to avoid them. Fear of individual and collective sanctions discourages bad behaviour and helps to build high levels of in-group trust and reputation (Coleman, 1988, pp. S107–108, 1990, pp. 306–307; Granovetter, 1985). In open networks, where contacts are not closely associated with mutual friends, bad behaviour may go unnoticed or receive less attention due to the variety of alternative contacts and interests (Brass et al., 1998).

This familiar narrative illustrates why norm compliance and trust are higher in closed social structures than in open networks. Empirical examples illustrating trust-producing structural properties of closed networks span time and space (see Burt and Opper, 2017, on business networks in China; Ellickson, 1991, on problem solving among cattle farmers in northern California; Greif, 1989, on Maghribi trader coalitions in the 11th century). More recently, Piskorski and Gorbatai (2017) used archival data of Wikipedia entries to directly test Coleman’s norm enforcement mechanism. Their study shows that more frequent punishment of norm violations in closed networks indeed limits their occurrence.

But what if critical transgressions still happen? Does network closure around ego still predict trust? Direct evidence on dyadic trust following interpersonal conflicts is missing, but a negative correlation between network closure and trust seems more

plausible than a positive one. First, we know that trust is more common in closed networks than in open networks (Burt, 1999, 2005; Coleman, 1988; Ellickson, 1991; Granovetter, 1985). If transgressors were not trusted less, bad behaviour would undermine the role of network reputation as a sanctioning mechanism (which is not reported). Second, individuals accustomed to closed networks are likely to develop behavioural attributes and preferences leading to more extreme responses when bad things happen.

Recent work exploring the role of social structure as a forcing function of behavioural preferences corroborates our conjecture and offers a possible causal explanation. Burt called early attention to the importance of network position in shaping actor interests ‘as perceptual norms and feelings’ (Burt, 1982, p. ix), which over time foster the development of distinct skill sets, capabilities, and behavioural preferences (Burt, 2010). In this sense, one can expect ‘two people who occupy similar network positions to share the same norms, feelings, and attitudes’ (Tasselli et al., 2015, p. 1371). Studies on network dynamics offer indirect support for this expectation (Quintane and Carnabuci, 2016). Agents embedded in open networks tend to recreate open networks over time, whereas those embedded in closed networks tend to reinforce network closure, an observation consistent with the idea that agents rely on social skills and capabilities acquired in the past. Burt et al. (2022) employed prisoner-dilemma games to study the association between network structure and cooperativeness; those embedded in open networks are more likely to cooperate with strangers than those accustomed to closed networks.

It is not too great a stretch to assume that forgiveness and trust are similarly shaped by ego’s learned network behaviour. Figure 1 sketches two different social situations around ego. In Panel A, a network with many mutually connected contacts surrounds ego (constraint: 45.9). Over time, ego becomes less familiar with heterogeneous contacts and less exposed to varied and conflicting ways of doing things (Burt, 2010). Ego is therefore likely to form narrow behavioural expectations about others that allow for little variation. What is right and wrong emerges by in-group consensus. Conflicts will arise less frequently but stand out more sharply if they do occur (Piskorski and Gorbatai, 2017). In Panel B, a relatively open network surrounds ego (constraint: 18.6); contacts 1 through 5 have no mutual connections. Ego becomes accustomed

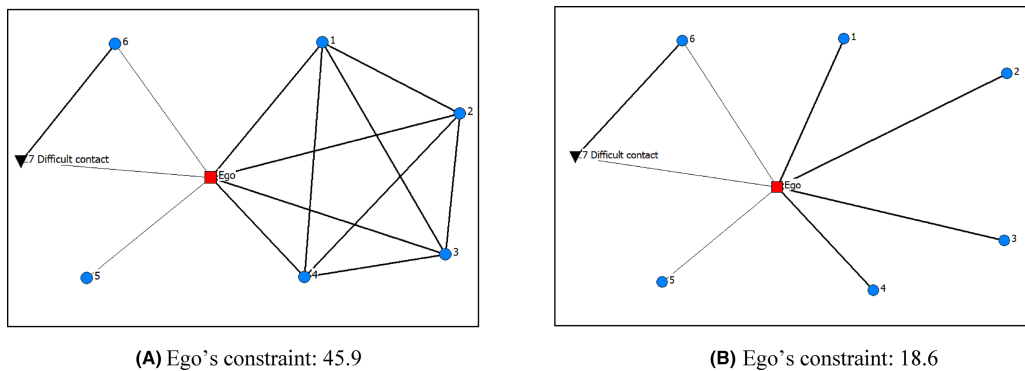


Figure 1. Stylized network structures: Egos with variable network closure

Note: Thick lines are strong ties; thin lines are weak ties.

to heterogeneity in opinion, variable behavioural styles, and different ways of doing things (Burt, 2010; Putnam, 1996). Norms of proper conduct become less narrowly defined; deviation from one's own behaviour and subjective expectations is a common social experience. Life in open networks is therefore likely to shape an individual's ability to forgive and to move on.

Our conjecture is consistent with a recent study by Antonucci et al. (2018), who found a positive association between network size (a correlate of diversity) and forgiveness in a cross-ethnic population of 907 respondents. While forgiveness is just a first step toward trust (Miller et al., 2008), the link between the social situation around ego and behavioural responses following interpersonal conflicts is encouraging. In sum, we propose:

Hypothesis 1: All else equal, the more (less) closed the network around ego, the less (more) accustomed ego is to behavioural variation, and the lower (higher) ego's trust in an allegedly difficult contact.

It is obvious that information influences how interpersonal relations evolve following a critical incident. The trust repair literature has explored how mediators and variable repair strategies can help to rebuild trust (Krylova et al., 2018; Tomlinson et al., 2004; Yu et al., 2017). In this study, we do not model information, but build on the theoretically and empirically well-established association between social structure and information flows (Carley, 1991; Coleman et al., 1966; Cook et al., 1983). More specifically, we theorize how social structure around the conflicting parties is likely to influence ego's opinion following a critical event (Burt, 2005). We assume that the amount and type of information ego receives about the difficult contact (and possibly the alleged transgression) depends on their position within ego's network. Three elements are critical: (1) ego's direct contact with the allegedly difficult contact, (2) the number and strength of connections between ego and shared third parties, and (3) the perceived strength of connections between third parties and the difficult contact. Note, it is not essential in this context that ego has precise information on the relationship status between shared third parties and the difficult contact. The fact that ego assumes alter-alter connections to be close influences the way information is processed and valued.

In business, it is usually impossible to avoid contacts perceived as difficult. The more frequent and close the interaction, the greater the chance that the conflict will be re-evaluated. More important than the direct connection with the difficult contact, however, is often information from people close to them (Heider, 1958; Simmel, 1902). First, ego is likely to code observed closeness between a difficult contact and shared alter ties as a signal of positive sentiment, which may influence ego's own assessment of the difficult contact (Rispen et al., 2011). Second, shared third-party ties establish a direct information channel, likely influencing the way ego assesses the perceived transgression. Drawing on Burt's (2005) work on echo and bandwidth, access to shared third-party ties gives ego the *chance* to encounter information that (partly) differs from her own narrative. As Simmel (1902, p. 170) opined, even 'a gesture, a way of listening, the quality of feeling which proceeds from a person, suffices to give to this dissent between two others a direction toward consensus'.

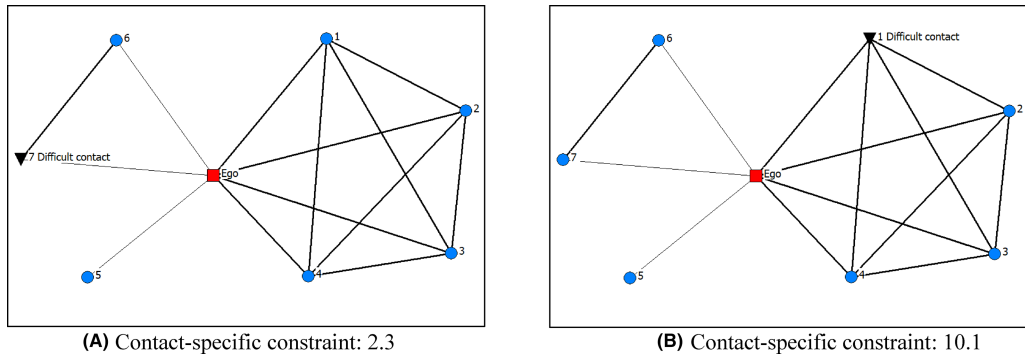


Figure 2. Stylized network structures: Difficult contacts with variable embeddedness

Note: Thick lines are strong ties; thin lines are weak ties.

All three elements – ego's tie with the difficult contact, ego's ties with third parties, and third-party ties with the difficult contact – are analytically captured by Burt's contact-specific network constraint (Burt, 1992, pp. 54–56), which we use to measure the subjectively perceived social embeddedness of the difficult contact. Figure 2 illustrates where reinforcing and balancing information is likely found. Holding constant ego's network constraint at 45.9 in both cases, in Panel A, the difficult contact shares with ego only contact 6 (analytically incorporating alter-alter ties and closeness, the contact-specific constraint on ego is 2.3). In Panel B, the difficult contact is embedded in the right cluster, sharing ego's contacts 2, 3, and 4 (the corresponding contact-specific constraint is 10.1). Clearly ego's chances of encountering novel information or a balancing narrative differs between the panels. In Panel A, ego is likely to share 'his account' with a close-knit cluster of four contacts. Contacts 1 through 4 in the right cluster are likely to echo ego's negative sentiment (Burt, 2005; Peters et al., 2017), as they have no independent or alternative information about the difficult other. Social cohesion within the cluster is likely to reinforce the effect (Schachter, 1951).^[1] Balancing opinion or bandwidth can only come from contact 6, who maintains a tie with the difficult contact. In Panel B, the situation is reversed. Ego shares three contacts with the difficult contact, allowing for greater 'bandwidth' in opinion, with each of these three contacts also having first-hand information about the difficult other.

To be clear, our argument does not suggest that business associates who are perceived to be close to the difficult contact have exclusively positive views to share. Clearly, they too may occasionally find fault in the other's behaviour. Yet once two people are perceived to be close, the overall sentiment is likely to be positive. After all, closeness signals how well group members know and feel about one another (Rispen et al., 2011). It is therefore safe to say that shared third-party ties with the difficult other offer ego the chance to come across more varied (and likely positive) information. Take the extreme counterfactual: If ego does not share any contacts with the difficult contact, there is no chance to come across informed and balancing opinions (for a more general discussion of unshared third-party ties, see Reagens et al., 2015).

Of course, the occasional person in ego's network may assume the role of devil's advocate. Yet absent first-hand information regarding the difficult contact, such counsel is less compelling.

Holding constant the relationship between ego and the difficult contact, Table I displays four configurations illustrating how variable constellations of ego-alter and alter-alter closeness are likely to influence ego's chances to receive either reinforcing (echo) or deviating information (bandwidth). In sum, chances for information bandwidth increase with the difficult contact's social embeddedness (contact-specific constraint) within ego's network. We predict:

Hypothesis 2: All else equal, the more (less) socially embedded a difficult contact within ego's network, the higher (lower) ego's chance to come across balancing opinions, and the higher (lower) ego's trust in the difficult person.

We now have two mechanisms; one rests on the association between network structure and behavioural preferences (Hypothesis 1), and the other is grounded in the link between social structure and information access (Hypothesis 2). With reference to the literatures on biased assimilation and attitude polarization, we expect these mechanisms to interact. Though balancing opinions offer the chance to revise one's beliefs and assessment, not everybody is equally prepared to do so (Lord et al., 1979). There is ample evidence that exposure to opposing views may even increase attitude polarization, given a common tendency to select and process agreeing information while discounting disagreeing information (see for instance Bail et al., 2018, on political polarization).

To what extent novel or alternative information is processed or discarded (Hypothesis 2) is likely to be influenced by the social structure around ego and ego's related capabilities to process diverse opinions. Returning to our previous observation that those embedded in closed networks are less likely to encounter novel information and alternative views than those in open networks, one can expect a greater inclination to maintain established beliefs and a greater reluctance to act on novel, disparate information. A logical derivation is that people embedded in closed networks are less prepared to consider alternative views and arguments; information inconsistent with ego's account will be filtered out. In contrast, those embedded in open networks are accustomed to controversy and open discourse, which will reinforce the positive association between information received through shared ties and trust in the allegedly difficult contact.

Empirical support for the assumed link between social structure and the ability to correct a given course of action comes from various fields. Facciani and Brashears (2019), for instance, report how religiously and politically homogenous networks strengthen values associated with the respective belief system. Oppen and Burt (2021) report that managers embedded in closed networks develop myopic tendencies and neglect long-term strategies. And Dhand and colleagues present evidence of delayed hospital arrival for stroke patients embedded in closed networks, which they trace to constricted information flows that 'reinforced the norm to watch-and-wait' (Dhand et al., 2019, p. 6). Patients embedded in large, open networks instead benefited from fast response times in the face of disruptive information.

Table I. Social embeddedness, information access, and trust

Scenarios	Tie-strength		Tie-strength		Contact-specific constraint of difficult contact on ego (social embeddedness)	Information flow between third-party ties and ego	Chance for a positive impact on ego's trust in difficult contact
	Ego-third-party ties (shared with difficult contact)	Ego-difficult contact	Ego-third-party ties (shared with difficult contact)	Third-party ties-difficult contact			
1	Constant	Close	Close	Close	High	Third parties are likely to have positive opinions of alter. Ego is fairly open to different views.	High
2	Constant	Close	Close	Distant	Medium	Third parties may have a positive opinion of alter. Ego is fairly open to different views.	Medium and low
3	Constant	Distant	Distant	Close	Medium	Third parties are likely to have positive opinions of alter. Ego may be open to different views.	Medium and low
4	Constant	Distant	Distant	Distant	Low	Third parties may have a positive opinion of alter. Ego may be open to different views.	Low

Differences in emotional support in closed and open networks are likely to reinforce the described differences in how disagreeing information is processed. People backed by the emotional support of mutually connected close ties will find it easier to disregard balancing opinions from contacts shared with the difficult contact. In contrast, people surrounded by only a few well-connected contacts are more likely to be influenced by the balancing accounts of shared contacts. Studies in the social support strand of network analysis support this view. Large, densely connected networks tend to provide significant social support in a variety of emotionally distressing situations (Haines et al., 2002). Building on our previous hypotheses, we propose:

Hypothesis 3: The positive relationship between the social embeddedness of the difficult contact and ego's trust toward the difficult contact is smaller (larger) if ego's social network is relatively closed (open).

DATA AND METHOD

The data come from a 2018 network survey of a stratified probability sample of 384 CEOs in China's Yangtze Delta region. Although some have argued for the cultural contingency of the social network mechanism (Xiao and Tsui, 2007), there is accumulating evidence against these arguments (see Batjargal et al., 2013; Burt, 2019; Burt and Batjargal, 2019). Specifically, we know that network closure around a contact has similar implications for trust in China as in the West (Burt and Burzynska, 2017; Burt and Opper, 2017). Therefore, we are confident that our results are not limited to the Chinese context.

Sample

Survey participants are CEOs of private companies in Shanghai and the municipalities of Hangzhou and Ningbo (both in Zhejiang province). All three cities are located at the heart of China's Yangtze Delta region, with Shanghai located to the north, Hangzhou to the west, and Ningbo to the south of Hangzhou Bay. All three cities share a colonial past and are ranked among the top cities in China in terms of global connectivity (Ni and Xu, 2021). To minimize industrial variation, the survey focused on two of the region's most developed industries: automobile and vehicle-parts production, as an example of a traditional manufacturing industry, and IT, representing one of the region's new technology-intensive sectors. To obtain a sample of sizeable companies, only businesses at least 3 years old and with at least 10 employees were included in the sampling frame. The target respondents were CEOs (ego); the survey did not permit replacements.

The survey was implemented by a local research firm and conducted by professional interviewers. Initial contacts and interview invitations were extended via phone and in writing, and interviews were conducted on the respondent company's premises. To standardize the implementation of all survey instruments, and to minimize potential interviewer effects, interviewers participated in a two-day training workshop. Upon conclusion of the workshop, a small pilot study with 10 CEOs was conducted in each city.

Review of the pilot survey results did not lead to any changes to the survey instrument but helped to refine the field protocols for the interview process.

In total, 384 of 1178 invited CEOs participated in the survey. The response rate of 33 per cent is in line with comparable studies involving top management in the West (Mellahi and Harris, 2016). A total of 346 (90.1 per cent) of the respondent CEOs were also (co-)owners (264 [76.3 per cent] of whom held the largest ownership share) and 322 (83.9 per cent) were (co-)founders of their company. The high representation of owner CEOs reflects the typical leadership structure of medium-sized companies in China. Following the Chinese Industrial Classification system, 58 per cent of the sample companies were medium-sized or larger, and the remainder were small. The average firm had a gross income of 55 million Chinese Yuan (CNY) and employed 120 full-time employees, which is close to the provincial average of 127 full-time employees in private firms (Zhejiang Statistics Bureau, 2018, p. 239).

The Survey

The CEOs – ego in our framework – participated in two survey modules, comprising (1) a CEO and firm survey providing some of the background data used here and (2) a network survey that combined name-generator items and name-interpreter items to collect information regarding the respondent CEOs' contacts. Such network survey research has a long tradition in management research (Batjargal et al., 2013; Burt, 2010, p. 281ff; Burt and Opper, 2017; Xiao and Tsui, 2007). More recently, Burt et al. (2022) have shown that behavioural predictions tend to be more accurate for network data including connections formed in past events, which is why our network measure also includes event contacts formed in the CEOs' pasts.

The survey design is an extended version of a survey conducted in 2012 (Burt and Burzynska, 2017; Burt and Opper, 2017). As in the previous survey, respondents were invited to use aliases for their contacts. Any auxiliary forms were removed and not submitted with the network survey. The decision to maintain complete anonymity has – in addition to ensuring compliance with data protection regulations – substantive advantages for the quality of the network data generated. First, respondents were not incentivized to signal status and power by referring to local leaders that were not actually part of their business network. Second, underreporting of ties that respondents relied on but thought would suggest low status seems unlikely.

The name generators collected information in the following order about a set of diverse key contacts: (1) the person who was most helpful in founding the business, (2) three to five business contacts who have been helpful in important events following the founding of the business, (3) three to four individuals who have been helpful business contacts during the current year (i.e., 2018), (4) the person the respondent considered to be the most difficult contact they had to deal with during the current business year, and (5) the employee the respondent most valued during the current year. Finally, the instrument also asked whether the respondent wished to mention any contact that should have been listed but whose name did not come to mind in the context of the previous name-generator items.

The name-interpreter items provided information about the cited contact (gender and role) and the quality of the relationship between the respondent and each listed contact (emotional closeness, duration of relationship in years, frequency of exchange

[daily, weekly, monthly, less often], contact channels, and level of trust). Moreover, the survey asked respondents to write down what the ‘difficult’ contact did to make things so difficult for the CEO in the current business year. Thus, in contrast to studies in the trust literature, which manipulate ‘incidents’ in a laboratory setting (for review see Sharma et al., 2023), managers reflected on recently experienced interpersonal conflicts. Note that our reference to a ‘difficult contact’ is distinct from Brennecke’s (2020) work on ‘dissonant’ ties (people who are difficult to deal with either for being less social, arrogant, or notoriously challenging). Our focus is on a contact who disappointed a CEO’s implicit or contractual expectations enough to stand out as the most difficult person the CEO had to deal with during the current business year.^[2] Hence, CEOs and their difficult contacts all experienced a crisis of trustworthiness. Further, respondents were asked to provide information regarding the perceived quality of alter-alter connections (close, distant, or something in between). Using these data, and data on the quality of the relationship between the respondent and each alter, the relationship between each pair of individuals was scaled to vary between zero and one (see Appendix in Burt and Burzynska, 2017). Each network comprised a matrix of connections with and among cited contacts, with network size ranging between 4 and 11 and a mean network size of around 7 contacts ($SD = 1.4$), which – according to Merluzzi and Burt (2013) – is sufficient to capture effects of network closure and openness.

The great majority of the 2702 cited contacts (88 per cent) were met at least once a month. Respondents on average had known their ‘difficult’ contacts for 5.72 years ($SD = 5.01$) and had known other cited valuable contacts for 11.81 years ($SD = 8.4$). Sceptics occasionally mourn the fact that data protection requirements forbid tie verification in ego-centric network surveys relying on random samples. Note, however, that our argument rests on the CEO’s *perception* – not on an externally verified structure – of her network and the third-party ties presumably shared with the difficult contact. Finally, the survey questions used for our analysis did not follow a common scale property and were clearly separated from each other. A single-source bias therefore seems unlikely.

Dependent Variable: Trust in the Difficult Contact

There are many different definitions of trust (for reviews: Lewicki and Brinsfield, 2017; McEvily and Tortoriello, 2011). We conceptualize trust as ‘a psychological state comprising the intention to accept vulnerability based on positive expectations of the intentions or behaviour of another’ (Rousseau et al., 1998: 395). This definition captures two aspects: (1) the trustor’s willingness to be vulnerable and (2) the trustor’s positive expectations of another’s behaviour. A desirable measure of trust will therefore capture both aspects. However, review studies have shown little consensus in measuring trust in organizational research, despite the convergence of theoretical conceptualizations of trust (Dirks and Ferrin, 2002; Kramer and Lewicki, 2010; Legood et al., 2023; McEvily and Tortoriello, 2011). Though some psychometric trust measures had been validated in several experimental studies (for instance, Mayer’s and Davis’s 1999-scale has been used by Ferrin et al., 2007; Kim et al., 2004), the use of context- and role-specific measures finds

its limitations in network survey research. Here the complication is that the researcher has no ex-ante information regarding the social role and mutual relations between trustor and trustee. This is especially true for randomly sampled ego networks not limited to an organization's employment roster. Given that elicited network contacts would likely cover a large variety of social roles, the survey followed the mainstream network literature on trust (Burt and Knez, 1995; Ferrin et al., 2006), relying on a relatively general, unidimensional trust construct (McEvily and Tortoriello, 2011). To ensure that all respondents could equally relate to the question, the wording also included examples of concrete situations of misconduct applicable to different role-contacts. The trust question reads as follows:

Consider the extent to which you trust each of the listed people.

For example, suppose one of the people asked for your help. The action needed from you is not extreme, but it is substantial. It is a level of help you cannot offer to many people. To what extent would you trust each person to give you all the information you need to decide whether to extend the required help? For example, if the person was asking for a loan, would they fully inform you about the risks of them being able to repay the loan? If the person was asking you to give a job to one of their relatives, would they fully inform you about their relative's poor work attitude or weak abilities, or other qualities that would deter you from hiring the relative?

The question not only captures managers' willingness to be vulnerable, as the help is costly, it captures their positive expectation of the trustee's behaviour: that the trustee would disclose all information relevant for managers to make an informed decision. Why such information may potentially not be disclosed (due to character, situation, or competence) is not defined, maintaining a rather open scenario. Respondents were asked to use a scale from 1 to 5, with 1 describing the lowest and 5 the highest trust level. Our variable of interest is the manager's trust in the difficult contact. In our sample, the average trust score for difficult contacts was 2.4 (SD = 1.12); for other contacts, it was 4.3 (SD = 0.69). Hence, difficult contacts scored on average 1.9 points lower than other network members. Given that all 'difficult' people were cited for some sort of transgression observed while acting on behalf of or together with ego, it is sensible to assume that lower trust scores are due to the referenced incident. Of course, a sceptic could worry that trust was low even before the incident; the fact that the critiqued behaviour generally occurred while the cited contact acted in a 'position of trust' should alleviate such concerns. Variation of recorded trust is pronounced: 16 per cent of the difficult contacts received high trust scores of 4 or 5; only 23 per cent received the lowest score of 1.

Explanatory Variables

Three structural measures capture ego's social network (Hypothesis 1), the embeddedness of the difficult contact within ego's network (Hypothesis 2), and an interaction term between the two (Hypothesis 3).

Network constraint around ego. This score measures the extent to which the respective manager is surrounded by a network of close, mutually connected contacts. Formally, the constraint is $C = \sum_j c_{ij} = \sum_j \left[p_{ij} + \sum_q p_{iq} p_{qj} \right]^2$, with $q \neq i, j$ (see Burt, 1992), in which p_{ij} captures the amount of time and energy ego, i , invests in contact j . This is the ratio of z_{ij} to the sum of i 's relations, in which z_{ij} is the tie strength between i and j . For ease of interpretation, we multiplied scores by 100. Intuitively, higher scores signal increasing network closure around ego. Networks become more closed as the number of contacts decreases (network size), as the number of strong direct ties between contacts increases (density), and as contacts are strongly connected indirectly through a central contact within the network (network hierarchy). In our sample, the network constraint score ranges from 12.8 to 78.2 (Mean: 41.7; SD = 12.69), which is comparable to entrepreneurial networks in the West.^[3]

Embeddedness of the difficult contact. The difficult person's contact-specific constraint c_{ij} on ego measures the embeddedness of the difficult contact. If ego and a contact are indirectly connected through multiple close shared third parties, the contact-specific constraint is high. We again multiplied scores by 100. The contact-specific constraint ranges between 0 and 29.6. The proportion of difficult contacts with a 0 contact-specific constraint is relatively large: 71 contacts (or 18.5 per cent) are isolates. To control for the related level effect on trust, we included a dummy variable with a value of 1 to mark these cases (*zero constraint*). As a logical derivation of Hypothesis 2, we expected a negative relation between this dummy variable and trust, given the absence of moderating voices.

Interaction between network closure and embeddedness of the difficult contact. To test Hypothesis 3, we constructed a binary variable with a value of 1 for ego networks that are more closed than the sample mean, and 0 otherwise (*high constraint*), and included an interaction term between high constraint and contact-specific constraint. We also used the product of the two linear measures as an alternative specification.

Control Variables

To avoid confounding effects and control for some of the obvious determinants of trust, we included personal characteristics and information regarding the breach.

Characteristics of ego. Levels of trust are, to some extent, person-specific, described by psychologists working from personality theory as a personal trait (Rotter, 1971); some people are more trusting than others. To account for such individual-level effects, we controlled for the average trust level between ego and all other contacts in ego's network (*average trust*). Further, we controlled for *gender* as a correlate of different network styles and types of network contacts in China (Burt, 2019) and a correlate of trust (Haselhuhn et al., 2015). Finally, we controlled for education (*years of schooling*), which prior studies confirmed as a correlate of network structure and of trust (Ibarra, 1992).

Attributes of the allegedly difficult person. As trust may vary with gender (Merluzzi, 2017), we held *gender* constant. Further, we held constant the number of years ego and the

difficult contact had known each other (*years known*). Our expectation was that recent acquaintances would be trusted less than older ones. Along similar lines, Burt and Luo (2019) found that the risk of being cited as a difficult contact decreased with the duration of a relationship.^[4] Finally, we explored the extent to which the *social role of the difficult person* influences ego's trust. Though research on the issue is ambiguous – Lount Jr and Pettit (2012) found a positive association, while Burt et al. (2018) found no confirmation for a social role-trust association – we controlled for social role relations. Respondents were asked to indicate all of the following social roles each contact occupied: family, neighbour, party associate, childhood friend, classmate, military associate, current colleague, former colleague, and other (respondents were asked to specify the role). For the difficult contact, the most frequently cited roles were colleague (144) and former colleague (83); 154 respondents stated that the difficult person belonged to the 'other' category. Regarding the nature of these 'other' contacts, respondents specified the following categories: customer (43), competitor (32), supplier (24), collaborator (16), friend (14), corporate governance (9), finance (6), government (6), and other business services (4). Our analysis includes the categories colleague, former colleague, and subcategories of the self-described category 'other'; in total, we include 11 dummy variables. Our benchmark category includes a variety of personal (non-business) roles and consists of 19 respondents that do not fall into any of the above-named categories, including family and friends.^[5] The sparse representation of family and friends may be surprising given the widespread perception of Asian businesses as family affairs. However, a closer look at the role distribution in our network shows that only 7.7 per cent of 2702 cited contacts are family. This is consistent with observations suggesting that by the early 2000s, Asian businesses had begun to resemble Western firms (Carney, 2005).

Nature and severity of the conflict. Even though each manager referred to what they regarded as the most difficult conflict in the current business year, we controlled for the nature and severity of the conflict. We follow previous studies that differentiated between integrity- and competence-based conflicts (Ferrin et al., 2007; Kim et al., 2004). The respondent descriptions of the alleged transgression range from a single phrase to more elaborate statements of up to 69 words. To avoid any author influence in the coding process, we asked two native speakers, graduate students currently enrolled at two different highly ranked Chinese universities, to code the nature and severity of each instance. The students did not know each other's identity and have never met.

We asked the coders to sort the descriptions into four categories: conflicts attributed to (1) a person's character (for instance, the respondent refers to ethics, honesty, attitude, etc.), (2) a person's competence (for instance, could not do their job, improper storage, etc.), (3) situational factors (for instance, poor response to a situation – supply shortage, financial crisis, etc.), and (4) other factors not fitting any of the prior three categories. Our coding has precedent in earlier social network survey research exploring factors predicting character assassination among American senior managers (Burt, 1999, 2005) and Chinese private firms' CEOs (Burt and Luo, 2019). With Cohen's kappa = 0.67 (SE = 0.03), the intercoder reliability passes as substantive (Landis and Koch, 1977) or good (Altman, 1991). In our analysis, we include the

categorical variable *blame* where ‘a person’s character’ serves as the reference group. As conflicts attributed to a person’s character tend to be the least likely to be forgiven (Kim et al., 2004), we expected positive coefficient estimates for the remaining categories (competence, situation, other).

Earlier work has rarely focused on the relationship between the severity of interpersonal conflicts and trust (Sharma et al., 2023), presumably due to the use of artificial scenarios, which at least nominally are identical. Yet even identical scenarios will be perceived differently by different people. In a business context, it is sensible to assume that the perceived severity of conflicts correlates with the incurred economic damage. This is consistent with the authors’ interview experience with CEOs operating small- and medium-sized firms in China. With access to bank loans continuing to be difficult and reliance on retained earnings high, profitability is a key concern. We therefore asked the coders to look for descriptions containing direct reference to monetary disadvantage (signalled by words such as profit, loss, money etc.). The intercoder agreement was again substantive and even slightly higher (Cohen’s kappa = 0.76, SE = 0.05). In our analysis, we include the dummy variable *damage*, with a value of 1 indicating a direct reference to monetary disadvantage. Clearly, not mentioning losses does not rule out the business experiencing a related loss. As an alternative, we therefore explored a four-category measure: (1) direct reference to profit, loss, money (20 per cent of events); (2) negative influence on the company’s resources (e.g., machinery, raw material, technology, assets) (55 per cent of events); (3) negative influence on future business opportunities (e.g., contracts, collaboration) (16 per cent of events); and (4) others which do not fall into the previous three categories (9 per cent of events). Since our results do not vary when using the four-category measure, we only present the binary variable *damage*.

Our results show no substantive difference between the two coders. We present results using codes produced by Coder 1 (Coder 2 results are available upon request). We return to the coding issue in our robustness tests.

Local context. To control for differences in the local policy environment, we included three dummy variables for city (Shanghai, Ningbo, and Hangzhou) and two for sector (automobile and IT). Table II provides a summary of means, standard deviations, and correlations of key variables.

RESULTS

Descriptive Results

We begin with a brief illustration of the bivariate association between the network structure around ego, the difficult person, and trust. Figure 3 shows mean values for ego’s trust in the allegedly difficult person (vertical axis) within five-point intervals of network constraint (horizontal axis in left panel) and within one-point intervals of contact-specific constraint of the difficult contact (horizontal axis in right panel). Note that Figure 3 uses raw data without any control variables. The association between constraint and trust is slightly positive, but the slope coefficient is extremely small (0.005) with a moderate

Table II. Summary statistics and correlations

	<i>Mean</i>	<i>SD</i>	<i>1</i>	<i>2</i>	<i>3</i>	<i>4</i>	<i>5</i>	<i>6</i>	<i>7</i>	<i>8</i>	<i>9</i>	<i>10</i>	<i>11</i>	<i>12</i>	
1	Ego's trust in difficult contact	2.44	1.12	1.00											
2	Constraint	41.75	12.69	0.04	1.00										
3	Contact-specific constraint	2.40	3.26	0.56	0.35	1.00									
4	Male (ego)	0.84	0.36	0.00	-0.06	-0.02	1.00								
5	Education (ego)	15.19	2.33	0.03	0.15	0.10	-0.02	1.00							
6	Male (difficult contact)	0.83	0.38	-0.12	0.02	-0.09	0.11	-0.01	1.00						
7	Contact duration (years)	5.72	5.01	0.36	0.01	0.27	-0.05	0.05	0.03	1.00					
8	Blame (1-4)	1.56	0.80	0.16	0.00	0.03	0.09	0.07	0.05	-0.03	1.00				
9	Damage	0.20	0.40	-0.02	-0.13	-0.06	0.00	-0.09	-0.01	-0.08	0.11	1.00			
10	Colleague	0.38	0.48	0.31	0.26	0.40	0.10	0.08	-0.02	0.01	0.05	-0.22	1.00		
11	Former colleague	0.22	0.41	-0.32	0.12	-0.17	-0.05	0.09	-0.03	-0.06	-0.14	-0.16	-0.33	1.00	
12	Other roles (0-9)	1.67	2.60	-0.22	-0.23	-0.26	0.00	-0.09	0.05	-0.13	0.03	0.13	-0.48	-0.26	1.00

Note: N = 384.

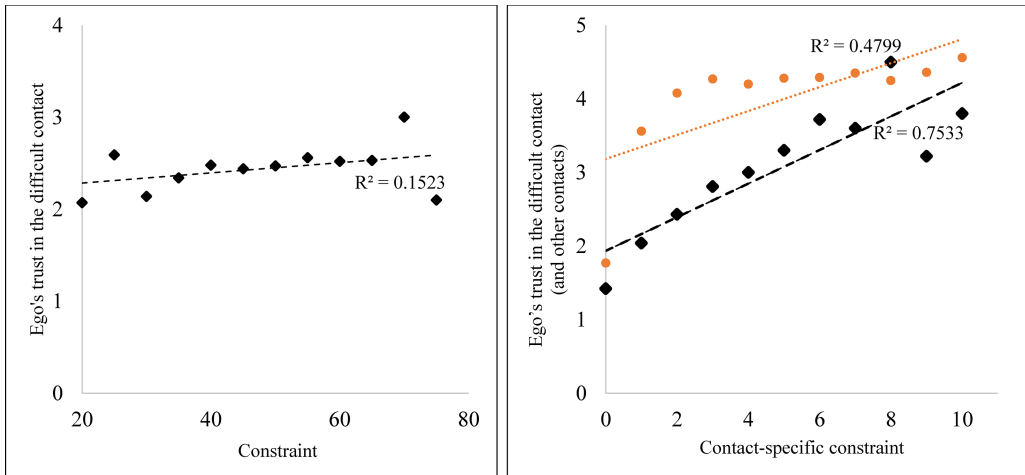


Figure 3. Trust defined by network constraint and embeddedness of the allegedly difficult contact

Notes: The left panel shows the zero-order association between ego's network constraint and trust in the difficult contact. Plotted scores are average values for five-point intervals of constraint. Rare levels of constraint smaller than 20 points are truncated to 20 points. Levels of constraint larger than 75 are truncated to 75. The right panel shows the zero-order association between the embeddedness of the difficult contact and ego's trust (rhombuses and dashed trend line). Plotted scores are average values for one-point intervals of embeddedness. Rare levels of embeddedness over 10 points (4.43 per cent of all observation) are truncated to 10 points. For comparison, circles and dotted trend line mark the respective association for other contacts.

$R^2=0.15$. In contrast, the association between the embeddedness of the difficult person and ego's trust is substantive (see right panel). The slope coefficient is 0.22 and the bivariate association is strong ($R^2=0.75$). Hence, ego's trust seems to depend strongly on the embeddedness of the difficult person in ego's network (Hypothesis 2). In fact, the most embedded contacts receive trust scores close to average trust levels in the network. Comparison with the embeddedness-trust association for contacts not seen as difficult (solid circles and dotted trend in the right panel of Figure 3) further highlights that difficult contacts require extreme levels of embeddedness to approach the level of trust bestowed on others not associated with a difficult situation. Trust in those others, in contrast, is high even with low levels of embeddedness (note the steep increase in trust between $c_{ij}=0$ and $c_{ij}=2$). Finally, and consistent with our embeddedness-argument, it is useful to note that the strong correlation between trust in difficult others and contact-specific constraint (0.56, Table II) is not driven by the number of shared third-party ties (bivariate correlation 0.22 with trust, not reported here) but hinges on the strength of alter-alter ties.

Baseline Estimations

Table III shows that the zero-order associations in Figure 3 are robust to person-specific and situational controls. Estimation results ($M1-M5$) are from Tobit specifications to account for the five-point scale of our dependent variable and the potential

Table III. Network structure determines ego's trust in the allegedly difficult contact

	M1	M2	M3	M4	M5	M5-II	M6	M7	M8
	Trust	Trust	Trust	Trust	Trust	Trust	Trust	High T	Low T
Constraint (ego)	-0.02** (0.00)	-0.01 (0.01)	-0.01 (0.01)	-0.01 (0.01)	0.00 (0.01)	-0.00 (0.00)	0.00 (0.01)	-0.00 (0.01)	0.01 (0.01)
Contact-specific constraint (of difficult contact)	0.24*** (0.03)	0.41*** (0.06)	0.35*** (0.06)	0.35*** (0.06)	0.33*** (0.05)	0.24*** (0.04)	0.44*** (0.09)	0.39*** (0.07)	-0.33*** (0.09)
Contact-specific const. × high const.	-0.19** (0.06)	-0.19** (0.06)	-0.16** (0.06)	-0.15** (0.06)	-0.17*** (0.05)	-0.11** (0.04)	-0.17** (0.04)	-0.16* (0.07)	0.19* (0.09)
Contact-specific const. × constraint							-0.00** (0.00)		
Zero constraint	-1.19*** (0.21)	-1.06*** (0.20)	-1.02*** (0.20)	-0.98*** (0.19)	-0.82*** (0.20)	-0.46*** (0.11)	-0.84*** (0.20)	-0.12 (0.46)	1.05*** (0.29)
Male (ego)			0.14 (0.18)	0.10 (0.18)	0.04 (0.17)	0.03 (0.12)	0.04 (0.17)	-0.24 (0.26)	-0.10 (0.23)
Education years (ego)			-0.02 (0.02)	-0.03 (0.02)	-0.01 (0.02)	-0.00 (0.02)	-0.00 (0.02)	0.01 (0.04)	0.02 (0.04)
Average trust (ego-alterns)			0.14 (0.18)	0.14 (0.19)	0.13 (0.19)	0.10 (0.15)	0.20 (0.19)	0.04 (0.28)	-0.06 (0.22)
Male (difficult contact)			-0.19 (0.16)	-0.23 (0.16)	-0.28 [†] (0.16)	-0.21 (0.13)	-0.33* (0.16)	-0.60* (0.24)	0.15 (0.22)
Years known			0.05*** (0.01)	0.05*** (0.01)	0.05*** (0.01)	0.04*** (0.01)	0.05*** (0.01)	0.05* (0.02)	-0.05** (0.02)
Blame (competence)				0.46** (0.15)	0.19 (0.15)	0.16 (0.13)	0.24 (0.15)	0.37 (0.28)	-0.26 (0.22)

(Continues)

Table III. (Continued)

	M1	M2	M3	M4	M5	M5-II	M6	M7	M8
	Trust	Trust	Trust	Trust	Trust	Trust	Trust	High T	Low T
Blame (situation)				0.56*** (0.15)	0.55*** (0.14)	0.39*** (0.11)	0.52*** (0.14)	0.62* (0.26)	-0.42* (0.21)
Blame (other)				0.39 (0.79)	0.15 (0.74)	0.09 (0.65)	0.19 (0.81)	-0.03 (0.94)	0.41 (0.71)
Damage				0.12 (0.14)	-0.11 (0.14)	-0.08 (0.11)	-0.11 (0.14)	-0.09 (0.26)	0.05 (0.22)
Colleague				-0.14 (0.26)	-0.14 (0.26)	-0.13 (0.19)	-0.19 (0.26)	-0.61 [†] (0.36)	0.11 (0.32)
Former colleague				-1.00*** (0.25)	-1.00*** (0.27)	-0.74*** (0.20)	-1.01*** (0.28)	-1.42*** (0.44)	0.90*** (0.38)
Customer				0.06 (0.78)	0.06 (0.78)	-0.03 (0.71*)	0.05 (0.82) [†]	-0.54 n.a.	-0.07 (0.99)
Government contact				(0.49)	(0.49)	(0.33)	(0.49)		(0.73)
Friend				-0.13 (0.40)	-0.13 (0.40)	-0.13 (0.32)	-0.13 (0.39)	-0.22 (0.44)	0.24 (0.44)
Supplier				-0.30 (0.30)	-0.30 (0.30)	-0.32 (0.23)	-0.36 (0.31)	-0.74 (0.54)	0.14 (0.43)
Corporate governance				-0.43 (0.40)	-0.43 (0.40)	-0.42 (0.32)	-0.44 (0.40)	-1.09* (0.49)	-0.38 (0.71)
Collaborator				-0.05 (0.32)	-0.05 (0.32)	-0.17 (0.26)	-0.05 (0.32)	-0.04 (0.48)	0.84 [†] (0.47)

(Continues)

Table III. (Continued)

	M1	M2	M3	M4	M5	M5-II	M6	M7	M8
Competitor	Trust	Trust	Trust	Trust	Trust	Trust	Trust	High T	Low T
					-1.02** (0.36)	-0.70** (0.21)	-1.03** (0.36)	-0.53 (0.61)	1.49* (0.58)
Finance contact					-0.02 (0.69)	-0.22 (0.44)	-0.02 (0.69)	n.a.	-0.18 (0.81)
Other business services contact					0.84** (0.30)	0.40 (0.25)	0.82** (0.31)	n.a.	-0.81 (0.68)
Constant	2.64*** (0.20)	2.14*** (0.23)	1.48† (0.84)	1.42† (0.85)	1.56† (0.93)	2.04** (0.72)	1.36 (0.97)	-1.23 (1.35)	0.05 (1.18)
Specification	Tobit	Tobit	Tobit	Tobit	Tobit	OLS	Tobit	Probit	Probit
Pseudo R ² /Adj. R ²	0.161	0.172	0.186	0.201	0.246	0.498	0.243	0.401	0.326

Notes: N = 384. Robust standard errors in parentheses. Blame (character) is omitted as a reference group. All models include dummy variables for city and industry (not reported here); coefficient estimates for city and industry are not statistically significant. In M7, high trust is defined as trust values of ≥4; in M8, low trust is defined as trust values ≤2. ***p < 0.001; **p < 0.01; *p < 0.05; †p < 0.10.

left and right censoring, with trust values bounded by 1 and 5, respectively. We expand the model specification stepwise. We begin, in *M1*, with no controls and focus on the social structure around ego (Hypothesis 1) and the allegedly difficult person (Hypothesis 2) without inclusion of the interaction term (Hypothesis 3). We then add the interaction term (*M2*), personal attributes (*M3*), situational controls (*M4*), and the social role of the difficult contact (*M5*). Hypothesis 3 specifies interaction effects between network closure around ego and embeddedness of the difficult contact therein. *M6* tests a broader interpretation of Hypothesis 3 by interacting the two network variables as linear measures. *M7* and *M8* employ probit model specifications, testing whether our results hold for extreme cases of relatively high and low trust in spite of the conflict. *M7* predicts the likelihood of high trust scores ≥ 4 and *M8* predicts the likelihood of scores ≤ 2 . All specifications include city and sector fixed effects and robust standard errors. The variance inflation factor (VIF) values of variables suggest multicollinearity is not a concern (Kutner et al., 2004).

As may be expected based on Figure 3, no specification (except *M1*) shows the predicted negative association between constraint and trust, which rejects Hypothesis 1. Instead, statistically significant variation in trust comes from the embeddedness of the allegedly difficult contact (Hypothesis 2). The more ego and the difficult person are jointly invested in other contacts, the higher the trust in the difficult contact, a finding that is also consistent with Krackhardt's (1998) observation that embedded relations tend to be more stable than unembedded relations. Across models *M1* to *M5*, coefficient estimates are significant at the 0.1 per cent level and range between $\beta = 0.24$, $t\text{-test} = 7.85$ without control variables (*M1*) and $\beta = 0.33$, $t\text{-test} = 6.66$ with all control variables (*M5*).^[6] The complete absence of shared contacts reduces trust by 0.82, $t\text{-test} = -4.17$ (*M5*). In *M5*, the respective average marginal effect of contact-specific constraint on the expected value of trust is estimated as 0.26 ($t\text{-test} = 6.99$). Estimation results also support Hypothesis 2 when we use the linear constraint measure in the interaction term (contact-specific constraint * constraint) in *M6*. Use of an OLS specification (see model *M5-II*) produces very similar results.^[7]

We further explored *M5-II* to see whether results for our core predictors *constraint*, *contact-specific constraint*, and *contact-specific constraint* \times *high constraint* might be due to an omitted variable bias. For *constraint*, the omitted variable would have to be correlated at 0.26 with the outcome and at 0.26 with the predictor of interest (conditioning on observed covariates) to invalidate our results. For *contact-specific constraint* the respective correlation would have to be 0.47 with the outcome and the predictor, and for the interaction term the respective correlation with outcome and predictors would have to be 0.24 and -0.24 . This implies that, to invalidate our findings, the minimum impact of the omitted variable would have to be 2.28 times larger than the influence of relationship length for *contact-specific constraint*, and 1.14 times larger for the interaction term. Given the well-grounded effect of relationship duration on network structure and trust, it is highly unlikely to have omitted a variable in the same or an even higher impact category (see Busenbark et al., 2022).^[8]

A legitimate question is whether the embeddedness effect mirrors a bridge-tie effect. Of the 151 bridge ties among the 384 difficult contacts in the sample, 71 are unembedded and could be driving trust between ego and the difficult contact. However, controlling for

bridge position adds nothing to the prediction (results are available upon request). The coefficient estimate for bridge contacts is positive and not significant at conventional levels (t -test = 1.77), and the size and statistical significance of predicted network effects are comparable to those reported in *M5* (contact-specific constraint $\beta = 0.35$, t -test = 6.70; for unembedded contacts $\beta = -0.97$, t -test = -4.72).

Hypothesis 3 predicts that the positive association between embeddedness (and related information flows) and trust is smaller if ego is embedded in a closed network. We find robust support for this. The influence of shared third-party ties is weaker if ego is surrounded by a relatively closed network. For the complete model (*M5*), the coefficient for the interaction term is $\beta = -0.17$, t -test = -3.64 , that is, network closure around the difficult contact reduces the effect by 51.5 per cent compared to an open network structure (the respective marginal effect on the expected trust value is -0.13 , t -test = -3.70). *M6* confirms the negative interaction between social embeddedness of the difficult contact and ego's network constraint ($\beta = -0.005$, t -test = -3.07). Both probit estimations (*M7* and *M8*) test the likelihood of extremely high (trust ≥ 4) and extremely low (trust ≤ 2) trust values following a conflict. All results are consistent with our Tobit and OLS specifications, and the direct association between network closure and dyadic trust remains statistically insignificant.

Figure 4 builds on *M6* to show the association between network structure and predicted trust values. We computed marginal effects for the two network measures, keeping all other variables at the mean of the estimation sample. Sample values for contact-specific constraint are set at the sample median (green line, circles), the sample mean (blue line, rhombus), and one standard deviation above the sample mean (red line, squares). Sample values for network constraint around the accuser are ± 2 standard deviations around the sample mean (41.7). All marginal effects are statistically significant at 0.1 per cent level and all three lines are pairwise statistically different from each other. Figure 4 shows that the least trusted allegedly difficult contacts following a violation are those located at the margins of ego's network (green line, circles; contact-specific constraint = 1.3). Trust varies only marginally, with 2.2 for low and 1.9 for high network closure around ego. In contrast, difficult contacts who are relatively well connected within ego's network (red line, squares, with contact-specific constraint set one standard deviation above the mean) continue to enjoy relatively high levels of trust. The most trusted difficult contacts are those on the left end of the red line; these are highly embedded in otherwise relatively sparsely connected ego networks. Note that at the far left (with a network constraint score of 16.5, two standard deviations below the sample mean), predicted trust following violations is as high as 3.8. The same embeddedness of the difficult contact in a relatively closed network around ego (67.1, two standard deviations above the sample mean) is associated with an average trust score of 2.4. Briefly, difficult contacts who – in spite of their missteps – enjoy high trust are deeply entrenched in otherwise relatively sparse networks.

Returning to Table III, only a few of the control variables add explanatory power to our social explanation of trust following interpersonal conflicts.^[9] Trust levels vary depending on blame attribution. Trust is higher if cited conflicts are associated with situational factors (see *M5*). Interestingly, damage is not statistically significant at conventional levels. Responses are equally explained by the same social mechanisms, independent of variable economic consequences.

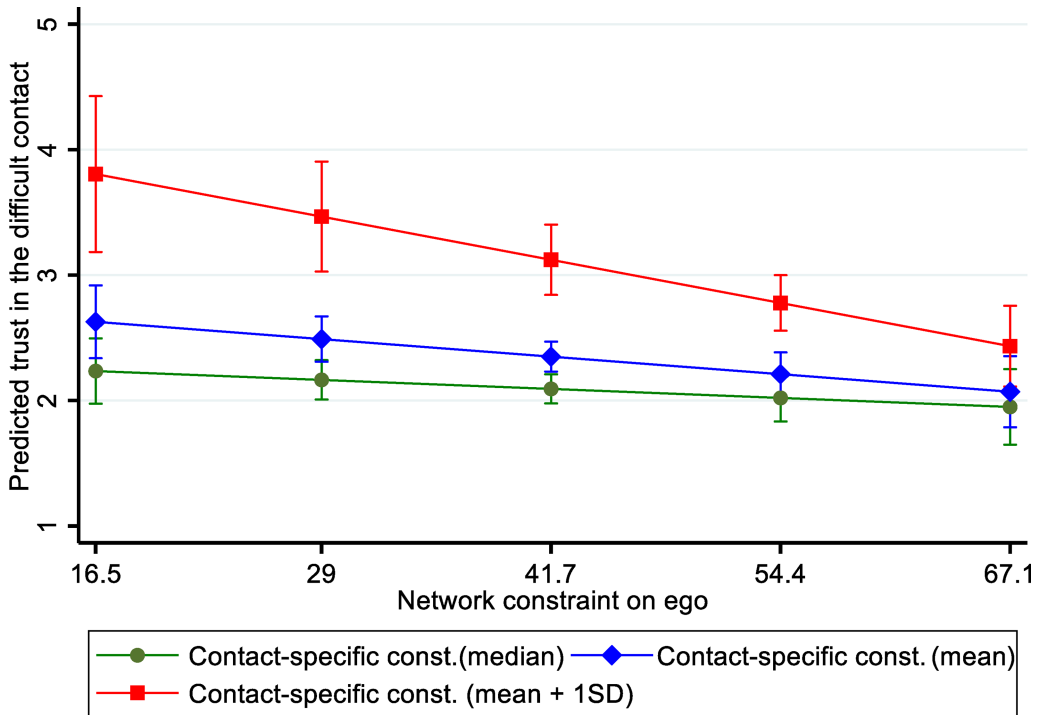


Figure 4. Network embeddedness of the allegedly difficult contact increases ego's trust following a conflict, especially in open ego networks

Notes: Constraint around ego is presented for the mean value 41.7 ± 2 SD (with 1 SD = 12.7). Median contact-specific constraint is 1.3, mean is 2.4 with 1 SD = 3.3. Predictions are with 95 per cent confidence intervals. All three lines are pairwise statistically different from each other (rhombus vs. circle: $\beta = -0.005$, t -test = -3.07 ; square vs. rhombus: $\beta = -0.016$, t -test = -3.07 ; square vs. circle: $\beta = -0.021$, t -test = -3.07).

The number of years that ego and the difficult person have known each other is positively linked with trust.^[10] We were curious to see at which point social structure around the difficult contact would lose its discernible positive influence on trust. As we excluded longer acquaintances, 1 year at a time, all balancing effects associated with embeddedness disappeared for acquaintances known for more than 9 years. Thus, from ego's perspective, social opinion becomes irrelevant when the difficult person has been known for a considerable time. The fading effect over time reinforces our assertion that social embeddedness is ultimately a signal of information breadth, a feature that loses its value in very mature relations.

Finally, pronounced status differences between the respondent and the difficult contact seem not to play a major role in determining trust. Current colleagues – who naturally have a lower status in the CEO's organization and are more tightly controlled than any of the external actors – do not experience a more lenient response than others. The same result undermines the idea that CEO trust reflects cultural specifics such as paternalism – a common leadership style proposing local CEOs tend to treat their employees as extended family (Li, 2008; Zhang et al., 2015).

Robustness

We explored three key questions to scrutinize our baseline findings: (1) potential concerns on endogeneity and reverse causality, (2) alternative measures, and (3) alternative explanations.

Endogeneity and reverse causality. People embedded in closed networks are more likely to form in-group consensus on what is right and wrong. Thus, they may be less likely to stand out as difficult, and if they do, the behavioural deviation may be small. The positive association between embeddedness and trust could therefore be due to the fact that no economic damage occurred in the first place. Though theoretically possible, our data does not support such a scenario. A zero-order correlation between contact-specific constraint and conflicts associated with an economic loss is negligible (corr. = -0.06 , $p = 0.248$). To rule out the possibility that some respondents suffered economic consequences they simply did not mention, we combined reported conflicts that either mentioned direct losses or any negative influence on company resources and confirmed an insignificant zero-order correlation (corr. = -0.05). Standard mean comparison tests show no significant difference of the mean contact-specific constraint across CEOs with either direct losses or implications for the company's resource base compared to those who mentioned neither direct nor indirect economic effects ($t = 0.904$).

The respondent's recollection of network contacts could also theoretically be affected by negative events. The risk seems limited, because the reported conflict happened within the months preceding the survey while reported ties were part of ego's network over multiple years (the mean for difficult contacts is 5.72 years, the mean for other contacts is 11.81 years). However, one could still argue that the positive association between embeddedness of the difficult contact and trust shows that the reported third-party ties only persist *because* the reported conflict was not substantial from the third party's perspective. Had it been substantial, third-party ties might no longer exist. The point is well-taken, but does not undermine our argument. If ties persist *because* the incident was ultimately minor from the third party's perspective, then it is likely that ego was presented with alternative accounts balancing their opinion. Thus, the reported alter-alter ties may theoretically be endogenous to the severity of the violation (as perceived by the shared alter contacts), but this type of network endogeneity would not affect the quality of opinion presented to ego. The social mechanism and causality would remain in place.

We also explored another, less likely, form of endogeneity. Theoretically, ego could intendedly or subconsciously underreport de-facto existing alter-alter ties in cases of serious conflicts (*'because I am so angry, I will not acknowledge others still deal with this difficult person'*). In this scenario, the 'acknowledged' embeddedness of the difficult contact would be downward biased if underlying conflicts were perceived as extreme. The positive coefficient estimate of embeddedness would not signal information brought to ego by shared third-party contacts, but would capture ego's independent evaluation reflected in the acknowledged ties. While there is no theory supporting such behaviour in general, we can infer from our data whether such behaviour may have biased our

results. To do so, we focused on those difficult contacts who reportedly have no ties with other contacts in ego's network. Our logic is: The complete lack of ties is more likely for contacts who are not part of ego's daily business routines; contacts embedded in ego's daily work environment and who ego meets on a daily or weekly basis, in contrast, should have some third-party ties in common with ego. Hence, finding a large number of unconnected difficult contacts that belong to the second group would be a signal of false reporting. This is not the case. Among the 151 cited contacts who do not share any third-party ties with ego, 32 are described as former colleagues, 95 fill 'other roles', and only the remaining 24 are current colleagues. Low contact frequency suggests that false reporting is unlikely; 90 per cent of the 151 unconnected contacts are seen either less than monthly ('rarely') or monthly. In sum, the systematic underreporting of alter-alter ties is unlikely to drive the positive association between the embeddedness of difficult contacts and ego's trust.

Measurement. We asked two independent coders to code the nature of the reported incident to rule out author manipulations. While the intercoder reliability is good by commonly accepted standards, we wanted to ensure our results were not driven by disputed assessments. We therefore conducted a sub-sample analysis of the 285 observations both coders assessed identically. Table IV summarizes our results. *M9–M12* replicate *M5–M8* in Table III. Results in all specifications confirm that highly embedded contacts enjoy relatively high trust, but less so if ego is in a closed network.

But are the reported conflicts sufficiently grave to affect a manager's trust in the difficult contact? After all, differences in trust could have occurred for other reasons. To address this concern, we conducted a sub-sample analysis focusing on instances in which difficult contacts were criticized for their character or competence. Both factors are well-established predictors of trust (Kim et al., 2004; Mayer et al., 1995). *M13–M15* in Table IV replicate our baseline model (*M5*) with coding results from Coder 1, Coder 2, and both coders, respectively. Again, highly embedded contacts are trusted more, but less so if ego is in a closed network. These results also hold when we only consider conflicts blamed on the bad character of the difficult contact. Clearly, in these cases, one can be relatively sure that interpersonal trust is affected (Tomlinson and Mryer, 2009).

Finally, we explored alternatives to measure conflict severity. In our main analysis, we used notions of economic damage as a signal of severity. Here we explore feelings of psychological loss or negative emotions as an alternative signal of severity. To construct a range of emotional measures, we used Linguistic Inquiry and Word Count (LIWC 2022 version), an established dictionary-based language analysis tool also available for Chinese language input. We focused on affect, namely positive and negative emotions, and specific aspects of negative emotions such as anxiety, anger, and sadness (see Tausczik and Pennebaker, 2010, who developed the software; see Burt, 2010; Srivastava et al., 2018, for using LIWC coding for English texts; and Huang et al., 2012 for Chinese texts). Most words (72 per cent of a respondent's description) were covered by the LIWC dictionary; expressions not covered typically referred to product types and technical jargon. Table SI in the Supporting Information has the results. Replacing the damage measure with any of the emotional measures does not change our main results (*M5.1–M5.3*). Reassuringly, our main results remain unchanged

Table IV. Different samples and measurements

	M9	M9-II	M10	M11	M12	M13	M14	M15
	<i>Trust</i>	<i>Trust</i>	<i>Trust</i>	<i>High T</i>	<i>Low T</i>	<i>Trust</i>	<i>Trust</i>	<i>Trust</i>
Constraint (ego)	-0.00 (0.01)	-0.00 (0.00)	-0.00 (0.01)	-0.01 (0.01)	0.01 (0.01)	-0.00 (0.01)	-0.00 (0.01)	-0.00 (0.01)
Contact-specific constraint	0.32*** (0.05)	0.23*** (0.04)	0.33*** (0.09)	0.48*** (0.09)	-0.32*** (0.09)	0.30*** (0.05)	0.27*** (0.06)	0.29*** (0.06)
Contact-specific constraint × high const.	-0.16** (0.05)	-0.11** (0.04)		-0.21* (0.09)	0.18* (0.09)	-0.14** (0.05)	-0.15** (0.06)	-0.15** (0.06)
Contact-specific constraint × const.			-0.00 [†] (0.00)					
<i>Specification</i>	Tobit	OLS	Tobit	Probit	Probit	Tobit	Tobit	Tobit
<i>Observations</i>	285	285	285	273	280	316	288	237
Pseudo R ² /Adj. R ²	0.259	0.506	0.253	0.474	0.328	0.260	0.272	0.277
<i>Coder</i>	Both	Both	Both	Both	Both	Coder 1	Coder 2	Both

Notes: M11 and M12 have less than 285 observations because a few observations dropped out due to collinearity. M13 and M14 contain observations that Coder 1 and Coder 2 interpreted as conflicts due to character or competence, respectively. M15 contains observations that both coders assessed identically. Robust standard errors in parentheses. All estimations include the same set of control variables as M5 in Table III. ***p < 0.001; **p < 0.01; *p < 0.05; †p < 0.10.

even when we hold constant blame, damage, and emotional measures simultaneously ($M5.4-M5.6$).^[11]

Alternative explanations. Could the demonstrated association between the difficult contact's embeddedness and the interaction with network closure around ego depend on the respondent's status (Lount Jr and Pettit, 2012)? While we worked with a highly homogenous sample of respondents with comparable status as CEOs of medium-sized enterprises in two select industries, we probed for any individual status differences that might influence trust. However, correlation coefficients between constraint and variable proxies of respondent status do not support this narrative. Constraint and personal income, as well as constraint and self-perceived industry status, are only weakly (and positively) correlated (corr. 0.12 and 0.09, respectively). The additional inclusion of both measures in our baseline estimation leaves our main results unchanged (contact-specific constraint: $\beta = 0.34$, $t\text{-test} = 6.56$; interaction term: $\beta = -0.18$, $t\text{-test} = -3.62$). Both added proxies for CEO-status are statistically insignificant, with $\beta = -0.01$, $t\text{-test} = -0.13$ and $\beta = 0.04$, $t\text{-test} = 1.20$, respectively. We produced similar results using company's return on assets or profits. Respondent status and status differences seem not to be driving our results.

DISCUSSION

What explains whether difficult people are trusted? Our study explores the social situation around the trustor–trustee dyad as a neglected social explanation. At the core of our relational framework are two mutually related mechanisms linking the social structure around the trustor (ego) and the difficult contact with ego's trust response: (1) ego's embeddedness as a forcing function of behavioural preferences and (2) the trustee's social embeddedness as a signal of information access. Using data from 384 Chinese CEOs reporting critical interpersonal conflicts in their business networks, we have two main findings: First, allegedly difficult contacts relationally embedded within ego's network tend to enjoy higher trust than unembedded contacts associated with a similar incident. Second, the positive association between social embeddedness and trust declines with network closure around ego. Jointly, these findings confirm the significant role social networks and network position play in shaping interpersonal trust, especially following a critical conflict.

Our approach bridges two literatures that have largely developed in isolation despite their shared interest in interpersonal trust: trust repair and social network theory. We see two broader contributions. First, the trust repair literature gains a social component. While this literature has largely focused on personal attributes, situational factors, and behavioural responses inside the trustor–trustee dyad (for review see Sharma et al., 2023), behavioural responses were explored in isolation, abstracting from the specific social structure around the conflicting parties (Kim et al., 2004; Kramer and Lewicki, 2010; Tomlinson et al., 2004). The demonstrated relational effect associated with network position and strength of shared third-party ties, however, suggests a number of possible implications that may lead to a socially embedded conceptualization of repair strategies. For instance, the effectiveness of variable forms of information (Shapiro, 1991), language of apology (Ferrin et al., 2007), compensation

(Desmet et al., 2011), and involvement of mediators (Yu et al., 2017) may well vary with the relational embeddedness and network position of participating parties.

Second, our findings contribute to the network perspective on interpersonal trust (McEvily et al., 2021; Schilke et al., 2021) and its long tradition of treating interpersonal trust as a social construct (Burt and Burzynska, 2017; Burt and Knez, 1995; Chua et al., 2008; Ferrin et al., 2006). In spite of a well-established consensus that closure helps in detecting and penalizing bad behaviour, and facilitating trust and stable cooperation in closed networks (Coleman, 1988; Ellickson, 1991; Granovetter, 1985; Greif, 1989; Piskorski and Gorbatai, 2017), the literature has largely bypassed the question of how social structure explains trust following interpersonal conflicts. Our results show that after a transgression, it is the combined influence of network structure around ego and relational embeddedness of the difficult contact that matters. Somewhat counterintuitively, closure around difficult contacts – the same mechanism that is largely interpreted as social protection against transgressions – also helps to maintain trust once transgressions have happened, though the association appears to be weaker than for positive and neutral contacts (see Figure 3).

There are practical implications, too. An obvious intervention strategy for team leaders managing work conflicts would be to activate shared ties as mediators in an effort to rebuild trust (Yu et al., 2017). Mediators who are relationally embedded and linked with both parties seem better positioned to alleviate tensions and increase trust, yet mediators are typically chosen based on their status and track record. Similarly, team assignments bringing together the triad of accuser, difficult contact, and shared contact, may be effective in reducing work conflicts and improving trust as they necessarily keep the conversation going. The worst response would be to leave the allegedly difficult person isolated, with likely consequences for team cooperation and effectiveness.

At this point we can only speculate how cooperation with difficult, still trusted contacts will evolve. However, our survey allows some tentative inferences. Respondents were asked to assess with which individuals in their network they would consider entering a joint venture. As in the trust question, respondents were asked to use a scale from 1 to 5 to indicate their willingness to collaborate. The correlation coefficient between trust and collaboration is considerable (0.69) and positive across all sample contacts ($n = 2702$). However, there is an interesting comparison between the group of difficult contacts ($n = 384$) and all remaining contacts ($n = 2318$). Whereas the correlation between trust and collaboration is 0.71 for the group of allegedly difficult people, it is only 0.39 for the remaining contacts, suggesting that trust may be an even stronger antecedent for cooperation once a contact is labelled as ‘difficult’. While answers to hypothetical questions do not carry much weight, they show that highly embedded (and therefore trusted) contacts have the best chance of playing an active role in future transactions.

Limitations and Future Research

We acknowledge a number of limitations, each of which offers a springboard for future research. The first is related to our research setting. We collected data in global,

cosmopolitan Chinese cities with deep connections to Western culture. Given the increasing number of studies undermining cultural contingency arguments (see Batjargal et al., 2013; Burt, 2019; Burt and Batjargal, 2019; Burt and Burzynska, 2017), we are relatively confident that we have highlighted a general social mechanism rather than a cultural peculiarity. However, this does not rule out the possibility of significant level effects when replicating our study in different regions and country settings. A common claim, for instance, is that trust transference may be more relevant in collectivist than in individualist cultures (Doney et al., 1998). Some also claim that interpersonal trust in China – and more generally in countries with weak formal institutions – is more personalized and dependent on network ties than in the West (Li, 2008).

While these concerns may be valid, such differences between China and the West are likely to play out in effect size, not in the social mechanism or its direction. Comparative studies show that trust in shared contacts is generally higher than in isolates – whether in China or in the West (Burt, 2019; Burt et al., 2018). Further, there is little reason to believe that the claimed cultural differences are particularly pronounced in our sample. Compared with other more traditional and less cosmopolitan regions, China's Yangtze Delta region is associated with relatively low values in interpersonal relatedness (Confucian traits) such as traditionalism, face, discipline, and harmony (Obschonka et al., 2019). One can therefore be relatively sure that our results are not culturally inflated. If anything, we would expect to find even larger effects in more traditional settings characterized by higher values of interpersonal relatedness. Also, professional groups with lower status and less international involvement than entrepreneurs and CEOs may cultivate different types of networks. To what extent such differences matter is an empirical question for future research.

Building on the initial corroboration of our relational argument, a natural second step would be to collect more detailed information describing the trust repair efforts of shared third-party ties and examine other factors in the trust rebuilding process, such as ego's forgiveness. For instance, experimental research on trust repair suggests that the mediator's style of communication matters (Yu et al., 2017) and that apology facilitates forgiveness (Grover et al., 2019). However, it is unclear to what extent trust is mediated by ego's forgiveness. Equally unclear is whether results from these vignette studies replicate in real-life settings when holding constant the social structure around ego, difficult contact, and alters. It is entirely possible that mutual closeness rather than tactics turns out to be a dominant effect.

Future research could also focus on more narrowly defined sources of conflict. For instance, one might suspect that conflicts in financial matters may have different confounding effects than issues that arise in research collaborations. Putting the empirical focus on more homogenous cases is therefore likely to provide additional insights. Relatedly, it remains an open question whether social structure has similar effects on trust if legal action would be viable to redress the disputed behaviour. Does social opinion modify individual responses to illegal activities, or is the balancing effect of social opinion limited to cases that lack legal and normative guidance regarding the severity of bad behaviour?

Finally, as with all cross-sectional surveys, possible omitted variable bias and endogeneity – even if unlikely to be a dominant effect in our specific setting – calls for other forms of corroboration. Even though we have shown that the estimated minimum impact of an omitted variable required to invalidate the reported effects makes a critical omitted variable bias unlikely, dynamic data would offer additional insights. For

instance, one could explore to what extent trust following a conflict hinges on prior trust. Such research design, however, is challenging in the context of network studies. Though laboratory experiments have been widely used in the trust literature studying responses to manipulated conflicts (Haselhuhn et al., 2015; Lount Jr and Pettit, 2012), social history and learned social behaviour are difficult to model in laboratory situations; bringing participants with strained relations into a lab setting adds another complication. Longitudinal archival studies building on email records and semantic analysis of complete community networks (instead of egocentric network data) offer an alternative path, but access to email content is generally not granted due to tightened data protection regulations. Also, community networks may not capture a comparable incidence severity, as choices to cite a difficult contact are limited to a defined roster of people. Relatedly, nominations of difficult contacts in community networks may be the outcome of gossip and social influence in broader communities (Burt, 2005).^[12]

CONCLUSION

Closed networks are perceived as a safe haven of mutually beneficial or acceptable business conduct. Closure around difficult contacts, however, can also increase their chance to be considered trustworthy despite past offences. Our findings offer insights into social situations that may facilitate the continuation of trust and even cooperative relations after transgressions. Naturally, there is a downside too: A group's opinion is not necessarily superior to one's own. There is some risk that opinion articulated publicly does not reflect private preferences (Kuran, 1995), a risk more common if power relations are asymmetric. Even if honest opinions are shared, it is still possible that such information is not superior to ego's own judgement. After all, only the future will tell whether renewed trust was deserved or misplaced.

ACKNOWLEDGMENTS

Sonja Opper is grateful to the Marcus and Marianne Wallenberg Foundation for financial support of the data collection jointly conducted with Ronald S. Burt (University of Chicago and Bocconi University) and to Bocconi University for financial support during the work reported here. For helpful comments on draft manuscript, we are grateful to Ronald S. Burt, and all four JMS reviewers. We also thank Yulian Cao, Grace Liu and Tan Li for excellent research support. Open Access funding enabled and organized by Projekt DEAL.

NOTES

- [1] Schachter's (1951) classic experiment is a good reminder of the social consequences those who deviate from common opinion around the accuser should expect. Confederates argue extreme positions in group discussions on the just response to a juvenile delinquent. When the confederate will not converge with the group's assessment, communication typically stops and the confederate is avoided in future group meetings.
- [2] The provided free-text descriptions of our survey confirm our point. No one received cognition-based negative evaluations describing a contact as arrogant or belligerent as in Brennecke's (2020) dissonant ties. Instead, contacts are associated with financial losses (20%), negative implications for the company's resources (55%), or missed business opportunities (16%).

- [3] Network constraint may be larger than 1 when the network size is 3 or smaller (Everett and Borgatti, 2020). However, no CEO reported fewer than 4 contacts.
- [4] Other studies have controlled for ‘closeness’ between both contacts, showing that contacts that the respondent feels close to are less frequently cited as difficult (Burt, 1999). However, closeness is as much a predictor of trust as the outcome of difficult situations.
- [5] The 19 contacts are family (9), childhood friend (3), classmate (3), neighbour (2), party friend (1), and contact from the military (1).
- [6] We conducted a sub-sample analysis focusing only on third parties with weak ties to the difficult contact. Still, highly embedded difficult contacts enjoy relatively high trust ($\beta = 0.38$, t -test = 5.29). This is consistent with our logic that any shared third-party ties increase ego’s chance of coming across balancing opinions.
- [7] We show that the positive influence on ego’s trust is rooted in the difficult contact’s embeddedness in ego’s social network (which includes the strength of alter-alter ties), rather than in a simple count of shared contacts. To this end, we replaced *contact-specific constraint* with number of *shared third parties*. In M1 for instance, the coefficient estimate for *shared third-party ties* is $\beta = 0.02$ (t -test = 0.48). The Pseudo R^2 drops correspondingly from 0.16 to 0.08. When further replacing *zero constraint* with *network size* as a control variable, third-party ties become significant ($\beta = 0.24$, t -test = 5.83), yet the Pseudo R^2 only reaches 0.03.
- [8] Calculations with *konfoud* (stata).
- [9] Our results remain robust when excluding ego’s average trust level for other contacts (contact-specific constraint: $\beta = 0.34$, t -test = 6.66; interaction term: $\beta = -0.18$, t -test = -3.75).
- [10] We probed whether elapsed time between the conflict and interview influenced ego’s trust. Controlling for the interview time does not change our results (contact-specific constraint: $\beta = 0.33$, t -test = 6.63; the interaction term: $\beta = -0.17$, t -test = -3.65). Time is insignificant ($\beta = -0.03$, t -test = -1.74).
- [11] Contact-specific constraint is positively correlated with negative emotion (corr. = 0.12, $p = 0.02$), which corroborates that the positive embeddedness-trust association is not driven by low conflict severity.
- [12] Burt (2005) reports a positive association between shared third-party contacts and being seen as a ‘difficult contact’.

REFERENCES

- Altman, D. G. (1991). *Practical Statistics for Medical Research*. London: Chapman & Hall.
- Antonucci, T. C., Arjouch, K. J., Webster, N. J. and Birditt, K. S. (2018). ‘Social networks and forgiveness: The role of trust and efficacy’. *Research in Human Development*, **15**, 3–20.
- Bail, C. A., Argyle, L. P., Brown, T. W., Bumpus, J. P., Chen, H., Hunzaker, M. B. F., Lee, J., Mann, M., Merhout, F. and Volfovsky, A. (2018). ‘Exposure to opposing views on social media can increase political polarization’. *Proceedings of the National Academy of Sciences*, **115**, 9216–21.
- Batjargal, B., Hitt, M. A., Tsui, A. S., Arregle, J. L., Webb, J. W. and Miller, T. L. (2013). ‘Institutional polycentrism, entrepreneur’s social networks, and new venture growth’. *Academy of Management Journal*, **56**, 1024–49.
- Brass, D. J., Butterfield, K. D. and Skaggs, B. C. (1998). ‘Relationships and unethical behavior: A social network perspective’. *Academy of Management Review*, **23**, 14–31.
- Brennecke, J. (2020). ‘Dissonant ties in intraorganizational networks: Why individuals seek problem-solving assistance from difficult colleagues’. *Academy of Management Journal*, **63**, 743–78.
- Burt, R. S. (1982). *Toward a Structural Theory of Action: Network Models of Stratification, Perceptions, and Action*. New York: Academic Press.
- Burt, R. S. (1992). *Structural Holes: The Social Structure of Competition*. Cambridge, MA: Harvard University Press.
- Burt, R. S. (1999). ‘Entrepreneurs, distrust, and third parties’. In Thompson, L., Levine, J. and Messick, D. (Eds), *Shared Cognition in Organizations: The Management of Knowledge*. Hillsdale, NJ: Lawrence Erlbaum Associates, 213–44.
- Burt, R. S. (2005). *Brokerage and Closure*. Oxford: Oxford University Press.
- Burt, R. S. (2010). *Neighbor Networks: Competitive Advantage Local and Personal*. New York: Oxford University Press.
- Burt, R. S. (2019). ‘The networks and success of female entrepreneurs in China’. *Social Networks*, **58**, 37–49.

- Burt, R. S. and Batjargal, B. (2019). 'Comparative network analysis in China'. *Management Organization Review*, **15**, 3–29.
- Burt, R. S., Bian, Y. and Opper, S. (2018). 'More or less guanxi: Trust is 60% network context, 10% individual difference'. *Social Networks*, **54**, 1–14.
- Burt, R. S. and Burzynska, K. (2017). 'Chinese entrepreneurs, social networks, and *guanxi*'. *Management Organization Review*, **13**, 221–60.
- Burt, R. S. and Knez, M. (1995). 'Kinds of third-party effects on trust'. *Rationality and Society*, **7**, 255–92.
- Burt, R. S. and Luo, J. D. (2019). 'Angry entrepreneurs: A note on networks prone to character assassination'. In Brass, D. J. and Borgatti, S. P. (Eds), *Social Networks at Work*. New York: Routledge-Taylor and Francis, 129–51.
- Burt, R. S. and Opper, S. (2017). 'Early network events in the later success of Chinese entrepreneurs'. *Management Organization Review*, **13**, 497–537.
- Burt, R. S., Opper, S. and Holm, H. J. (2022). 'Cooperation beyond the Network'. *Organization Science*, **33**, 495–517.
- Busenbark, J. R., Yoon, H., Gamache, D. L. and Whithers, M. C. (2022). 'Omitted variable bias: Examining management research with the impact threshold of a confounding variable (ITCV)'. *Journal of Management*, **48**, 17–48.
- Carley, K. M. (1991). 'A theory of group stability'. *American Sociological Review*, **56**, 331–54.
- Carney, M. (2005). 'Globalization and the renewal of Asian business networks'. *Asia Pacific Journal of Management*, **22**, 337–54.
- Chua, R. Y. J., Ingram, P. and Morris, M. W. (2008). 'From the head and the heart: Locating cognition- and affect-based trust in managers' professional networks'. *Academy Management Journal*, **51**, 436–52.
- Coleman, J. S. (1988). 'Social capital in the creation of human capital'. *American Journal of Sociology*, **94**, S95–120.
- Coleman, J. S. (1990). *Foundation of Social Theory*. Cambridge, MA: Harvard University Press.
- Coleman, J. S., Katz, E. and Menzel, H. (1966). *Medical Innovation: A Diffusion Study*. Indianapolis, IN: Bobbs-Merrill Company.
- Cook, K. S., Gillmore, M. R. and Yamagishi, T. (1983). 'The distribution of power in exchange networks: Theory and experimental results'. *American Journal of Sociology*, **89**, 275–305.
- Desmet, P. T., De Cremer, D. and van Dijk, E. (2011). 'In money we trust? The use of financial compensations to repair trust in the aftermath of distributive harm'. *Organizational Behavior and Human Decision Processes*, **114**, 75–86.
- Dhand, A., Luke, D., Lang, C., Tsiaklides, M., Feske, S. and Lee, J. M. (2019). 'Social networks and risk of delayed hospital arrival after acute stroke'. *Nature Communication*, **10**, 1206.
- Dirks, K. T. and Ferrin, D. L. (2002). 'Trust in leadership: Meta-analytic findings and implications for research and practice'. *Journal of Applied Psychology*, **87**, 611–28.
- Doney, P. M., Cannon, J. P. and Muller, M. R. (1998). 'Understanding the influence of national culture on the development of trust'. *Academy of Management Review*, **23**, 601–20.
- Ellickson, R. C. (1991). *Order without Law*. Cambridge, MA: Harvard University Press.
- Everett, M. G. and Borgatti, S. P. (2020). 'Unpacking Burt's constraint measure'. *Social Networks*, **62**, 50–7.
- Facciani, M. and Brashears, M. E. (2019). 'Sacred alters: The effects of ego network structure on religious and political beliefs'. *Socius*, **5**, 1–6.
- Ferrin, D., Dirks, K. T. and Shah, P. (2006). 'Direct and indirect effects of third-party relationships on interpersonal trust'. *Journal of Applied Psychology*, **91**, 870–83.
- Ferrin, D. L., Kim, P. H., Cooper, C. D. and Dirks, K. T. (2007). 'Silence speaks volumes: The effectiveness of reticence in comparison to apology and denial for responding to integrity- and competence-based trust violations'. *Journal of Applied Psychology*, **92**, 893–908.
- Friedkin, N. E. (1999). 'Choice shift and group polarization'. *American Sociological Review*, **64**, 856–75.
- Granovetter, M. (1985). 'Economic action, social structure, and embeddedness'. *American Journal of Sociology*, **91**, 481–510.
- Granovetter, M. (1992). 'Problems of explanation in economic sociology'. In Nohria, N. and Eccles, R. G. (Eds), *Networks and Organization*. Boston, MA: Harvard Business School Press, 29–56.
- Greif, A. (1989). 'Reputation and coalitions in medieval trade: Evidence on the Maghribi traders'. *Journal of Economic History*, **49**, 857–82.
- Grover, S. L., Abid-Dupont, M. A., Manville, C. and Hasel, M. C. (2019). 'Repairing broken trust between leaders and followers: How violation characteristics temper apologies'. *Journal of Business Ethics*, **155**, 853–80.
- Haines, V. A., Beggs, J. J. and Hurlbert, J. S. (2002). 'Exploring the structural contexts of the support process: Social networks, social statuses, social support, and psychological distress'. *Social Networks and Health*, **8**, 269–92.

- Harrigan, N. M., Labianca, G. and Agneessens, F. (2020). 'Negative ties and signed graphs research: Stimulating research on dissociative forces in social networks'. *Social Networks*, **60**, 1–10.
- Haselhuhn, M. P., Kennedy, J. A., Kray, L. J., Van Zant, A. B. and Schweitzer, M. E. (2015). 'Gender differences in trust dynamics: Women trust more than men following a trust violation'. *Journal of Experimental Social Psychology*, **56**, 104–09.
- Heider, F. (1958). *The Psychology of Interpersonal Relations*. New York: John Wiley.
- Hewlin, P. F., Dumas, T. L. and Burnett, M. F. (2017). 'To thine own self be true? Facades of conformity, values incongruence, and the moderating impact of leader integrity'. *Academy of Management Journal*, **60**, 178–99.
- Huang, C. L., Chung, C. K., Hui, N. H. H., Lin, Y. C., Seih, Y., Lam, M. C. P. and Pennebaker, J. W. (2012). 'The development of the Chinese linguistic inquiry and word count dictionary'. *Chinese Journal of Psychology*, **54**, 185–201.
- Ibarra, H. (1992). 'Homophily and differential returns: Sex differences in network structure and access in an advertising firm'. *Administrative Science Quarterly*, **37**, 422–47.
- 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-based trust violations'. *Journal of Applied Psychology*, **89**, 104–18.
- Krackhardt, D. (1998). 'Simmelian ties: super strong and sticky'. In Kramer, R. M. and Neale, M. A. (Eds), *Power and Influence in Organizations*. Thousand Oaks, CA: SAGE Publications, 21–38.
- Kramer, R. M. and Lewicki, R. J. (2010). 'Repairing and enhancing trust: Approaches to reducing organizational trust deficits'. *Academy of Management Annals*, **4**, 245–77.
- Krylova, K. O., Longacre, T. E. and Phillips, J. S. (2018). 'Applicants with a tarnished past: Stealing thunder and overcoming prior wrongdoing'. *Journal of Business Ethics*, **150**, 793–802.
- Kuran, T. (1995). *Private Truths, Public Lies: The Social Consequences of Preference Falsification*. Cambridge, MA: Harvard University Press.
- Kutner, M. H., Nachtsheim, C. and Neter, J. (2004). *Applied Linear Regression Models*, 4th edition. New York: McGraw-Hill/Irwin.
- Landis, J. R. and Koch, G. G. (1977). 'An application of hierarchical kappa-type statistics in the assessment of majority agreement among multiple observers'. *Biometrics*, **33**, 363–74.
- Legood, A., van der Werff, L., Lee, A., den Hartog, D. and van Knippenberg, D. (2023). 'A critical review of the conceptualization, operationalization, and empirical literature on cognition-based and affect-based trust'. *Journal of Management Studies*, **60**, 495–537.
- Lewicki, R. J. and Brinsfield, C. (2017). 'Trust repair'. *Annual Review of Organization Psychology and Organizational Behavior*, **4**, 287–313.
- Li, P. P. (2008). 'Toward a geocentric framework of trust: An application to organizational trust'. *Management and Organization Review*, **4**, 413–39.
- Lo, S. and Aryee, S. (2003). 'Psychological contract breach in a Chinese context: An integrative approach'. *Journal of Management Studies*, **40**, 1005–20.
- Lord, C. G., Ross, L. and Lepper, M. R. (1979). 'Biased assimilation and attitude polarization: The effects of prior theories on subsequently considered evidence'. *Journal of Personality and Social Psychology*, **37**, 2098–109.
- Lount, R. B., Jr. and Pettit, N. C. (2012). 'The social context of trust: The role of status'. *Organizational Behavior and Human Decision Processes*, **117**, 15–23.
- Mayer, R. C., Davis, J. H. and Schoorman, F. D. (1995). 'An integrative model of organization trust'. *Academy of Management Review*, **20**, 709–34.
- McEvily, B. and Tortoriello, M. (2011). 'Measuring trust in organisational research: review and recommendations'. *Journal of Trust Research*, **1**, 23–63.
- McEvily, B., Zaheer, A. and Soda, G. (2021). 'Network trust'. In Gillespie, N., Fulmer, A. and Lewicki, R. J. (Eds), *Understanding Trust in Organizations: A Multilevel Perspective*. London: Routledge. [in print].
- Mellahi, K. and Harris, L. C. (2016). 'Response rates in business and management research: An overview of current practice and suggestions for future direction'. *British Journal of Management*, **27**, 426–37.
- Merluzzi, J. (2017). 'Gender and negative network ties: Exploring difficult work relationships within and across gender'. *Organization Science*, **28**, 636–52.
- Merluzzi, J. and Burt, R. S. (2013). 'How many names are enough? Identifying network effects with the least set of listed contacts'. *Social Networks*, **35**, 331–37.
- Miller, A. J., Worthington, E. K. and McDaniel, M. A. (2008). 'Gender and forgiveness: A meta-analytic review and research agenda'. *Journal of Social Clinical Psychology*, **27**, 843–76.
- Ni, P. and Xu, H. (Eds) (2021). *Annual Report on China's Urban Competitiveness No. 19: Mega Cities: Health Benchmark and Ideal Benchmark*. Beijing: China Social Sciences Press.

- Obschonka, M., Zhou, M., Zhou, Y., Zhang, J. and Silbereisen, R. K. (2019). ‘“Confucian” traits, entrepreneurial personality, and entrepreneurship in China: A regional analysis’. *Small Business Economics*, **53**, 961–99.
- Opper, S. and Burt, R. S. (2021). ‘Social network and temporal myopia’. *Academy of Management Journal*, **64**, 741–71.
- Peters, K., Jetten, K., Radova, D. and Austin, K. (2017). ‘Gossiping about deviance: Evidence that deviance spurs the gossip that builds bonds’. *Psychological Science*, **28**, 1610–19.
- Piskorski, M. J. and Gorbatai, A. (2017). ‘Testing Coleman’s social-norm enforcement mechanism: Evidence from Wikipedia’. *American Journal of Sociology*, **122**, 1183–222.
- Putnam, R. D. (1996). ‘The strange disappearance of civic America’. *Policy: A Journal of Public Policy and Ideas*, **12**, 3–15.
- Quintane, E. and Carnabuci, G. (2016). ‘How do brokers broker? Tertius gaudens, tertius iungens, and the temporality of structural holes’. *Organization Science*, **27**, 1343–60.
- Reagens, R., Singh, P. V. and Krishnan, R. (2015). ‘Forgotten third parties: Analyzing the contingent association between unshared third parties, knowledge overlap, and knowledge transfer relationships without sidlers’. *Organization Science*, **26**, 1400–14.
- Rispens, S., Greer, L., Jehn, K. A. and Thatcher, S. M. (2011). ‘Not so bad after all: How relational closeness buffers the association between relationship conflict and helpful and deviant group behaviors’. *Negotiation and Conflict Management Research*, **4**, 277–96.
- Rotter, J. B. (1971). ‘Generalized expectancies for interpersonal trust’. *American Psychologist*, **35**, 1–7.
- Rousseau, D. M., Sitkin, S. B., Burt, R. S. and Camerer, C. (1998). ‘Not so different after all: a cross-discipline view of trust’. *Academy of Management Review*, **23**, 393–404.
- Schachter, S. (1951). ‘Deviation, rejection, and communication’. *Journal of Abnormal Social Psychology*, **46**, 190–207.
- Schilke, O., Reinmann, M. and Cook, K. S. (2021). ‘Trust in social relations’. *Annual Review of Sociology*, **47**, 239–59.
- Shapiro, D. L. (1991). ‘The effects of explanations on negative reactions to deceit’. *Administrative Science Quarterly*, **36**, 614–30.
- Sharma, K., Schoorman, F. D. and Ballinger, G. A. (2023). ‘How can it be made right again? A review of trust repair research’. *Journal of Management*, **49**, 363–99.
- Simmel, G. (1902). ‘The number of members as determining the sociological form of the group, II’. *American Journal of Sociology*, **8**, 158–96.
- Srivastava, S. B., Goldberg, A., Manian, V. G. and Potts, C. (2018). ‘Enculturation trajectories: Language, cultural adaptation, and individual outcomes in organizations’. *Management Science*, **64**, 1348–64.
- Tasselli, S., Kilduff, M. and Menges, J. I. (2015). ‘The microfoundations of organizational social networks: A review and an agenda for future research’. *Journal of Management*, **41**, 1361–87.
- Tausczik, Y. R. and Pennebaker, J. W. (2010). ‘The psychological meaning of words: LIWC and computerized text analysis methods’. *Journal of Language and Social Psychology*, **29**, 24–54.
- 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.
- Tomlinson, E. C. and Mryer, R. C. (2009). ‘The role of causal attribution dimensions in trust repair’. *Academy of Management Review*, **34**, 85–104.
- Xiao, Z. and Tsui, A. S. (2007). ‘When brokerage may not work: The cultural contingency of social capital in Chinese high-tech firms’. *Administrative Science Quarterly*, **52**, 1–31.
- Yang, S. W., Trincado, F., Labianca, G. and Agneessens, F. (2020). ‘Negative ties at work’. In Brass, D. J. and Borgatti, S. P. (Eds), *Social Networks at Work*. New York: Routledge-Taylor and Francis, 49–78.
- Yu, Y., Yang, Y. and Jing, F. (2017). ‘The role of the third party in trust repair processes’. *Journal of Business Research*, **78**, 233–41.
- Zhang, Y., Huai, M. Y. and Xie, Y. H. (2015). ‘Paternalistic leadership and employee voice in China: A dual process model’. *The Leadership Quarterly*, **26**, 25–36.
- Zhejiang Statistics Bureau (2018). *Zhejiang Statistical Yearbook 2018*. Beijing: China Statistics Press.

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of this article at the publisher’s web site.