

# Annual Review of Sociology Trust in Social Relations

## Oliver Schilke, Martin Reimann, and Karen S. Cook<sup>3</sup>

<sup>1</sup>Department of Management and Organizations, Eller College of Management, University of Arizona, Tucson, Arizona 85721-0108, USA; email: oschilke@arizona.edu

<sup>2</sup> Department of Marketing, Eller College of Management, University of Arizona, Tucson, Arizona 85721-0108, USA; email: reimann@arizona.edu

<sup>3</sup> Department of Sociology, Stanford University, Stanford, California 94305, USA; email: kcook@stanford.edu

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### **Keywords**

trust, particularized trust, categorical trust, generalized trust, trustworthiness, cooperation

#### **Abstract**

Trust is key to understanding the dynamics of social relations, to the extent that it is often viewed as the glue that holds society together. We review the mounting sociological literature to help answer what trust is and where it comes from. To this end, we identify two research streams—on particularized trust and generalized trust, respectively—and propose an integrative framework that bridges these lines of research while also enhancing conceptual precision. This framework provides the springboard for identifying several important avenues for future research, including new investigations into the radius of trust, the intermediate form of categorical trust, and the interrelationships between different forms of trust. This article also calls for more scholarship focusing on the consequences (versus antecedents) of trust, addressing more fully the trustee side of the relation, and employing new empirical methods. Such novel approaches will ensure that trust research will continue to provide important insights into the functioning of modern society in the years to come.

#### INTRODUCTION

Social scientists have long insisted that without trust, society as we know it could not exist (Arrow 1974, Blau 1964, Fukuyama 1995, Putnam 1995, Simmel 1978). It is thus unsurprising that trust is at the heart of sociological inquiry (Lewis & Weigert 1985) and that the list of scholars elaborating on its critical importance reads like a *Who's Who* of sociology, including foundational theorists such as Durkheim (1984), Weber [1951 (1915)], Parsons (1937), Simmel (1950), and Blau (1964). Today, the study of trust remains at the forefront of sociology, often motivated by the argument that trust underlies a variety of key societal outcomes, such as reciprocity (Hayashi et al. 1999), collective action (Ostrom 1998), solidarity (Molm et al. 2007a), equality (Smith 2010), social order (Cook 2005), and democracy itself (Choi & David 2012).

If it appears straightforward that trust is important and significant in many social relations, what is nonetheless so intriguing about this topic? One answer to this question relates to the paradox that trust is often not entirely rational ex ante but is very effective ex post (Berg et al. 1995). If incentives are such that it is attractive for partners to abuse trust and act opportunistically, people should not take risks with these partners. However, studies consistently show that trust is a pervasive reality of social life. In that sense, research on trust is intriguing because trust may help reduce the complexities of social interactions (Luhmann 1979), symbolize the fabric of our day-to-day living (Rotter 1980), and represent a glue that binds social systems together (Paxton 2007).

It is likely that the importance of trust will only continue to grow. In the twenty-first century, remote collaboration with both unknown and known counterparts is increasing (in part due to the recent global pandemic), and much of economic life is now happening outside the boundaries of organizations, regions, and nations, making trust a ubiquitous concern. Max Weber was among the first to raise concerns that a lack of universal trust could endanger social functioning in modern society [Weber 1951 (1915)]. Similarly, Niklas Luhmann (1979) related trust to accommodating the growing complexities, uncertainties, and risks that pervade modern society. In today's world, power relations within organizations have been increasingly replaced by trust relations in markets (Blau 2002, Cook & Hardin 2001). The obligations involved in larger networks of associations are not prescribed by norms to the same extent as in smaller groups but are instead more diffuse and uncertain, bringing the problem of trust to the fore (Cook 2005). Because it is more difficult to apply formal controls in today's interdependent, uncertain, and global settings (Bijlsma-Frankema & Costa 2005), trust has evolved as an important alternative to govern social relations (Misztal 1996, Sztompka 1999) and undergird significant societal institutions.

The growing relevance of trust in society has been accompanied by an increasing amount of scholarly work in this area. As concerns surrounding peacemaking, stability, sustainability, and justice are becoming more and more urgent in today's world, sociological investigations will surely continue to shed light on trust in the years to come (Cook et al. 2005a, Lewis & Weigert 2012, Mizrachi et al. 2007). In addition to representing a bedrock of sociological theorizing and inquiries, trust research has also been growing in other major disciplines in the social sciences and beyond, including psychology (Messick et al. 1983), economics (Fehr 2009), biochemistry (Kosfeld et al. 2005), neuroscience (Krueger et al. 2007), and genetics (Cesarini et al. 2008), as well as many professional disciplines such as marketing (Morgan & Hunt 1994), management and organizations (Mayer et al. 1995), and management information systems (Pavlou & Gefen 2004).

#### WHAT IS TRUST?

We define trust as the willingness of an entity (i.e., the trustor) to become vulnerable to another entity (i.e., the trustee). In taking this risk, the trustor presumes that the trustee will act in a way

that is conducive to the trustor's welfare despite the trustee's actions being outside the trustor's control. This understanding is consistent with those of Mayer et al. (1995), Rousseau et al. (1998), and other contemporary conceptualizations. Across social science disciplines, important similarities exist in terms of how trust is viewed (Rousseau et al. 1998). Scholars that view trust from the perspectives of psychology (e.g., Lewicki et al. 1998) and economics (e.g., Bhattacharya et al. 1998) would agree that trust broadly refers to one's willingness to be vulnerable to another actor. However, while consensus has been emerging on what trust is (Foddy & Yamagishi 2009), notable compartmentalization of the study of trust remains. For instance, sociologists seem to be divided in their interest in either particularized or generalized trust, which may produce overly fragmented views on the topic. As with many other constructs that are used by a variety of scholars with different backgrounds, central ideas often get lost and microcommunities emerge, impeding cumulative progress in our understanding of the phenomenon.

To address this issue, in this review we attempt to synthesize the mounting sociological literature by (a) summarizing the state of the field of trust in social relations, (b) reviewing two (only ostensibly separate) approaches to trust—particularized versus generalized—based on extant literature, and (c) proposing an integrative theoretical framework that allows for a better understanding of trust. This review focuses on work in which trust represents a key analytical concept and in which the focal setting concerns social relations represented by at least two human actors. It is beyond the scope of this review to address trust in nonhuman actors (such as pets or objects) or trust in oneself (Avnet et al. 2012). This review is also primarily concerned with trust research in sociology, although we identify some of the relevant work by other social scientists at several points in this article.

#### TRUST IN SOCIAL RELATIONS

Trust plays a key role in classical sociological theories (Blau 1964, Luhmann 1979) and has been studied empirically in the context of a wide array of social relations, such as those between people in the workplace (Burt & Knez 1995), sellers and buyers (Kollock 1994), investors and banks (Yenkey 2018), organizations (Powell 1996), criminals (Smith & Papachristos 2016), citizens and governments (Choi & David 2012), scientists (Zucker et al. 1996), firefighters (Pratt et al. 2019), doctors and patients (Schnittker 2004), family members (Li & Tan 2013), and married couples (Burke & Stets 1999). Given the breadth of applications across a variety of contexts, trust is central to a number of subfields of sociology, including economic sociology (Granovetter 1985); social psychology (Simpson & Willer 2015); demography (Larzelere & Huston 1980); race, gender, and class (Smith 2010); morality (Hitlin & Vaisey 2010); education (Bryk & Schneider 2002); medical sociology (Stepanikova et al. 2006); and immigration (Portes 1995), among others.

In conceptual treatises and empirical investigations, trust has been related to many other social processes, some of which can be considered conceptually distinct while others are relatively close correlates. For instance, trust is different from, yet related to, the construct of social uncertainty in the sense that the uncertainty inherent in social relations is a crucial precondition for the development of trust (as we will discuss further later on). Trust is also different from risk (Sztompka 1999); for example, risk aversion among Airbnb users was found to have an inverse relationship with trust when the Airbnb host had a high reputation (Abrahao et al. 2017). Trust can also be distinguished from commitment; for example, trust levels vary by level of commitment in romantic relations, being lower for ex-partners and higher for engaged couples, newlyweds, and couples married for more than 20 years (Larzelere & Huston 1980). Further, trust is different from trustworthiness (Cheshire et al. 2010), which denotes the partner's level of reciprocity. Other constructs often associated with trust are social capital (Lin et al. 2001, Portes 1998), cooperation (Cook & Cooper 2003), embeddedness (Granovetter 1985), distrust (Reimann et al. 2017), and

liking (McAllister 1995). While the definition of trust presented in the previous section highlights what is unique about the construct, to make trust measurable it is reasonable for empirical research to operationalize trust in terms of related proxies (e.g., trust games often approximate trust through cooperation, assuming that it represents the behavioral manifestation of the willingness to make oneself vulnerable).

#### TWO APPROACHES TO TRUST? EXTANT FINDINGS

A prevalent method of structuring the landscape of sociological trust research rests on the binary distinction between scholarship on generalized versus particularized trust (e.g., Gilson 2003, Yamagishi 2011). Various terms have been used quasi-synonymously when referring to each of these notions; for generalized trust, these include social trust (Hardin 2002), abstract trust (Paxton 1999), general trust (Yamagishi 2001), dispositional/interpersonal trust (Rotter 1980), propensity to trust (Mayer et al. 1995), and trusting stance (McKnight et al. 1998), while for particularized trust they include personalized trust (Marschall & Stolle 2004), dyadic trust (Larzelere & Huston 1980), knowledge-based trust (Yamagishi & Yamagishi 1994), and relational trust (Cook 2005). Generalized trust typically involves a relatively large circle of unfamiliar others, a societal level of analysis, and/or a wide array of activities for which trust can exist, whereas particularized trust commonly refers to a rather narrow circle of familiar others, a more micro level of analysis, and/or a specific domain in which trust exists. While particularized trust identifies variance, generalized trust typically assumes it away. Scholars regularly point to differences between these two approaches to trust research in terms of their respective assumptions, methods, and citation networks (Sturgis & Smith 2010, Wu & Wilkes 2016). In this review, we briefly adopt this institutionalized dichotomy when presenting our summary of extant sociological trust scholarship before highlighting problems with this dichotomy and the need to better integrate trust research across the generalized-particularized divide. Figure 1 provides an overview of frequently employed theoretical approaches to studying the sources of trust, which serves as the structure of our ensuing discussion of extant findings.

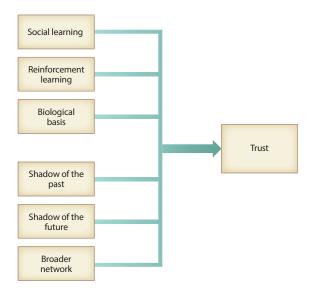


Figure 1

Prominent theoretical approaches to explaining the origins of trust.

#### **Generalized Trust**

The term "generalized trust" typically describes actors placing a certain level of trust independent of the identity of the trustee and the nature of the situation (Cook et al. 2005a). The concept refers to dispositional tendencies to trust others (Rotter 1971), confidence in people's goodwill (Kosugi & Yamagishi 1998), a default belief in the benign nature of mankind (Yamagishi & Yamagishi 1994), or a moral obligation to assume that others are trustworthy (Uslaner 2002). While this stream of research can be traced back to studies in psychology that treated generalized trust as a kind of personality trait, some studies in sociology and political science conceptualize generalized trust at the cultural level, proposing national or regional differences in the tendency to trust others.

Much of the research in this vein uses archival survey information, such as the General Social Survey or the Social Trust Survey, to identify time trends or cross-country differences in generalized trust. In support of Putnam's (1995) provocative claim that trust is declining in the United States, Paxton (1999) and Robinson & Jackson (2001), for example, find empirical support for a degeneration of generalized trust in individuals. While in 1960 the majority (55%) of Americans agreed that "most people can be trusted," this number dropped to just 35% in 1988 (Putnam 2000). In terms of cross-country differences, Bjørnskov (2008) provides a synthetic overview of generalized trust levels around the world. Among the more consistent findings in this research are that Scandinavian countries have the highest levels of generalized trust, followed by several other Western European nations.

To tackle the question of where such variations in generalized trust may originate, theorizing often adopts a social learning perspective (Hardin 2002, Paxton & Glanville 2015, Stolle 2001). According to this view, actors extrapolate from early life experiences (Erikson 1964) as well as ongoing encounters (Hardin 2002) in order to form a general expectancy of others' trustworthiness. In other words, people learn to what extent others can be trusted. A particular focus is on early life experiences with family members, which are thought to be especially formative. For example, Rotenberg (1995) finds a positive relationship between mothers' fulfillment of promises to their children and their children's trust, as well as a positive relationship between a mother's and her children's trust beliefs. However, trust can also be learned and altered much later in life. In Cao & Galinsky's (2020) study, for instance, social interactions are shown to alter people's levels of generalized trust (also see Paxton & Glanville 2015), pointing to its malleability (rather than absolute rigidness).

Another attempt to identify the sources of generalized trust is based on reinforcement learning, or learning about oneself (Kuwabara 2015, Macy & Sato 2002). Instead of discerning the trustworthiness of others (as in social learning), the focus of reinforcement learning is on getting to know one's own identity and comfort level and categorizing oneself as either a naturally low or high trustor. As people observe their own actions, they come to form a self-perception of themselves as trusting or nontrusting.

A third, more recent line of work has identified a biological component of generalized trust. Rather than assuming trust to be solely a product of socialization, this research points to genetic influences predisposing an individual toward certain levels of generalized trust (Cesarini et al. 2008, Reimann et al. 2017, Sturgis et al. 2010). Consistent with the broader stream of research into the genetic origins of social processes (see Freese & Shostak 2009), the reasons for people's willingness to trust appear to be, at least in part, biologically based.

In summary, generalized trust research assumes that some people are consistently more trusting than others. Thus, there are "high trustors" and "low trustors" in society, either because people are born this way or because they learn their trusting disposition as a result of their experiences.

Using these and other theoretical models as their springboard, a considerable number of empirical studies have investigated the antecedents to generalized trust. Among the most widely studied antecedents are race and ethnic diversity (Dinesen & Sønderskov 2015, Rydgren et al. 2013, Ziller 2015), religious orientation and church attendance (Delhey & Newton 2005, DiPrete et al. 2011, Welch et al. 2007), social embeddedness (Glanville et al. 2013, Li et al. 2005, Paxton 2007), national and regional (cultural) differences (Gheorghiu et al. 2009, Simpson 2006, Yamagishi & Yamagishi 1994), economic conditions (Abascal & Baldassarri 2015, Delhey & Newton 2003, Ross et al. 2001), age (Li et al. 2005, Robinson & Jackson 2001), and education (DiPrete et al. 2011, Welch et al. 2007). Although some extant findings are far from conclusive, the majority of these studies find generalized trust to be higher among whites (versus nonwhites), in ethnically less diverse environments (but see Rydgren et al. 2013), among Protestants (versus non-Protestants) and frequent church-goers, when people are socially embedded, in Western (versus Asian) countries, in the Southern (versus non-Southern) United States, under prosperous economic conditions, among older people, and among the highly educated. While the list of factors studied in prior research is impressive, there is clearly room for more studies, both to examine additional antecedents and to sort out the complex interrelationships between previously identified ones.

#### Particularized Trust

Research on particularized trust assumes that the locus of trust is a specific situation or a specific relationship rather than an actor's disposition (Cook 2015, Kollock 1994). Particularized trust is relational in nature; it is directed toward a particular target and a particular action. Among the different approaches to studying particularized trust, the encapsulated interest conception of trust (Cook et al. 2005a, Hardin 2002, Hardin 2006) is probably the most theoretically advanced. Adopting a rational-choice perspective, the encapsulated interest account assumes that trustors attempt to predict whether it will pay off for the trustee to encapsulate their interests and be high in trustworthiness. That is, a precondition for trust to be placed is that the trustor has reason to believe the trustee will be motivated not to behave opportunistically and to instead honor that trust. A key reason for the trustee to do so is a desire to not spoil the relationship, leading the trustee to care about—or encapsulate—the trustor's interests in the relation. Of course, making such predictions about the trustee's motivations and trustworthiness is nontrivial (and this is why trust necessarily remains risky), but there are important pieces of information that can serve as a basis for making reasonable predictions. In particular, the encapsulated interest account emphasizes three sources of information on which the trustor may rely: (a) past interactions, (b) future interactions, and (c) broader networks.

First, a partner's trustworthiness can be inferred from past interactions, a process sometimes referred to as the "shadow of the past" (Poppo et al. 2008, Swärd 2016). This view considers trustworthiness perceptions to be the result of prior exchanges between the parties (Blau 1964). Accumulated relationship experience from the past offers important cues to the kind of behavior to be expected from the trustee in the situation at hand (Larson 1992, Luhmann 1979). In a way, the partner's past behavior serves as a proxy for his or her expected future behavior; trust is dependent on the prior exchange history, which functions as a social institution shaping expectations and behaviors. Following a logic of path dependency, a new relationship may start with relatively insignificant exchanges; as these smaller obligations are honored and more substantial exchanges are undertaken, trust in the partner grows. Thus, a trustee's earlier trustworthy behavior engenders trust. However, "where people have little history together, or an erratic history of cooperation mixed with exploitation, or a consistent history of failure to cooperate, people will distrust one another" (Burt 2001, p. 33).

Second, trustworthiness can be inferred from how much the partner is likely to value the relationship and to want to maintain it, a process called the "shadow of the future" (Axelrod 1985, Molm et al. 2000, Poppo et al. 2008). From this viewpoint, trust is the result of a forward-thinking assessment of the costs and benefits of trustworthy behavior for the partner. When the expected payoffs from a series of future exchanges are larger than the gains from opportunism in the present (with opportunism likely resulting in the trustor dissolving the relationship and the trustee losing the stream of returns from future interactions), it makes economic sense for the trustee to be trustworthy. However, when short-term benefits from defection outweigh anticipated long-term gains, trustworthy behavior may be rather unlikely. Therefore, key considerations include the trustee's short-term gains from exploiting trust versus the net present value of the future relationship, which is a function of its remaining length and the value generated in each transaction (Telser 1980). As such, ceteris paribus, trust tends to be lower when the relationship will naturally expire soon and when payoffs from the few remaining interactions are likely to be negligible.

Third, trustworthiness can be inferred from the broader network in which the trustor and trustee are embedded. Such inferences are likely particularly relevant when actors lack direct experience and are unclear about future interactions. From a network perspective, trust can be the result of reputational concerns and can flow through indirect connections linking actors to one another (Coleman 1990, Dasgupta 1988, Kollock 1999, McEvily et al. 2020). If the trustee has a strong reputation, and if reputation is a key success factor in the trustee's field, then the trustee has an incentive to be trustworthy in order to preserve his or her reputation (Schilke et al. 2017, Zucker 1986). In other words, a trust breach is more costly for those who have made significant investments in reputation-building and for whom reputation is a critical resource (Schilke & Cook 2015). Conversely, partners with little concern for their reputation will be trusted to a lesser extent. According to this logic, trust originates in the broader social context in which the focal relationship is embedded; it stems less from the trustee's (past or future) direct tie to the trustor than from the trustee's motivation to maintain ties to third parties who may be of great value (Burt & Knez 1995). Furthermore, trust can be based on less diffuse sources of network information whenever the trustor has a close tie to an actor who in turn is tied to the focal trustee. Such a third party may communicate their perceptions of the trustee to the trustor either explicitly or implicitly through their behavior (Granovetter 1985).

Building on these and other theoretical arguments, sociological research has identified a variety of antecedents to particularized trust. In terms of the shadow of the past, both the duration of the existing relationship and the experiences in prior interactions have important implications for trust. Consistent with predictions from the encapsulated interested account, particularized trust tends to be stronger when there has been a long history of exchange between parties (Kollock 1994) and when the trustee has demonstrated behavioral commitment (Molm et al. 2000), shown consistent reciprocity (Cheshire et al. 2010, Molm et al. 2007b), or even given favors to the trustor (Uzzi 1997). Conversely, particularized trust declines when there has been a trust breach (Robinson 1996), especially when this breach happened early (rather than at a later stage) in the relationship (Kuwabara et al. 2014, Schilke et al. 2013).

Similarly, the idea of the shadow of the future has found broad support. Particularized trust tends to be higher when actors expect their relationship to extend to future interactions (Cook et al. 2005b) or at least consider it likely that their paths will cross again (Macy & Skvoretz 1998). Following a shadow-of-the-future logic, one would also expect social constraints (such as contracts or regulations) to bolster expectations of trustworthiness; however, results in this area have been mixed. While some scholars find that such constraints do foster trust (Robbins 2016, Schilke & Cook 2015), others find that they may actually decrease trust, especially once the constraints are taken away (Irwin et al. 2014, Malhotra & Murnighan 2002). To reconcile such contradictory

findings, researchers would be well advised to move from the question of whether trust and constraints are complements or substitutes to the question of when they are (Cao & Lumineau 2015). More work is required to disentangle the intricacies of the trust–control nexus (Bijlsma-Frankema & Costa 2005).

Beyond direct experiences, indirect cues in the form of reputation (Abrahao et al. 2017) or observing third parties' trust decisions (Przepiorka & Aksoy 2021) can also significantly affect particularized trust. More generally, trust and distrust can be substantially amplified by the presence of third parties, although the precise effect of these third parties is contingent on their role (Burt & Knez 1995) and the multiplexity of their relationships with the trustor and trustee (Li & Piezunka 2020). Despite these important findings, the broader-networks approach to studying the antecedents of particularized trust has received relatively scant attention to date. We believe the time has come for scholars to move beyond the focal dyad to consider the broader social settings in which this dyad is embedded when studying how trust decisions are made (McEvily et al. 2020).

While much extant sociological research on particularized trust can be directly interpreted from an encapsulated interest angle, one antecedent that has received much attention addresses a fundamental precondition for trustworthiness assessments to even come into play: social uncertainty. There is now considerable evidence that social uncertainty is a necessary condition for trust to emerge. In the absence of uncertainty about the other party's actions, trust is not required and thus is unlikely to be pronounced. Kollock (1994), for instance, reports higher levels of trust in the context of trading experience goods (whose quality can only be evaluated by the buyer after the purchase) versus search goods (which the buyer can fully evaluate prior to purchase and are thus of certain quality). Further, Guseva & Rona-Tas (2001) suggest that trust is more evident in situations involving uncertainty compared with those involving calculable risk. Expanding on the idea of social uncertainty sowing the seeds for trust, Molm and colleagues (Molm et al. 2013, Molm et al. 2000, Molm et al. 2012) offer convergent evidence that reciprocal exchanges (in which benefits flow unilaterally and sequentially) are more conducive to trust building than are negotiated exchanges (in which benefits flow bilaterally and jointly and thus involve less uncertainty). All of these findings point to one of the central paradoxes in research on particularized trust (Yamagishi 2011): Trust is most relevant in situations when uncertainty is high, and it is in exactly those situations that trust is most difficult to produce. Surely this puzzle will continue to spur future trust scholarship on the complicated interrelationship between uncertainty and trust.

#### TRUST: AN EXTENDED FRAMEWORK

Although the generalized–particularized divide is frequently evoked in sociological research on trust, we propose that it is oversimplified and needs to be refined in order to reduce confusion regarding how trust can be studied and to eliminate a false dichotomy that may mistakenly imply insurmountable qualitative differences between research streams. In a field of scholarship regularly criticized for its conceptual fuzziness, like that of trust (e.g., Hwang & Burgers 1997, Williamson 1993), it is critical for researchers to use precise terminology rather than umbrella labels that lack sufficient precision. At the same time, we need to eschew a bifurcation of sociological trust research and be careful with categorical labels that may create the mistaken impression that distinct camps of trust scholars might be interested in radically different and unrelated things, when in reality many differences in sociological trust scholarship are more a matter of degree than a matter of kind. Overall, we believe that the conventional generalized–particularized distinction may exaggerate qualitative differences across camps while glossing over relevant differences within them. To overcome this problem, we introduce a more nuanced framework that (a) highlights the

gradual nature of just how generalized trust can be and (b) elaborates three unique components of trust whose respective degrees of generality can be orthogonal and thus require individual specification.

First, rather than thinking about generalized and particularized trust as a bipartite distinction, we advocate an approach that conceives of the "radius of trust" as a gradual concept. The idea of a trust radius goes back to Fukuyama (1995) and can be understood as "the width of the circle of people among whom a certain trust level exists" (van Hoorn 2014, p. 1256). The term "width" unmistakably implies graduality (as opposed to a binary understanding), such that various degrees of width are possible, ranging from very narrow to very wide, with many points in between. It would thus be misleading and overly restrictive to focus all our attention on the extreme points of highly particularized and highly generalized trust alone. Importantly, we would overlook a plethora of highly relevant intermediate forms—most notably, trust as it pertains to various social categories, or what we refer to as categorical trust. Neither confined to a specific individual or single situation nor abstracted to virtually all people or any circumstance, categorical trust captures many of the social dynamics at the core of sociology. In fact, categorical trust may represent the most realistic middle ground in many everyday-life trust decisions, where—in the interest of conserving cognitive resources—trust is neither customized to each specific instance nor generalized across virtually all possible situations. A wide variety of categorical forms come to mind with respect to the trust target, including trust in family members, trust in coworkers, trust in organizations, trust in racial categories, trust in people of a certain gender, and trust in strangers, among many others. None of these forms of trust could be accurately termed either particularized or generalized, but they nonetheless—or perhaps for this reason—deserve considerable research attention in order for us to truly understand how trust decisions are formed.

Second, there is an inherent lack of precision built into the generalized-particularized dichotomy because trust, by definition, entails three components, some of which may be rather generalized while others may be rather particularized. Specifically, virtually all contemporary models of trust contain (a) a trustor, (b) a trustee, and (c) a trust object. "A trusts B with respect to issue x" (Cook et al. 2005a, p. 7), where A is the trustor (the actor placing trust), B is the trustee (the target of trust), and x is the trust object (the domain or activity in which trust is placed) (also see Gheorghiu et al. 2009, Hardin 2002, Rompf 2015). The trust radius of each of these components can vary independently, making it highly ambiguous what generalized (or particularized) trust as a uniform concept means. Many earlier applications of the dichotomous approach either conflate these three components or focus on only one while leaving the other two unspecified. In particular, there appears to be a tendency to prioritize the trustee over the trustor and the trust object. Such an exclusionary focus is usually not justified. We also do not know at what assumed level of generality the trustor and trust object are held constant in such investigations. To remedy these problems, we recommend moving toward radiuses (plural) of trust. The generality of trust can vary and needs to be specified along all three components. First, the trustee's radius can range from highly particularized (trust in a specific individual) to highly generalized (trust in most people), with a wide variety of intermediate, categorical forms of trust targets, as mentioned above. Second, the trustor's focal unit of analysis can vary on a continuum from a particular individual to a small group to an organization to an entire society. Third, the trust object can be very specific trust in the context of this particular interaction, but not beyond—but it can also be more broad, such as trust across several interactions within the same domain of activity (e.g., trust with respect

<sup>&</sup>lt;sup>1</sup>In our discussion, we take the individual as the lowest level of analysis, although neuroscientists may drill down to the level of brain regions or even specific neurons where trust can exist (Krueger et al. 2007).

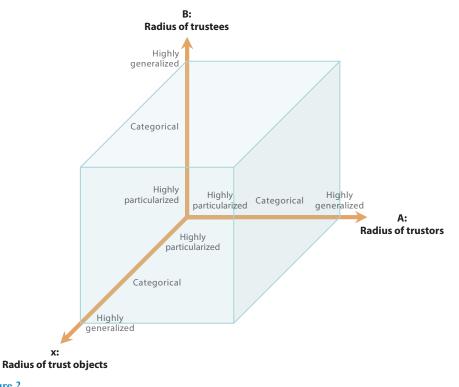


Figure 2

An extended framework of three trust radiuses.

to conducting monetary transactions, but not with respect to caring for a child) or even complete trust with respect to all things in life.

We suggest that these three trust radiuses can be conceptually orthogonal to one another, and while it is ultimately an empirical question whether certain constellations are more prevalent than others (e.g., following a configurational approach à la Ragin 1987), there is evidence that these trust radiuses do not neatly converge into overall correspondence across components. Kuwabara (2015), for instance, studies a rather generalized trust radius with respect to the trustee (i.e., strangers) while taking a rather particularized radius with respect to the trustor (i.e., individuals) and adopting an intermediate radius with respect to the trust object (i.e., online market transactions). By contrast, Dinesen & Sønderskov (2015) study highly generalized trustees ("most people"), rather particularized trustors (individuals), and highly generalized trust objects ("most of the time").

For all these reasons, we urge trust scholars to avoid underspecification of their work and instead clearly position their studies within the three-dimensional space laid out in **Figure 2**. This expanded trust framework makes it clear that the radius of trust is neither binary nor one-dimensional. We propose this framework not to pursue the virtue of nuance for its own sake (Healy 2017) but because we believe it can be intellectually productive. The framework not only helps to avoid ambiguity and confusion about terms but also underscores the notion that research on particularized and generalized trust should not be thought of as separate. Relevant differences do exist, but they are more gradual than previously assumed. The various forms of trust operate according to a commensurable logic, and we hope that recognizing this fact will bring together

the two research streams that have largely existed in isolation (also see Sztompka 1999). Perhaps even more importantly, the framework directs attention to five sets of important research avenues that may have been ignored otherwise.

First, our framework opens the door for further scholarship on the radius of trust as a variable in its own right. Recent research shows that if it is left unspecified in the data collection instrument, study participants may form their own assumptions about the pertinent radius of trust (Delhey et al. 2011, Sturgis & Smith 2010). So far, however, we know relatively little about why this is the case. Why do some actors intuitively conceive of trust as more versus less generalized, and along which components of trust? In other words, beyond predicting variations in the dominant target of trust, can we also identify predictors of trust objects (the types of interactions people think about when queried about trust) and trustors (the most salient social level of analysis doing the trusting)?

Second, in addition to issues related to measurement invariance (or lack thereof), how much variation in trust levels can we observe on each of the three suggested components? In other words, just how particularized is trust in the real world, and when? Considering the trade-off between parsimony and precision that underlies the trust radius spectrum, one could argue that more particularized approaches to conceptualizing trust are only justified to the extent that notable variability exists with regard to how trust is placed. So, how variable (versus consistent) are the levels of trust that are placed in different trustees, how much do levels of trust differ across trustors within a given social unit, how different are levels of trust placed in one domain versus another, and can we predict such variations based on relevant contextual variables? One approach to this new stream of trust research could leverage the idea of consensus, which has recently been introduced to the study of legitimacy to identify the conditions conducive to various evaluators agreeing (versus disagreeing) on the appropriateness of a legitimacy target (Haack et al. 2021). Employing an analogous logic, trust researchers could endeavor to measure and predict the degree of consensus in who is being trusted, across different trustors, and across domains (see de Jong et al. 2020 for an initial application of this approach).

Third, we need more research into the interrelationships between more particularized and more generalized forms of trust. When reviewing the vast sociological literature on trust for this article, we encountered approximately equal numbers of studies focusing on either end of the trust radius continuum, but investigations capturing more than one form simultaneously and examining their links remain rare (also see Cook 2005). Most of the few studies that have been conducted in this vein propose a positively reinforcing relationship (e.g., Glanville & Paxton 2007, Glanville & Shi 2019), but Yamagishi & Yamagishi (1994) and Kuwabara et al. (2007) indicate that trust can also be negatively connected along its radius when they suggest that, in terms of the trust target, Japanese people tend to have low levels of generalized trust but high levels of particularized trust. Similarly, the existence of strong ties in close trust networks—akin to highly particularized trust—has been proposed to constrain the development of more generalized trust (Latusek & Cook 2012).

Fourth, much could be gained from comparative studies juxtaposing the predictive power of various trust radiuses. Such studies could help us appreciate under what circumstances it may be sufficient to employ more generalized trust measures to predict relevant outcomes versus when we need to move toward more particularized forms of trust (see Delhey et al. 2011, Kuwabara et al. 2014 for initial analyses along those lines). Answering this question would help us appreciate what would be missed were we to only study highly generalized trust to the exclusion of more categorical and particularized trust, and vice versa. Possibly, smaller trust radiuses might be most predictive of individual success outcomes (such as a person's economic well-being), whereas larger trust radiuses might be relatively more predictive of civic outcomes (such as community engagement or social responsibility) (e.g., Gheorghiu et al. 2009). Furthermore, a smaller (larger) trust

radius with respect to the trustor might predict behaviors when the partner is known (unknown) (McKnight et al. 1998). Comparative positions such as these are more commonly assumed than put to the test. Beyond possible differences in magnitude, one might even expect to see the sign flip for certain effects. For instance, while highly particularized trust may increase relationship commitment, highly generalized trust may conversely decrease relationship commitment (Burke & Stets 1999, Yamagishi et al. 1998), presumably because high trustors are more comfortable taking a chance on a new partner.

Finally, there is a need for more research into categorical trust. In an early discussion of categorical trust, Zucker (1986) described it as characteristic based and pointed to family background, sex, and national origin as relevant social categories in trust production. At least two theoretical approaches speak to the generalization of trust across groups of trustees. The first is based on the idea of homophily (McPherson et al. 2001) and posits that perceptions of common group membership and shared identity may underlie many trust judgments. This can be either due to in-group favoritism—which should make trustees behave more cooperatively toward members of their own group, elevating expected trustworthiness (Foddy & Yamagishi 2009)—or because a common background can help align expectations and facilitate coordination between exchange partners, which should foster trust (Lewicki & Bunker 1996). Second, trust can be the result of status ascribed to a particular social group, independent of whether the trustor is a member of this group as well. For instance, members of high-status groups are typically attributed a range of positive qualities, often based on stereotypes (Berger et al. 1980), which in turn may be associated with perceptions of elevated trustworthiness (Blue et al. 2020). We suggest that future research should not only extend and start to disentangle these lines of theorizing (e.g., Simpson et al. 2007) but also expand the study of categorical trust from the radius of the trustee to that of the trustor and trust objects. What groups of trustors can be meaningfully clustered together, and what types of interactions do people generalize to when making trust decisions?

#### **DISCUSSION**

So far, we have highlighted promising research opportunities specifically at the intersection of particularized and generalized trust, but this is only one of many windows into extending sociological trust research. There is much more work to be done in order to truly understand how trust unfolds in social relations. We see at least four additional fruitful avenues for enlarging the sociological research agenda on trust.

First, our review prioritizes rational accounts of trust over moralistic or affective trust theories, certainly not because we consider these other theoretical approaches irrelevant but simply because they are not as well developed in extant sociological inquiry. It is important to acknowledge that the process of placing trust may not be fully rational. Trustors may assume a partner is trustworthy because they believe he or she is morally committed to being so. Trustors may also act on a gut feeling that is based on a variety of emotions and that leads them to believe the partner will be trustworthy. Unfortunately, however, moral and emotional theories of trust are severely undeveloped in sociology. We thus recommend turning to recent advances in adjacent disciplines to further enrich the sociology of trust.

One particularly influential trust model in the field of management scholarship is Mayer et al.'s (1995) ABI (ability, benevolence, integrity) framework. At its core, this model posits that trust-worthiness judgments rest on the trustor's perceptions of the trustee's ability, benevolence, and integrity. While benevolence is well captured through the encapsulated interested account (reviewed in detail above) and the concept of ability is consistent with Yamagishi & Yamagishi's (1994)

careful discussion of confidence in competent role performance (also see Barber 1983, Deutsch 1960, Mizrachi et al. 2007, Möllering 2006, Schnittker 2004), the notion of integrity in Mayer et al.'s (1995) model, and the subsequent management research that it spurred, will prove useful for sociologists to bring moral considerations to the study of trust. According to Mayer et al. (1995, p. 719), integrity refers to the "perception that the trustee adheres to a set of principles that the trustor finds acceptable." Adopting a highly particularized approach with respect to the trustor and trustee, this definition stresses the relational nature of morality, in that it is not a fixed set of principles that underlies this trustworthiness dimension but rather one that is acceptable to both parties. A complementary perspective of the moral foundations of trust is offered by the political scientist Uslaner (2002), who follows a more generalized approach and contends that trust may be viewed as a moral value in and of itself; that is, we trust because we believe it is right to do so, independent of assessments of our counterpart's trustworthiness.<sup>2</sup> Such moralistic trust is thus viewed as unconditional and largely stable. No matter which approach is chosen, sociologists would gain much from elucidating the moral dimensions of trust. Two recent exemplars have begun to do just that. While Simpson et al. (2013) show that people who make moral judgments subsequently tend to be more trustworthy and elicit greater trust, Robbins (2016) finds that a trustee's goodwill and virtuous dispositions may, in relative terms, produce even greater trust than encapsulated interests and social constraints. These initial findings underline the importance of a moral turn in sociological trust scholarship.

Beyond the moral dimension, it may seem fairly obvious that affective processes influence how people evaluate their trust in another party (Burke & Stets 1999, Lewis & Weigert 1985, McAllister 1995), but thus far it is much less clear exactly how and for what types of emotions this influence unfolds (Barbalet 2009). A few recent investigations have started to address this gap. For instance, Irwin et al. (2008) show that the relational emotion of sympathy tends to be salient in situations of high interdependence and, in turn, can foster trust. Moreover, Schilke et al. (2015) report that the emotion of hope can be particularly pronounced among power-disadvantaged actors and may lead to elevated perceptions of trustworthiness and increased levels of trust. Along similar lines, Möllering (2001) and Pratt et al. (2019) suggest that trust is regularly based on faith (rather than cognitive evaluations), especially in the absence of relevant information about the trustee's record in a given domain.

All these recent insights point to the notion that trust may not be purely cognitive and therefore also may not be entirely rational. However, although many trust theories are explicit about just how rational they assume actors to be, the situation-specific degree of rationality is rarely treated as a research question in and of itself. This is unfortunate, because Lewis & Weigert (1985) and Kramer (1999) (among others) insist that the rationality of trust can vary systematically in its bandwidth. So, just how calculative is trust, and under what circumstances can we expect (non-)calculative aspects to dominate? For instance, is it truly the case that calculativeness dominates in business transactions, whereas emotional and moralistic components of trust prevail in personal relationships, as assumed by Williamson (1993)? Furthermore, is calculative trust more pronounced early on in a relationship, whereas it declines in importance over repeated interactions as familiarity develops (Lewicki & Bunker 1996, Schilke & Cook 2015)? We see much potential for future research to address these and other questions pertaining to contextualized variations in the rationality of trust.

<sup>&</sup>lt;sup>2</sup>Hardin (2002, 2006) makes a forceful argument that, while it may be moral to be trustworthy, it makes less sense to argue that is it moral to trust, since in various circumstances it is too risky to trust, especially in contexts in which distrust is clearly warranted.

Second, another noteworthy insight from our review of the relevant research is that the vast majority of sociologists study trust as a dependent variable, while very few have investigated the consequences of trust (see Aassve et al. 2016, Berigan & Irwin 2011, Kiyonari et al. 2006 for noteworthy exceptions). Scholars usually talk about the various virtues of trust in the introduction section of an article, solely to justify the need to study its origins. There are two problems with this common practice (which we readily admit appears in some of our own investigations). First, some of the benefits are merely assumed and not underpinned by rigorous empirical research that could offer convergent evidence. Second, the bias of one-sidedly focusing on the benefits of trust conceals the fact that trust can also have a dark side (Gargiulo & Ertug 2006, Neal et al. 2015, Portes 1998, Skinner et al. 2014, Sztompka 1999). In fact, trust may have a variety of negative consequences. From the trustor's perspective, trust can be exploited, leading to emotional and economic harm. From the trustee's perspective, trust can be undesirable, as it often comes with unwelcome obligations to reciprocate. From a societal perspective, trust can be associated with exaggerated optimism and a lack of vigilance among citizens. As such, it often seems less desirable to maximize trust than to calibrate it to an optimal level (Schilke & Huang 2018). To this end, we need greater knowledge of the contingent effects of trust—both positive and negative.

Third, while much has been said about the trustor's trust, relatively less is known with regard to the trustee's trustworthiness (Hardin 2002). This is a significant omission, because trust tends to be closely linked to estimates of trustworthiness. Much would be gained from studies that switch vantage points to treat the trustee as their focal unit of analysis and study his or her perceptions of the interaction and the trustor, which have been underappreciated in extant sociological research.<sup>3</sup> The insights obtained would, in turn, allow for comparisons between the trustors' predictions and the trustee's actual trustworthiness behavior, which could be used to assess trust accuracy (Fetchenhauer & Dunning 2010, Schilke & Huang 2018, Yamagishi 2001).

Fourth, in terms of empirical methods, there appears to be a near-perfect correspondence between studying highly generalized trust and using archival surveys on the one hand and focusing on highly particularized trust and running experiments on the other. Not only do we suggest abandoning this bifurcation in trust research—as discussed in detail above—but we also hope to see a greater number of trust studies employing more unconventional methods. Since methods and theory coevolve, methodological innovations often go hand in hand with novel theoretical findings. For instance, we encourage more research on highly generalized components of trust adopting experiments (e.g., Hayashi et al. 1999) and, vice versa, studies on highly particularized forms of trust leveraging the strengths of survey research (e.g., Burt & Knez 1995). The proliferation of the Internet has led to much change within each of these methodological domains, with lab-inthe-field experiments opening up entirely new research opportunities (Abrahao et al. 2017, Parigi et al. 2017) and primary surveys being more affordable to administer than ever before (Couper 2017). Research on trust is particularly well suited to leverage these developments. In addition to these traditional approaches, we see real merit in the greater use of qualitative methods, which are surprisingly rare in sociological trust research (but see the important qualitative contributions by Guseva & Rona-Tas 2001, Khodyakov 2007, Li & Piezunka 2020, Mizrachi et al. 2007, Uzzi 1997). Rounding off the methodological repertoire, we also recommend greater use of simulations (Macy & Sato 2002, Macy & Skvoretz 1998), conversation analysis (Lindström 1994), and multi-method inquiries (Burke & Stets 1999, Gulati & Westphal 1999).

<sup>&</sup>lt;sup>3</sup> See Kiyonari et al. (2006), Simpson et al. (2013), and Robbins (2016) for noteworthy exceptions. Also note that relevant work on the trustee's perspective and his/her trustworthiness has started to appear in economics (e.g., Ashraf et al. 2006, Sutter & Kocher 2007) and political science (Levi & Stoker 2000).

#### **CONCLUSION**

In this article, we have synthesized much of the burgeoning sociological literature on trust. Our contribution is threefold. First, we offer a comprehensive synopsis of the trust concept, its history, and its antecedents. This analysis shows that the study of trust can be traced back to the roots of sociology and is now essential to many of its subfields. Although there is much convergence in how trust is conceptualized in contemporary research, we also underscore the need for greater integration of scholarship on the more generalized and the more particularized components of trust. Moving forward, we need to build bridges across these research streams to share insights, avoid fragmentation, and ensure that work on trust maintains its important position in the sociological analysis of modern society. Second, we have proposed an integrated framework to further this pursuit. This framework builds on the notion of trust radiuses and acknowledges the gradual character of the generality of trust, the critical importance of intermediate forms of categorical trust, and the three-dimensional nature of trust along its key components—the trustor, the trustee, and the trust object. This framework should help avoid underspecification in future trust research while also pointing scholars to new research opportunities, including trust radius as a variable in its own right, the variability of trust across its components, the interrelationships and relative predictive power of more particularized and more generalized forms of trust, and categorical forms of trust. Finally, our review aims to spark interest in several other issues related to trust that have been largely neglected in extant sociological scholarship. Specifically, we call for future research on the moral and affective aspects of trust, the positive and negative consequences of trust, the trustee and his or her trustworthiness as the focal object of study, and a variety of other topics. We also recommend using novel methods to approach these studies, which will direct researchers to uncover questions that escape more conventional approaches. Given that trust has become even more important in many ways during the recent global pandemic (trust in strangers, trust in family members and friends, trust in colleagues and fellow employees, trust in science, trust in local and national government, trust in the media, etc.), we hope that our review article stimulates future research on the many domains in which trust is significant and impactful in our lives.

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#### LITERATURE CITED

Aassve A, Billari FC, Pessin L. 2016. Trust and fertility dynamics. Soc. Forces 95:663-92

Abascal M, Baldassarri D. 2015. Love thy neighbor? Ethnoracial diversity and trust reexamined. Am. J. Sociol. 121:722–82

Abrahao B, Parigi P, Gupta A, Cook KS. 2017. Reputation offsets trust judgments based on social biases among Airbnb users. *PNAS* 114:9848–53

Arrow KJ. 1974. The Limits of Organization. New York: W. W. Norton

Ashraf N, Bohnet I, Piankov N. 2006. Decomposing trust and trustworthiness. Exp. Econ. 9:193-208

Avnet T, Pham MT, Stephen AT. 2012. Consumers' trust in feelings as information. *J. Consum. Res.* 39:720–35 Axelrod R. 1985. *The Evolution of Cooperation*. New York: Basic

Barbalet J. 2009. A characterization of trust, and its consequences. Theory Soc. 38:367-82

Barber B. 1983. The Logic and Limit of Trust. New Brunswick, NJ: Rutgers Univ. Press

Berg J, Dickhaut J, McCabe K. 1995. Trust, reciprocity, and social history. Games Econ. Behav. 10:122-42

Berger J, Rosenholtz SJ, Zelditch M. 1980. Status organizing processes. Annu. Rev. Sociol. 6:479-508

Berigan N, Irwin K. 2011. Culture, cooperation, and the general welfare. Soc. Psychol. Q. 74:341-60

Bhattacharya R, Devinney TM, Pillutla MM. 1998. A formal model of trust based on outcomes. *Acad. Manag. Rev.* 23:459–72

Bijlsma-Frankema K, Costa AC. 2005. Understanding the trust-control nexus. Int. Sociol. 20:259-82

Bjørnskov C. 2008. Social trust and fractionalization: a possible reinterpretation. Eur. Sociol. Rev. 24:271-83

Blau PM. 1964. Exchange and Power in Social Life. New York: Wiley

Blau PM. 2002. Reflections on a career as a theorist. In *New Directions in Contemporary Sociological Theory*, ed. J Berger, M Zelditch, pp. 345–57. Lanham, MD: Rowman & Littlefield

Blue PR, Hu J, Peng L, Yu H, Liu H, Zhou X. 2020. Whose promises are worth more? How social status affects trust in promises. *Eur. J. Soc. Psychol.* 50:189–206

Bryk A, Schneider B. 2002. Trust in Schools: A Core Resource for Improvement. New York: Russell Sage

Burke PJ, Stets JE. 1999. Trust and commitment through self-verification. Soc. Psychol. Q. 62:347-66

Burt RS. 2001. Bandwidth and echo: trust, information, and gossip in social networks. In *Networks and Markets*, ed. JE Rauch, A Casella, pp. 30–74. New York: Russell Sage

Burt RS, Knez M. 1995. Kinds of third-party effects on trust. Ration. Soc. 7:255-92

Cao J, Galinsky AD. 2020. The diversity-uncertainty-valence (DUV) model of generalized trust development. Organ. Behav. Hum. Decis. Process. 161:49–64

Cao Z, Lumineau F. 2015. Revisiting the interplay between contractual and relational governance: a qualitative and meta-analytic investigation. *J. Oper. Manag.* 33–34:15–42

Cesarini D, Dawes CT, Fowler JH, Johannesson M, Lichtenstein P, Wallace B. 2008. Heritability of cooperative behavior in the trust game. *PNAS* 105:3721–26

Cheshire C, Gerbasi A, Cook KS. 2010. Trust and transitions in modes of exchange. Soc. Psychol. Q. 73:176–95Choi SYP, David R. 2012. Lustration systems and trust: evidence from survey experiments in the Czech Republic, Hungary, and Poland. Am. J. Sociol. 117:1172–201

Coleman JS. 1990. Foundations of Social Theory. Cambridge, MA: Harvard Univ. Press

Cook KS. 2005. Networks, norms, and trust: the social psychology of social capital. Soc. Psychol. Q. 68:4-14

Cook KS. 2015. Institutions, trust, and social order. In *Order on the Edge of Chaos: Social Psychology and the Problem of Social Order*, ed. EJ Lawler, S Thye, J Yoon, pp. 125–44. Cambridge, UK: Cambridge Univ. Press

Cook KS, Cooper RM. 2003. Experimental studies of cooperation, trust and social exchange. In Trust, Reciprocity and Gains from Association: Interdisciplinary Lessons from Experimental Research, ed. E Ostrom, J Walker, pp. 277–333. New York: Russell Sage

Cook KS, Hardin R. 2001. Norms of cooperativeness and networks of trust. In *Social Norms*, ed. M Hechter, K-D Opp, pp. 327–47. New York: Russell Sage

Cook KS, Hardin R, Levi M. 2005a. Cooperation Without Trust? New York: Russell Sage

Cook KS, Yamagishi T, Cheshire C, Cooper R, Matsuda M, Mashima R. 2005b. Trust building via risk taking: a cross-societal experiment. Soc. Psychol. Q. 68:121–42

Couper MP. 2017. New developments in survey data collection. Annu. Rev. Sociol. 43:121-45

Dasgupta P. 1988. Trust as a commodity. In Trust: Making and Breaking Cooperative Relations, ed. D Gambetta, pp. 49–72. New York: Blackwell

de Jong B, Gillespie N, Williamson I, Gill C. 2020. Trust consensus within culturally-diverse teams: a multistudy investigation. *7. Manag.* https://doi.org/10.1177/0149206320943658

Delhey J, Newton K. 2003. Who trusts? The origins of social trust in seven societies. Eur. Soc. 5:93–137

Delhey J, Newton K. 2005. Predicting cross-national levels of social trust: global pattern or Nordic exceptionalism? *Eur. Sociol. Rev.* 21:311–27

Delhey J, Newton K, Welzel C. 2011. How general is trust in 'most people'? Solving the radius of trust problem. *Am. Sociol. Rev.* 76:786–807

Deutsch M. 1960. The effect of motivational orientation upon trust and suspicion. Hum. Relat. 13:123–39

Dinesen PT, Sønderskov KM. 2015. Ethnic diversity and social trust: evidence from the micro-context. Am. Sociol. Rev. 80:550–73

DiPrete TA, Gelman A, McCormick T, Teitler J, Zheng T. 2011. Segregation in social networks based on acquaintanceship and trust. *Am. 7. Sociol.* 116:1234–83

Durkheim E. 1984. The Division of Labor in Society. New York: Free Press

Erikson EH. 1964. Childhood and Society. New York: Norton

Fehr E. 2009. On the economics and biology of trust. 7. Eur. Econ. Assoc. 7:235-66

Fetchenhauer D, Dunning D. 2010. Why so cynical? Asymmetric feedback underlies misguided skepticism regarding the trustworthiness of others. *Psychol. Sci.* 21:189–93

Foddy M, Yamagishi T. 2009. Group-based trust. In Whom Can We Trust? How Groups, Networks, and Institutions Make Trust Possible, ed. K Cook, M Levi, R Hardin, pp. 17–41. New York: Russell Sage

Freese J, Shostak S. 2009. Genetics and social inquiry. Annu. Rev. Sociol. 35:107-28

Fukuyama F. 1995. Trust: The Social Virtues and the Creation of Prosperity. New York: Free Press

Gargiulo M, Ertug G. 2006. The dark side of trust. In *The Handbook of Trust Research*, ed. R Bachmann, A Zaheer, pp. 165–86. Cheltenham, UK: Edward Elgar

Gheorghiu MA, Vignoles VL, Smith PB. 2009. Beyond the United States and Japan: testing Yamagishi's emancipation theory of trust across 31 nations. Soc. Psychol. Q. 72:365–83

Gilson L. 2003. Trust and the development of health care as a social institution. Soc. Sci. Med. 56:1453-68

Glanville JL, Andersson MA, Paxton P. 2013. Do social connections create trust? An examination using new longitudinal data. Soc. Forces 92:545–62

Glanville JL, Paxton P. 2007. How do we learn to trust? A confirmatory tetrad analysis of the sources of generalized trust. Soc. Psychol. Q. 70:230-42

Glanville JL, Shi Q. 2019. The extension of particularized trust to generalized and out-group trust: the constraining role of collectivism. Soc. Forces 98:1801–28

Granovetter M. 1985. Economic action and social structure: the problem of embeddedness. Am. J. Sociol. 91:481–510

Gulati R, Westphal JD. 1999. Cooperative or controlling? The effects of CEO-board relations and the content of interlocks on the formation of joint ventures. Adm. Sci. Q. 44:473–506

Guseva A, Rona-Tas A. 2001. Uncertainty, risk, and trust: Russian and American credit card markets compared. Am. Sociol. Rev. 66:623–46

Haack P, Schilke O, Zucker LG. 2021. Legitimacy revisited: disentangling propriety, validity, and consensus. 7. Manag. Stud. 58:749–81

Hardin R. 2002. Trust and Trustworthiness. New York: Russell Sage

Hardin R. 2006. Trust. Cambridge, UK: Polity

Hayashi N, Ostrom E, Walker J, Yamagishi T. 1999. Reciprocity, trust, and the sense of control: a cross-societal study. *Ration. Soc.* 11:27–46

Healy K. 2017. Fuck nuance. Sociol. Theory 35:118-27

Hitlin S, Vaisey S. 2010. Handbook of the Sociology of Morality. New York: Springer

Hwang P, Burgers WP. 1997. Properties of trust: an analytical view. Organ. Behav. Hum. Decis. Process. 69:67-73

Irwin K, McGrimmon T, Simpson B. 2008. Sympathy and social order. Soc. Psychol. Q. 71:379-97

Irwin K, Mulder L, Simpson B. 2014. The detrimental effects of sanctions on intragroup trust: comparing punishments and rewards. Soc. Psychol. Q. 77:253–72

Khodyakov DM. 2007. The complexity of trust-control relationships in creative organizations: insights from a qualitative analysis of a conductorless orchestra. Soc. Forces 86:1–22

Kiyonari T, Yamagishi T, Cook KS, Cheshire C. 2006. Does trust beget trustworthiness? Trust and trustworthiness in two games and two cultures: a research note. Soc. Psychol. Q. 69:270–83

Kollock P. 1994. The emergence of exchange structures: an experimental study of uncertainty, commitment, and trust. Am. 7. Sociol. 100:313–45

Kollock P. 1999. The production of trust in online markets. Adv. Group Process. 16:99-123

Kosfeld M, Heinrichs M, Zak PJ, Fischbacher U, Fehr E. 2005. Oxytocin increases trust in humans. Nature 435:673–76

- Kosugi M, Yamagishi T. 1998. Generalized trust and judgments of trustworthiness (in Japanese with an English abstract). *Ipn. 7. Psychol.* 69:349–57
- Kramer RM. 1999. Trust and distrust in organizations: emerging perspectives, enduring questions. Annu. Rev. Psychol. 50:569–96
- Krueger F, McCabe K, Moll J, Kriegeskorte N, Zahn R, et al. 2007. Neural correlates of trust. PNAS 104:20084–89
- Kuwabara K. 2015. Do reputation systems undermine trust? Divergent effects of enforcement type on generalized trust and trustworthiness. Am. J. Sociol. 120:1390–428
- Kuwabara K, Vogt S, Watabe M, Komiya A. 2014. Trust, cohesion, and cooperation after early versus late trust violations in two-person exchange: the role of generalized trust in the United States and Japan. Soc. Psychol. Q. 77:344–60
- Kuwabara K, Willer R, Macy MW, Mashima R, Terai S, Yamagishi T. 2007. Culture, identity, and structure in social exchange: a web-based trust experiment in the United States and Japan. Soc. Psychol. Q. 70:461–79
- Larson A. 1992. Network dyads in entrepreneurial settings: a study of the governance of exchange relationships. Adm. Sci. Q. 37:76–104
- Larzelere RE, Huston TL. 1980. The dyadic trust scale: toward understanding interpersonal trust in close relationships. 7. Marriage Fam. 42:595–604
- Latusek D, Cook KS. 2012. Trust in transitions. Kyklos 65:512-25
- Levi M, Stoker L. 2000. Political trust and trustworthiness. Annu. Rev. Political Sci. 3:475-507
- Lewicki RJ, Bunker BB. 1996. Developing and maintaining trust in work relationships. In *Trust in Organizations: Frontiers of Theory and Research*, ed. RM Kramer, TR Tyler, pp. 114–39. Thousand Oaks, CA: SAGE
- Lewicki RJ, McAllister DJ, Bies RJ. 1998. Trust and distrust: new relationships and realities. Acad. Manag. Rev. 23:438–58
- Lewis JD, Weigert A. 1985. Trust as a social reality. Soc. Forces 63:967-85
- Lewis JD, Weigert AJ. 2012. The social dynamics of trust: theoretical and empirical research, 1985–2012. Soc. Forces 91:25–31
- Li AN, Tan HH. 2013. What happens when you trust your supervisor? Mediators of individual performance in trust relationships. *7. Organ. Behav.* 34:407–25
- Li JB, Piezunka H. 2020. The uniplex third: enabling single-domain role transitions in multiplex relationships. Adm. Sci. O. 65:314–58
- Li Y, Pickles A, Savage M. 2005. Social capital and social trust in Britain. Eur. Sociol. Rev. 21:109-23
- Lin N, Cook KS, Burt RS. 2001. Social Capital: Theory and Research. New Brunswick, NJ: Transaction
- Lindström A. 1994. Identification and recognition in Swedish telephone conversation openings. *Lang. Soc.* 23:231–52
- Luhmann N. 1979. Trust and Power. Chichester, UK: Wiley
- Macy MW, Sato Y. 2002. Trust, cooperation, and market formation in the US and Japan. PNAS 99:7214-20
- Macy MW, Skvoretz J. 1998. The evolution of trust and cooperation between strangers: a computational model. *Am. Sociol. Rev.* 63:638–60
- Malhotra D, Murnighan JK. 2002. The effects of contracts on interpersonal trust. Adm. Sci. Q. 47:534-59
- Marschall MJ, Stolle D. 2004. Race and the city: neighborhood context and the development of generalized trust. *Political Behav*. 26:125–53
- Mayer RC, Davis JH, Schoorman FD. 1995. An integrative model of organizational trust. *Acad. Manag. Rev.* 20:709–34
- McAllister DJ. 1995. Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. Acad. Manag. 7, 38:24–59
- McEvily B, Zaheer A, Soda G. 2020. Network trust. In *Understanding Trust in Organizations: A Multilevel Perspective*, ed. N Gillespie, A Fulmer, RJ Lewicki, pp. 179–204. London: Routledge
- McKnight DH, Cummings LL, Chervany NL. 1998. Initial trust formation in new organizational relationships. *Acad. Manag. Rev.* 23:473–90
- McPherson M, Smith-Lovin L, Cook JM. 2001. Birds of a feather: homophily in social networks. *Annu. Rev. Sociol.* 27:415–44

- Messick DM, Wilke H, Brewer MB, Kramer RM, Zemke PE, Lui L. 1983. Individual adaptations and structural change as solutions to social dilemmas. *7. Personal. Soc. Psychol.* 44:294–309
- Misztal BA. 1996. Trust in Modern Societies. Cambridge, UK: Blackwell
- Mizrachi N, Drori I, Anspach RR. 2007. Repertoires of trust: the practice of trust in a multinational organization amid political conflict. *Am. Sociol. Rev.* 72:143–65
- Möllering G. 2001. The nature of trust: from Georg Simmel to a theory of expectation, interpretation and suspension. *Sociology* 35:403–20
- Möllering G. 2006. Trust: Reason, Routine, Reflexivity. Oxford, UK: Elsevier
- Molm LD, Collett JL, Schaefer DR. 2007a. Building solidarity through generalized exchange: a theory of reciprocity. Am. J. Sociol. 113:205–42
- Molm LD, Melamed D, Whitham MM. 2013. Behavioral consequences of embeddedness: effects of the underlying forms of exchange. Soc. Psychol. Q. 76:73–97
- Molm LD, Schaefer DR, Collett JL. 2007b. The value of reciprocity. Soc. Psychol. Q. 70:199-217
- Molm LD, Takahashi N, Peterson G. 2000. Risk and trust in social exchange: an experimental test of a classical proposition. Am. J. Sociol. 105:1396–427
- Molm LD, Whitham MM, Melamed D. 2012. Forms of exchange and integrative bonds: effects of history and embeddedness. Am. Sociol. Rev. 77:141–65
- Morgan RM, Hunt SD. 1994. The commitment-trust theory of relationship marketing. J. Mark. 58:20–38
- Neal TMS, Shockley E, Schilke O. 2015. The 'dark side' of institutional trust. In *Interdisciplinary Perspectives on Trust: Towards Theoretical and Methodological Integration*, ed. E Shockley, TMS Neal, BH Bornstein, LM PytlikZillig, pp. 177–91. New York: Springer
- Ostrom E. 1998. A behavioral approach to the rational choice theory of collective action: presidential address, American Political Science Association, 1997. Am. Political Sci. Rev. 92:1–22
- Parigi P, Santana JJ, Cook KS. 2017. Online field experiments: studying social interactions in context. Soc. Psychol. Q. 80:1–19
- Parsons T. 1937. The Structure of Social Action. New York, New York: McGraw Hill
- Pavlou PA, Gefen D. 2004. Building effective online marketplaces with institution-based trust. *Inf. Syst. Res.* 15:37–59
- Paxton P. 1999. Is social capital declining in the United States? A multiple indicator assessment. *Am. J. Sociol.* 105:88–127
- Paxton P. 2007. Association memberships and generalized trust: a multilevel model across 31 countries. Soc. Forces 86:47–76
- Paxton P, Glanville JL. 2015. Is trust rigid or malleable? A laboratory experiment. Soc. Psychol. Q. 78:194-204
- Poppo L, Zhou KZ, Ryu S. 2008. Alternative origins to interorganizational trust: an interdependence perspective on the shadow of the past and the shadow of the future. *Organ. Sci.* 19:39–55
- Portes A. 1995. The Economic Sociology of Immigration: Essays on Networks, Ethnicity, and Entrepreneurship. New York: Russell Sage
- Portes A. 1998. Social capital: its origins and applications in modern sociology. Annu. Rev. Sociol. 24:1-24
- Powell WW. 1996. Trust-based forms of governance. In *Trust in Organizations: Frontiers of Theory and Research*, ed. RM Kramer, TR Tyler, pp. 51–67. Thousand Oaks, CA: SAGE
- Pratt MG, Lepisto DA, Dane E. 2019. The hidden side of trust: supporting and sustaining leaps of faith among firefighters. *Adm. Sci. Q.* 64:398–434
- Przepiorka W, Aksoy O. 2021. Does herding undermine the trust enhancing effect of reputation? An empirical investigation with online-auction data. Soc. Forces 99:1575–600
- Putnam RD. 1995. Bowling alone: America's declining social capital. J. Democracy 6:65-78
- Putnam RD. 2000. Bowling Alone: The Collapse and Revival of American Community. New York: Simon and Schuster
- Ragin CC. 1987. The Comparative Method: Moving Beyond Qualitative and Quantitative Strategies. Berkeley, CA: Univ. Calif. Press
- Reimann M, Schilke O, Cook KS. 2017. Trust is heritable, whereas distrust is not. PNAS 114:7007-12
- Robbins BG. 2016. Probing the links between trustworthiness, trust, and emotion: evidence from four survey experiments. Soc. Psychol. Q. 79:284–308

Robinson RV, Jackson EF. 2001. Is trust in others declining in America? An age-period-cohort analysis. Soc. Sci. Res. 30:117–45

Robinson SL. 1996. Trust and breach of the psychological contract. Adm. Sci. Q. 41:574–99

Rompf SA. 2015. Trust and Rationality: An Integrative Framework for Trust Research. New York: Springer

Ross CE, Mirowsky J, Pribesh S. 2001. Powerlessness and the amplification of threat: neighborhood disadvantage, disorder, and mistrust. Am. Sociol. Rev. 66:568–91

Rotenberg KJ. 1995. The socialisation of trust: parents' and children's interpersonal trust. *Int. J. Behav. Dev.* 18:713–26

Rotter JB. 1971. Generalized expectancies for interpersonal trust. Am. Psychol. 26:443-52

Rotter JB. 1980. Interpersonal trust, trustworthiness, and gullibility. Am. Psychol. 35:1–7

Rousseau DM, Sitkin SB, Burt RS, Camerer C. 1998. Not so different after all: a cross-discipline view of trust. Acad. Manag. Rev. 23:393–404

Rydgren J, Sofi D, Hällsten M. 2013. Interethnic friendship, trust, and tolerance: findings from two north Iraqi cities. *Am. J. Sociol.* 118:1650–94

Schilke O, Cook KS. 2015. Sources of alliance partner trustworthiness: integrating calculative and relational perspectives. *Strateg. Manag. J.* 36:276–97

Schilke O, Huang L. 2018. Worthy of trust? How brief interpersonal contact affects trust accuracy. J. Appl. Psychol. 103:1181–97

Schilke O, Reimann M, Cook KS. 2013. Effect of relationship experience on trust recovery following a breach. PNAS 110:15236–41

Schilke O, Reimann M, Cook KS. 2015. Power decreases trust in social exchange. PNAS 112:12950-55

Schilke O, Wiedenfels G, Brettel M, Zucker LG. 2017. Interorganizational trust production contingent on product and performance uncertainty. *Socio-Economic Rev.* 15:307–30

Schnittker J. 2004. Social distance in the clinical encounter: interactional and sociodemographic foundations for mistrust in physicians. Soc. Psychol. Q. 67:217–35

Simmel G. 1950. The Sociology of Georg Simmel. New York: Free Press

Simmel G. 1978. The Philosophy of Money. London: Routledge & Kegan Paul

Simpson B. 2006. Social identity and cooperation in social dilemmas. Ration. Soc. 18:443-70

Simpson B, Harrell A, Willer R. 2013. Hidden paths from morality to cooperation: moral judgments promote trust and trustworthiness. Soc. Forces 91:1529–48

Simpson B, McGrimmon T, Irwin K. 2007. Are blacks really less trusting than whites? Revisiting the race and trust question. *Soc. Forces* 86:525–52

Simpson B, Willer R. 2015. Beyond altruism: sociological foundations of cooperation and prosocial behavior. Annu. Rev. Sociol. 41:43–63

Skinner D, Dietz G, Weibel A. 2014. The dark side of trust: when trust becomes a 'poisoned chalice.' Organization 21:206–24

Smith CM, Papachristos AV. 2016. Trust thy crooked neighbor: multiplexity in Chicago organized crime networks. Am. Sociol. Rev. 81:644–67

Smith SS. 2010. Race and trust. Annu. Rev. Sociol. 36:453-75

Stepanikova I, Mollborn S, Cook KS, Thom DH, Kramer RM. 2006. Patients' race, ethnicity, language, and trust in a physician. *J. Health Soc. Behav.* 47:390–405

Stolle D. 2001. Clubs and congregations: the benefits of joining an association. In *Trust in Society*, ed. KS Cook, pp. 202–44. New York: Russell Sage

Sturgis P, Read S, Hatemi PK, Zhu G, Trull T, et al. 2010. A genetic basis for social trust? *Political Behav*. 32:205–30

Sturgis P, Smith P. 2010. Assessing the validity of generalized trust questions: What kind of trust are we measuring? Int. J. Public Opin. Res. 22:74–92

Sutter M, Kocher MG. 2007. Trust and trustworthiness across different age groups. *Games Econ. Behav.* 59:364–82

Swärd A. 2016. Trust, reciprocity, and actions: the development of trust in temporary inter-organizational relations. Organ. Stud. 37:1841-60

Sztompka P. 1999. Trust: A Sociological Theory. Cambridge, UK: Cambridge Univ. Press

- Telser LG. 1980. A theory of self-enforcing agreements. 7. Bus. 53:27–44
- Uslaner EM. 2002. The Moral Foundation of Trust. Cambridge, UK: Cambridge Univ. Press
- Uzzi B. 1997. Social structure and competition in interfirm networks: the paradox of embeddedness. *Adm. Sci.* 0. 42:35–67
- van Hoorn A. 2014. Trust radius versus trust level: radius of trust as a distinct trust construct. Am. Sociol. Rev. 79:1256–59
- Weber M. 1951 (1915). The Religion of China. New York: Free Press
- Welch MR, Sikkink D, Loveland MT. 2007. The radius of trust: religion, social embeddedness and trust in strangers. Soc. Forces 86:23–46
- Williamson OE. 1993. Calculativeness, trust, and economic organization. 7. Law Econ. 36:453-86
- Wu C, Wilkes R. 2016. Durable power and generalized trust in everyday social exchange. PNAS 113:E1417
- Yamagishi T. 2001. Trust as a form of social intelligence. In *Trust in Society*, ed. KS Cook, pp. 121–47. New York: Russell Sage
- Yamagishi T. 2011. Trust: The Evolutionary Game of Mind and Society. New York: Springer
- Yamagishi T, Cook KS, Watabe M. 1998. Uncertainty, trust, and commitment formation in the United States and Japan. Am. 7. Sociol. 104:165–94
- Yamagishi T, Yamagishi M. 1994. Trust and commitment in the United States and Japan. *Motiv. Emot.* 18:129–66
- Yenkey CB. 2018. Fraud and market participation: social relations as a moderator of organizational misconduct. Adm. Sci. Q. 63:43–84
- Ziller C. 2015. Ethnic diversity, economic and cultural contexts, and social trust: cross-sectional and longitudinal evidence from European regions, 2002–2010. Soc. Forces 93:1211–40
- Zucker LG. 1986. Production of trust: institutional sources of economic structure, 1840–1920. Res. Organ. Behav. 8:53–111
- Zucker LG, Darby MR, Brewer MB, Peng Y. 1996. Collaboration structure and information dilemmas in biotechnology: organizational boundaries as trust production. In *Trust in Organizations: Frontiers of Theory* and Research, ed. RM Kramer, TR Tyler, pp. 90–113. Thousand Oaks, CA: SAGE