At What Level (and in Whom) We Trust: Trust Across Multiple Organizational Levels

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What is This?
At What Level (and in Whom) We Trust: Trust Across Multiple Organizational Levels

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Despite the importance of trust across multiple levels in organizations, extant reviews have focused predominantly on trust at the individual level. A systematic review of trust research across levels and trust referents is sorely needed to synthesize the growing number of both micro and macro studies on this topic. Moreover, as trust is a linchpin for divergent areas, such as negotiation, leadership, team processes, human resource management, organizational change, entrepreneurship, and strategic alliances, a multilevel–multireferent review of trust can facilitate integration in the field of organizational sciences. In this review, the authors adopt a levels-of-analysis approach to organize the research on trust between 2000 and 2011 in multiple referents that include interpersonal, team, and organization at the individual, team, and organizational levels and analyze the similarities and differences in antecedents, consequences, and theoretical perspectives dominant at each level. Building on this foundation, the authors identify current strengths, weaknesses, and research gaps; offer recommendations for integration across levels and referents; and discuss lingering questions that research so far has overlooked. In doing so, the review offers a systematic and comprehensive view of the current state of the trust literature in organizational sciences and provides a blueprint for future research.

Keywords: trust; trust processes; levels of analysis; organizations; teams

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Decades of research have highlighted the central role of trust in organizations. At the micro level, trust has been linked to outcomes such as employee satisfaction (Edwards & Cable, 2009; Gulati & Sytch, 2007), effort and performance (Aryee, Budhwar, & Chen, 2002; Colquitt, Scott, & LePine, 2007), citizenship behavior (Mayer & Gavin, 2005; Walumbwa, Luthans, Avey, & Oke, 2011), collaboration and teamwork (Sargent & Waters, 2004; Simons & Peterson, 2000), leadership effectiveness (Dirks & Ferrin, 2002; Gillespie & Mann, 2004), human resource management (HRM) perceptions (Graham & Tarbell, 2006), and negotiation success (Lee, Yang, & Graham, 2006; Olekalns & Smith, 2007). At the macro level, trust has been credited as a driving force in organizational change and survival (Gibson & Birkinshaw, 2004; Sonpar, Handelman, & Dastmalchian, 2009), entrepreneurship (Blatt, 2009), strategic alliances (Fryxell, Dooley, & Vryza, 2002; Ireland, Hitt, & Vaidyanath, 2002), mergers and acquisitions (Maguire & Phillips, 2008; Stahl & Sitkin, 2005), and even national-level economic health (Fukuyama, 1995).

Despite the growing evidence that trust is important in organizations, extant syntheses of research predominantly focus on trust at the individual level (e.g., Lewicki, Tomlinson, & Gillespie, 2006; Kramer, 1999; Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998). Organizations are inherently multilevel systems, and trust, like many other constructs, operates at the individual, team, and organizational levels of analysis, making attention to different levels a theoretical and empirical imperative (Klein, Dansereau, & Hall, 1994). Although the large body of trust research has uncovered important findings, there have been no systematic reviews of trust across levels, and it remains unclear as to whether the antecedents and consequences currently identified in studies at one level are unique to that level of analysis or applicable across levels (i.e., quasi-isomorphic). Therefore, an integration of trust research across multiple levels in organizations is sorely needed.

As the first review that examines the nexus of trust and levels of analysis, this article serves three novel functions. First, we organize and review studies on trust based on different levels, including the individual, team, and organizational levels, and thus our review includes trust at higher levels that have not been previously reviewed. Within each level, we also consider different referents of trust, such as trust in leaders, trust in teams, and trust in organizations. Based on these two distinctions, we offer a multilevel–multireferent framework that differentiates between trust at a level of analysis and trust in a referent. Our multilevel–multireferent framework is important for improving precision in the conceptualization of trust in organizations. Second, we highlight the antecedents and consequences of trust that have (and have not) been examined at each level. In doing so, this review delineates the commonalities and differences in the antecedents and consequences of trust across levels and referents. Finally, based on our review, we articulate a multilevel research agenda for research on trust in organizations, including potential isomorphism at different levels, the top-down and bottom-up effects of trust, and the interrelationships of trust across referents and levels. Above all, given that trust can act as a linchpin for numerous topics in the organizational sciences, including negotiation, leadership, team processes, HRM, organizational change, entrepreneurship, and strategic alliances, among others, we believe that this multilevel review of trust can ultimately facilitate integration across divergent areas and be of interest to researchers and practitioners alike.

Using the EBSCOhost and ScienceDirect databases, we collected all articles published in these 20 journals in the period between January 2000 and December 2011 that included the word trust in titles, abstracts, or keyword or subject terms. We excluded commentaries, dialogues, book reviews, and papers that examine trust in the financial or legal sense (e.g., trust funds, antitrust law). Our search yielded 375 papers. In addition, we included classic works (e.g., Das & Teng, 1998; Lewicki & Bunker, 1996; Zaheer, McEvily, & Perrone, 1998) to compare and contrast them with recent literature throughout our multilevel–multireferent review. While we sought to provide a representative review for the past 10 years, we were also mindful not to reiterate gaps already addressed in other reviews on trust. We carefully looked at previous reviews (e.g., Burke, Sims, Lazzara, & Salas, 2007; Lewicki et al., 2006; Schoorman, Mayer, & Davis, 2007) to ensure that the issues identified in our review build upon and extend the topics that have been raised and do not restate the same content as these prior reviews. Further, many of the gaps we identify concern multilevel theorizing, and as we show in this review, levels of analysis and trust have only recently received attention. In sum, the topics discussed in this review are uniquely informed by the levels perspective and have yet to be systematically reviewed thus far.

The organization of this review is as follows. We first review key distinctions regarding trust at different levels and trust in different referents to introduce our multilevel–multireferent framework. Particular attention is paid to the similarities and differences in definitions of trust across levels of analysis. Thereafter, we review research on trust at each level with respect to different referents. We identify influential theoretical perspectives, summarize key antecedents and consequences, and articulate the strengths and limitations of research at each level of analysis. Building on this, we then present examples of multilevel and cross-level models that hold promise to integrate research on trust across levels. We end with a discussion of some lingering questions in current trust research and additional future research directions.
Key Distinctions

Trust at Different Levels and Trust in Different Referents

To organize extant research effectively, we distinguish between trust at a level and trust in a referent, distinctions that have not been made clearly in the previous literature. Trust at a level refers to the level of analysis of a study. In this article, we review research at three organizational levels—individual, team, and organizational. Trust at the individual level denotes an individual’s degree of trust. Trust at the higher levels refers to the degree of trust collectively shared by individuals within a unit. For example, trust at the team level represents the aggregated degree of trust that is shared with sufficient consensus among members in a team. Likewise, trust at the organizational level involves the aggregated degree of trust shared with sufficient consensus among members in an organization.

Trust in a referent refers to the target of the trust (i.e., the trustee). Within each level of analysis, at least three referents are possible: interpersonal, team, and organization. The interpersonal referent refers to a specific other or others such as a leader, a negotiation partner, a stranger, or a coworker or coworkers. Note that interpersonal trust is differentiated from the disposition of generalized trust or trust propensity (Goldberg, 1999; Mayer et al., 1995; Yamagishi & Yamagishi, 1994) in that the former is directed toward a specific target whereas generalized trust is about people in general. The team referent, different from interpersonal referents, refers to trust in a collectivity of interdependent people pursuing a shared goal with inherently unique dynamics. Trust in the team referent is becoming increasingly important given the reliance on teams in organizations (Kozlowski & Ilgen, 2006). Lastly, the organization referent refers to trust in the entity of an organization. Differentiating trust referents facilitates organizing and grasping this continually expanding literature. It is also theoretically important because, as we demonstrate in this review, trust in different referents can have divergent antecedents and consequences due to the changing relational dynamics across referents. For example, employees can have needs and concerns with their coworkers that are different from those with their leaders or organizations, thus making it possible that different antecedents and consequences might characterize different referents.

We note that although research on various combinations of levels and referents is theoretically possible, as will be evident below, there is a concentration within each level on particular referents to the exclusion of others. Specifically, while research on the individual level tends to focus on multiple referents, research on trust at the team level has focused on the interpersonal and team referents and much less so on the organization referent. Likewise, research on trust at the organizational level has focused mainly on trust in coworkers and organizations, with little focus on trust in other interpersonal referents or in teams. Our multilevel–multireferent framework thus affords an understanding of where trust research has resided and areas that have so far been overlooked.

Defining Trust

Trust is a construct with a long history and broad relevance. It is not surprising that a multitude of definitions of trust, predominantly at the individual level, have been offered in
the organization sciences alone, and numerous reviews have focused exclusively on these
definitions (e.g., Castaldo, Premazzi, & Zerbini, 2010; McKnight, Choudhury, & Kacmar,
2002; Romano, 2003; Tschanen-Moran & Hoy, 2000). Without reiterating the issues
already discussed at length, we refer readers to these other reviews for a good summary of
topics that have been raised in the definition of trust, including the distinction among bases
of trust and between attitudinal versus behavioral trust (Kramer, 1999), the dimensionality of
trust (Lewicki et al., 2006), the conceptualizations of trust in different disciplines (Rousseau
et al., 1998), and the relationship between trust definition and measurement (Dietz & Den
Hartog, 2006).

Because the focus of our review is on levels of analysis and different trust referents, we
focus our analysis of the definitions on the similarities and differences in how trust has been
defined across levels and referents in the past 10 years. Table S1 in the online journal sum-
marizes a sample of the various ways in which trust has been defined at the individual, team,
and organizational levels with respect to the interpersonal, leader, team, and organization
referents.

First, noting the commonalities, a perusal of Table S1 illustrates that the vast majority of
trust definitions focus on two key dimensions that have been identified in prior reviews
(Dietz & Den Hartog, 2006; Ferrin, Bligh, & Kohles, 2008; Huff & Kelley, 2003; Kim,
Ferrin, Cooper, & Dirks, 2004; Tan, Yang, & Veliyath, 2009): positive expectations of trust-
worthiness, which generally refers to perceptions, beliefs, or expectations about the trustee’s
intention and being able to rely on the trustee, and willingness to accept vulnerability,
which generally refers to suspension of uncertainty (Möllering, 2006) or an intention or a decision
to take risk and to depend on the trustee. These two common dimensions have appeared
across not only different levels but also different referents in our review. For example, much
research across levels and referents has adopted a definition by Mayer and colleagues that
describes trust as “the willingness of a party to be vulnerable to the actions of another party
based on the expectation that the other will perform a particular action important to the trus-
tor, irrespective of the ability to monitor or control that other party” (1995: 712). Along the
same lines, other research has drawn upon Rousseau and colleagues, who defined trust as “a
psychological state comprising the intention to accept vulnerability based upon positive
expectations of the intentions or behavior of another” (1998: 395). Likewise, these two
dimensions are included in the conceptualizations of trust at the team level (e.g., Korsgaard,
Bordt, & Whitener, 2002; Langfred, 2004) and at the organizational level (e.g., Davis,
Schoorman, Mayer, & Tan, 2000; Fryxell et al., 2002). In short, Table S1 illustrates that the
use of both positive expectations about trustworthiness and willingness to accept vulnerabil-
ity are applied well beyond the individual level and are found with respect to a variety of
referents.

Nevertheless, it should be noted that, while a growing number of definitions include both
dimensions (e.g., Deery, Iverson, & Walsh, 2006; Edwards & Cable, 2009; Van Dijke, De
Cremer, & Mayer, 2010), a good number of definitions tend to focus only on positive expec-
tations (e.g., Ferrin, Dirks, & Shah, 2006; Menges, Walter, Vogel, & Bruch, 2011; Simons &
Peterson, 2000). Fewer focus only on vulnerability (Chua, Ingram, & Morris, 2008; Gainey
& Klass, 2003; Gibson & Birkinshaw, 2004). To provide clarity, we recommend that
researchers be very clear about the emphasis their definition places on positive expectations,
vulnerability, both, or neither and the rationale for this emphasis in relation to a particular
referent and a particular level of analysis.
Further, other distinctions within these two dimensions can be noted in Table S1. For example, with respect to positive expectations, definitions tend to vary on whether they focus on generalized expectations or specific expectations. Some definitions describe general positive expectations (e.g., Krishnan, Martin, & Noorderhaven, 2006; Simons & Peterson, 2000) or confidence (e.g., Deery et al., 2006; Nielsen & Nielsen, 2009) that one will not be harmed, without specifying the content of the expectations. Other definitions focus on specific characteristics of the trustee, which generally follow Mayer and colleagues’ distinction of ability, or domain-specific competence of a trustee; benevolence, or that the trustee would “do good to the trustee” (1995: 718); and integrity, or that “the trustee adheres to a set of principles that the trustee finds acceptable” (1995: 719), including reliability, fairness, justice, and consistency. For example, at the individual level, some definitions for the interpersonal referent focus on benevolence—“will act beneficially” (Saparito, Chen, & Sapienza, 2004: 400), “will not be harmed” (Deery et al., 2006: 167), and “behave in a benevolent manner” (De Jong, Van der Vegt, & Molleman, 2007: 1626). To a lesser extent, definitions at this level focus on integrity—“about the integrity and dependability” (Ferrin et al., 2006: 871) and “may be relied upon to fulfill its obligations, to behave predictably, and to act and negotiate fairly” (Gulati & Sytch, 2007: 41). Other definitions at the individual level focus on ability, as indicated in Oreg and Sverdlik’s definition (“management’s ability to steer the organization”; 2011: 341). At the higher levels, a number of definitions focus on multiple dimensions (e.g., Dirks, 2000; Faems, Janssens, Madhok, & Van Looy, 2008; Schaubroeck, Lam, & Peng, 2011). This suggests that people may have disparate expectations of different trustees at different levels. However, there tends to be a lack of theoretical justification throughout the literature on why certain dimensions are relevant and not others (see Colquitt, LePine, Zapata, & Wild, 2011, and Cruz, Gómez-Mejia, & Becerra, 2010, for exceptions). We suggest that researchers justify why they define positive expectations generally or in terms of specific dimensions.

Moreover, researchers need to be very clear in the referent to which specific positive expectations apply. For example, although it is encouraging to see that research has begun to specify the referent in trust definitions, after explicit calls from prior reviews (e.g., Colquitt et al., 2007; Dirks & McLean Parks, 2003; Schoorman et al., 2007), Table S1 also clearly indicates that many trust definitions do not include the referent of trust. For example, at the individual level, some definitions do not specify a referent even when trust is targeted to a leader (e.g., Simmons, Gooty, Nelson, & Little, 2009) or an organization (e.g., Edwards & Cable, 2009). Likewise, at the team and organizational levels, research can be vague about the referent, using terms such as “multiple organizational members” (Shockley-Zalabak, Ellis, & Winograd, 2000) and “each other” (e.g., Gibson & Birkinshaw, 2004). We suggest that researchers specify the referent in their research to improve construct and theoretical clarity and to allow comparison across studies.

While the above discussion relates to the dimension of positive expectations, it is also worthwhile to illustrate the variability with which the second dimension—willingness to accept vulnerability—has been treated in the literature across levels and referents. While not all definitions explicitly discuss willingness to be vulnerable, the majority of definitions make reference to vulnerability, using language such as “risk,” “uncertainty,” and “opportunities.” Similar to positive expectations, some definitions tend to be general (e.g., “in a situation involving risk or vulnerability,” Graebner, 2009: 436). Others specify the contexts of
risk, which can arise due to the trustee (e.g., “uncertainty regarding motives and prospective actions,” Chua et al., 2008: 436; “be vulnerable to the actions of another,” Edwards & Cable, 2009: 657) or due to the situation (e.g., “in conditions of interdependence and risk,” Mesquita, 2007: 73; “in situations involving some risk,” Langfred, 2004: 386). Interestingly, at the organizational level with another organization as a referent, all definitions explicitly mention risk and opportunism, with few exceptions (e.g., Carson, Madhok, Varman, & John, 2003), suggesting that risk and vulnerability with entities outside of the organization may be more salient than those with entities within the organization, an emphasis related to the transaction cost economics theory in research on interorganizational relations (cf. Verbeke & Greidanus, 2009).

What is noteworthy about the definitions in Table S1 is that there is clearly a new distinction that goes beyond former reviews on trust, namely, the conceptualization of trust as a shared construct beyond the individual level. Whereas previous research on the individual level has conceptualized trust as an individual phenomenon, trust at higher levels is typically conceptualized as a construct shared by unit members. Among the definitions that discuss trust as a shared construct, the particular nature of the sharedness varies somewhat by levels. For example, at the team level, some definitions refer to the aggregate or shared (Langfred, 2004; Simons & Peterson, 2000) aspect of team trust. De Jong and Elfring, for example, defined team trust as “shared generalized perceptions of trust” (2010: 536). At the organizational level, some researchers defined trust as an attribute of the context (Gibson & Birkinshaw, 2004) or climate (Shockley-Zalabak et al., 2000). For example, Collins and Smith discussed organizational trust in terms of “the collective set of norms, values, and beliefs” (2006: 547), and Huff and Kelley defined interorganizational trust as “a collectively held trust orientation toward a partner firm” (2003: 82). It is also notable that, with a few exceptions (e.g., De Jong & Elfring, 2010; Langfred, 2004), definitions at higher levels tend to omit the emergent nature of the construct—a point to which we will return later as a critical area for future research. Further, some definitions bypass the component of sharedness and appear to be applied directly from the individual level (e.g., Carson et al., 2003). Other definitions, such as that of interorganizational trust, describe that the trust belief is held by one firm in another firm (Krishnan et al., 2006; Lui & Ngo, 2005), without indicating whether there is a consensus among members of a firm. We generally recommend that the trust definitions at higher levels should specify how trust is conceptualized at those levels and be clear on the sharedness and emergence of the construct, using the terminology put forth by the levels-of-analysis literature when applicable (Chan, 1998; Kozlowski & Klein, 2000). This will facilitate construct clarity and theory building of trust across levels of analysis.

This review more generally poses the question of whether trust is a fundamentally different phenomenon across levels and referents. While it is certainly theoretically possible that trust is different across levels, there are also bound to be similarities, as have been found with other constructs in the organizational sciences literature. Many constructs that have been investigated in multiple levels, including organizational climate (Glick, 1985), creativity (Drazin, Glynn, & Kazanjian, 1999), efficacy (Lindsley, Brass, & Thomas, 1995), and empowerment (Kirkman & Rosen, 1999), have been argued to be quasi-isomorphic across levels. For example, research on efficacy has used a central component in definitions to support fruitful examination of the construct across levels (Chen & Bliese, 2002; Chen et al., 2002; Gibson, 2001). Self-efficacy at the individual level is defined as “beliefs in one’s
capabilities to organize and execute the courses of action required to produce given attainments” (Bandura, 1997: 3), while team efficacy has been defined as “the team members’ collective belief in their capability to perform their job” (May & Schwoerer, 1994: 30). Assuming quasi-isomorphism for constructs in early stages of multilevel research is consistent with the recommendations made by researchers in the levels-of-analysis literature (e.g., Chan, 1998; Chen, Mathieu, & Bliese, 2004; Kozlowski & Klein, 2000). Put differently, when in an early stage of investigating a construct across levels, assumptions are made about certain similarities of the construct—namely, isomorphism of the construct content and meaning—across levels to make meaningful comparisons (Chen, Mathieu, et al., 2004). We too suggest that trust definitions across levels and referents share at least some similarities or core dimensions. In particular, positive expectations of trustworthiness and willingness to accept vulnerability are likely contained in trust across levels and referents, and as such, there will likely be a certain degree of construct invariance. To be sure, trust across levels and referents is still at the nascent stage of scholarship, and future work is needed to directly test the construct invariance across levels, a point to which we return later in the discussion.

Defining trust across levels and referents. Based on these two dimensions—positive expectations of trustworthiness and willingness to accept vulnerability—we offer specific definitions of trust across levels and referents. Trust at the individual level is thus treated as a personal belief about the degree to which a particular referent is trustworthy and to which one is willing to accept vulnerability vis-à-vis this referent. We use the general term positive expectations to broadly encompass the three dimensions of trustworthiness (ability, benevolence, and integrity). Trust at higher levels of analysis is conceptualized as direct consensus compositional models (Chan, 1998) and assumes that trust in a particular referent is shared across individuals in a unit. Drawing on these notions and prior definitions (e.g., Rousseau et al., 1998), we define trust in an interpersonal referent at the individual level as a psychological state comprising willingness to accept vulnerability based on positive expectations of a specific other or others, trust in an interpersonal referent at the team level as a shared psychological state among team members comprising willingness to accept vulnerability based on positive expectations of a specific other or others, and trust in an interpersonal referent at the organizational level as a shared psychological state among organizational members comprising willingness to accept vulnerability based on positive expectations of a specific other or others. Likewise, trust in an organization at the individual level is defined as a psychological state comprising willingness to accept vulnerability based on positive expectations of an organization, and trust in an organization at the team level as a shared psychological state among team members comprising willingness to accept vulnerability based on positive expectations of an organization, and trust in an organization at the organizational level as a shared psychological state among organizational members comprising willingness to accept vulnerability based on positive expectations of an organization.
focused most of its attention at the individual level of analysis, and our review of the past 10 years of research echoes this tradition. These studies have examined the antecedents and consequences of individuals’ trust in a wide range of referents (Dietz & Den Hartog, 2006; Mayer et al., 1995). As will be seen below, several dominant theoretical paradigms are notable at this level. Many studies draw on the broad perspective of social exchange theory (Axelrod, 1984; Blau, 1964; Deutsch, 1958) to explain how individuals trust another individual or entity, based on what they put into and what they receive from a relationship. When individuals perceive an imbalance in the exchange and experience dissatisfaction, trust decreases (Ambrose & Schminke, 2003; Aryee et al., 2002; Khazanchi & Masterson, 2011). Such cost-and-benefit analyses can be subjective, and both economic and relational concerns can be considered. Studies on the effect of equity, fairness, and reciprocity principles draw heavily on this theory (Aryee et al., 2002; Choi, 2008; Deery et al., 2006; Gopinath & Becker, 2000), as do studies on the psychological contract that concerns expectations of tangible and intangible work outcomes (Montes & Irving, 2008; Restubog, Hornsey, Bordia, & Esposo, 2008; Robinson, 1996) and studies on perceived organizational support (Whitener, 2001). Although not mutually exclusive from social exchange theory, the embeddedness perspective extends beyond the dyadic relationship between a trustor and a trustee and considers the impact of third parties (Ferrin et al., 2006).

Research at this level also focuses on trust as a sense-making process (Caldwell & Hansen, 2010), drawing on social information processing theory and attribution theory. Social information processing theory (Salancik & Pfeffer, 1978) purports that individuals form beliefs and attitudes partially through the social environment, such as information provided by others. This perspective has been particularly influential in research on antecedents of trust such as communication (Hill, Bartol, Tesluk, & Langa, 2009) and reputation (Lau & Liden, 2008). Attribution theory (Heider, 1958; Weiner, 1992) has been used to explain how trustors perceive the trustworthiness of the trustee and the relationship with the trustee (Tomlinson & Mayer, 2009). This perspective has been particularly influential in research on antecedents of trust such as generalized propensity to trust (Colquitt et al., 2007), leadership behavior (Gillespie & Mann, 2004; Korsgaard, Brodt, & Whitener, 2002), and monitoring and contracts (Ferrin, Bligh, & Kohles, 2007; Malhotra & Murnighan, 2002).

Finally, social identity theory (Tajfel & Turner, 1979) is another important theoretical perspective of trust at this level, as seen in a good number of studies. Because individuals strive to maintain a positive view of the self, when trustees are viewed to be connected to oneself, such as by sharing similarities or group membership, this theory provides a mechanism for why interpersonal trust (Giessner & Van Knippenberg, 2008; Gillespie & Mann, 2004; Naquin & Paulson, 2003), trust in teams (Jehn & Mannix, 2001), and trust in organizations (Restubog et al., 2008) would increase, as discussed below.

Antecedents of Individual Trust in Interpersonal Referents

Interpersonal trust includes specified referents such as a negotiator, a leader, and a coworker or coworkers. Because of the vast number of studies, we organize our review by various key antecedents before turning to the consequences of interpersonal trust. Tables 1 and 2 present a summary of our review on the antecedents and consequences for each level.
As can be seen, categories of antecedents or consequences are listed in the top row while the level and the referent of trust are indicated in the first left column. Only example studies are provided.

**Characteristics of the trustor.** Generalized propensity to trust has been found to facilitate interpersonal trust, due to willingness to form new relationships and to give others a second chance (Dirks & Ferrin, 2002; Rotter, 1980). Colquitt and colleagues (2007) found that propensity to trust is positively correlated with perceptions of others’ trustworthiness (*ability, benevolence, and integrity*; Mayer et al., 1995). Followers with high propensity to trust have been found to have high trust in leaders despite low perceptions of leader trustworthiness (Grant & Sumanth, 2009). The effect of propensity to trust has further been found to be stronger in virtual than face-to-face environment (Yakovleva, Reilly, & Werko, 2010). A number of other trustor characteristics also have been examined: Long-term time perspective (Korczynski & Ott, 2005) has been linked to higher levels of trust in the interpersonal referent, and secure attachment style (Simmons et al., 2009) has been linked to higher levels of trust in leaders. Sniezek and Van Swol (2001) found that individuals with low power trusted their counterparts with high power more than the high-power counterparts trusted them.

**Characteristics of the trustee.** Research consistently has shown that trustors are concerned about vulnerability associated with the potential loss from trusting (e.g., Özer, Zhen, & Chen, 2011). To the extent that the trustee can engender positive perceptions in the trustor, a trusting relationship is more likely to take place. Overall, all three trustworthiness dimensions (*ability, benevolence, and integrity*) on the part of the trustee have been found to contribute to individuals’ trust in interpersonal referents. In a meta-analysis, Colquitt and colleagues (2007) found that perceptions of ability were positively related to trust in interpersonal referents. It is also important for interpersonal trust in online transactions (Balasubramanian, Konana, & Menon, 2003). For the leader referent, to the extent that followers perceive leaders to be high on competence, trust in leaders is higher (Dirks & Ferrin, 2002). Specific leader behaviors that demonstrate competence, such as communicating a collective vision, also have been linked to high levels of trust in leaders (Gillespie & Mann, 2004).

Likewise, benevolence has been found to be a key predictor of interpersonal trust (Colquitt et al., 2007; Dirks & Ferrin, 2002). In mentor–protégé relationships, support behaviors that indicate benevolence are positively related to interpersonal trust, an effect mediated by met expectations (Young & Perrewé, 2000). Perceived voluntary help from the trustee (De Jong et al., 2007) and rapport demonstrated from the trustee in the form of sympathy and cooperation (Jap, Robertson, & Hamilton, 2011) have been found to increase interpersonal trust. For the leader referent, the behavior of demonstrating individualized support has been linked to high levels of trust in leaders (Hernandez, 2008; Korsgaard et al., 2002). Relatedly, a one-to-one relationship with the leader appears to be particularly important in engendering followers’ trust in leaders. Roussin (2008) found that customizing leadership through dyadic interaction between a leader and individual team members, but not group interactions between a leader and the whole group, led to high individual trust in leaders.

Finally, as with ability and benevolence, perceptions of integrity are positively related to trust in interpersonal referents (Colquitt et al., 2007). For example, interpersonal trust is higher when the trustee is perceived to be able to uphold commitments, particularly when the
Table 1
Antecedents by Level of Analysis and Referent

<table>
<thead>
<tr>
<th>Level and Referent</th>
<th>Trustor Characteristics</th>
<th>Trustee Characteristics and Behavior</th>
<th>Shared Characteristics Between Trustor and Trustee</th>
<th>Communication Processes</th>
<th>Structural/Networks Characteristics</th>
<th>Organizational Characteristics</th>
<th>External Characteristics to the Organization</th>
</tr>
</thead>
<tbody>
<tr>
<td>Individual level</td>
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<tr>
<td>Individual trust in interpersonal referents</td>
<td>Propensity to trust (e.g., Dirks &amp; Ferrin, 2002; Yakovleva, Reilly, &amp; Werko, 2010)*</td>
<td>Perceptions of ability, integrity, and benevolence (e.g., Colquitt, Scott, &amp; LePine, 2007)*</td>
<td>Cultural-ethnic similarity (Jiang, Chua, Kotabe, &amp; Murray, 2011)*</td>
<td>Communication medium (e.g., Hill, Bartol, Tesluk, &amp; Langa, 2009)</td>
<td>Types of ties (Chua et al., 2008)</td>
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<td>Long-term time perspective (Korczynski &amp; Ott, 2005)</td>
<td>Propensity to trust (e.g., Dirks &amp; Ferrin, 2002; Yakovleva, Reilly, &amp; Werko, 2010)*</td>
<td>Perceptions of ability, integrity, and benevolence (e.g., Colquitt, Scott, &amp; LePine, 2007)*</td>
<td>Cultural-ethnic similarity (Jiang, Chua, Kotabe, &amp; Murray, 2011)*</td>
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<td>Participative and consulting decision-making (Huang, Iun, Liu, &amp; Gong, 2010)*</td>
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<td>Individual trust in teams</td>
<td>Identification with teams (Colquitt et al., 2011)</td>
<td>Integrity and benevolence (e.g., Colquitt et al., 2011) Group membership and functional roles (e.g., Kramer, 1999; Meyerson, Weick, &amp; Kramer, 1996)</td>
<td>Shared family membership (Cruz, Gómez-Mejia, &amp; Becerra, 2010) Value consensus (Jehn &amp; Mannix, 2001)</td>
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<td>Positive employee-organization relationships (Zhang, Tsui, Song, Li, &amp; Jia, 2008) Value consensus (e.g., Edwards &amp; Cable, 2009)</td>
<td>Repeated timely and honest communication (Strong, Ringer, &amp; Taylor, 2001) Reciprocal interactions (Koehn, 2003)</td>
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<td>Ongoing organizational change (Kiefer, 2005) Politics (Chen &amp; Indartono, 2011) Perceived organizational support (Whitener, 2001)</td>
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<td>Frequent interactions and shared vision (e.g., Tsai &amp; Ghoshal, 1998)</td>
<td>Communication medium (e.g., Wilson, Straus, &amp; McEvily, 2006)</td>
<td>Positive, smooth communication (e.g., Jarvenpaa &amp; Leidner, 1999)</td>
<td>Transparency in information (Palanski, Kahai, &amp; Yannarino, 2011)</td>
<td>Leadership styles (Joshi, Lazarova, &amp; Liao, 2009)</td>
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<td>Cognitive flexibility (Raes, Heijltjes, Glunk, &amp; Roe, 2011)</td>
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<td>Integrative bargaining (Raes et al., 2011)</td>
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<td>Organizational products (Choi, Eldomiaty, &amp; Kim, 2007)</td>
<td>Expected future relationship (Inkpen &amp; Tsang, 2005)</td>
<td>Communication quality (Stahl et al., 2011)</td>
<td>Asset specificity (Invested assets cannot be easily transferred; e.g., Gainey &amp; Klaas, 2003)</td>
<td>Fair, transparent policies (e.g., Gillespie &amp; Dietz, 2009)</td>
<td>Competition to partners (Croonen, 2010)</td>
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<td>Task competence (Gullett et al., 2009)</td>
<td>Partner similarity (Robson et al., 2008)</td>
<td>Communication of trustworthiness (Kasper-Fuehrer &amp; Ashkanasy, 2001)</td>
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<td>Equity and fairness (e.g., Scheer et al., 2003)</td>
<td>Joint dependence and co-location (e.g., Gainey &amp; Klaas, 2009)</td>
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<td>Cultural diversity values (Stahl et al., 2011)</td>
<td>Mutual adaptation (Carson et al., 2003)</td>
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Table 2
Consequences by Level of Analysis and Referent

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<th>Attitudes and Preferences</th>
<th>Knowledge Sharing and Organizational Learning</th>
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<td>Individual trust in interpersonal referents</td>
<td>Job satisfaction and satisfaction with leader (e.g., Dirks &amp; Ferrin, 2002)</td>
<td>Knowledge exchange (e.g., Andrews &amp; Delahaye, 2000)</td>
<td>Future cooperation (Rosanas, 2008)</td>
<td>Virtual work adjustment (Raghuram et al., 2001)</td>
<td>Creativity (e.g., Ford &amp; Gioia, 2000)</td>
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<td>Belief in information from leaders and commitment to leader decision (e.g., Dirks &amp; Ferrin, 2002)</td>
<td>Help seeking (Hofmann, Lei, &amp; Grant, 2009)</td>
<td>Implementation of negotiated agreement (e.g., Mislin, Campagna, &amp; Bottom, 2011)</td>
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<td>In-role performance and organizational citizenship behavior (OCB; e.g., Colquitt et al., 2007)</td>
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<td>Risk-taking (e.g., Colquitt, Scott, &amp; LePine, 2007)</td>
<td>Following advisor’s advice (Sniezek &amp; Van Swol, 2001)</td>
<td>Expression of opinions Organizational commitment and intention to quit (e.g., Dirks &amp; Ferrin, 2002)</td>
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<td>Attention on on tasks (Mayer &amp; Gavin, 2005)</td>
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<td>Negotiation partner selection (Fairchild, 2011)</td>
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<td>Mentor support (Wang, Tomlinson, &amp; Noe, 2010)</td>
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<td>Team psychological safety and team potency (e.g., Schaubroeck, Lam, &amp; Peng, 2011)</td>
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<td>Team turnover rate (e.g., Davis, Schoorman, Mayer, &amp; Tan, 2000)* Team sales, profits (e.g., Davis et al., 2000)*</td>
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<td><strong>Organizational level</strong></td>
<td><strong>Organizational trust in interpersonal referents</strong></td>
<td>Compassion (Dutton, Worline, Frost, &amp; Lilis, 2006)</td>
<td>Knowledge exchange (Collins &amp; Smith, 2006)</td>
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<td>Learning by experimenting (Pablo, Reay, Dewald, &amp; Casebeer, 2007)</td>
<td>Reduced coworker fighting and conflicts between employees and management (Hodson, 2004)</td>
<td>Continuous business relations, despite failure (e.g., Patzelt &amp; Shepherd, 2008)</td>
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<td>Organizational trust in organizations</td>
<td>Ease of introducing organizational change (Sonpar, Handelman, &amp; Dastmalchian, 2009)</td>
<td>Accumulating firm-specific knowledge resources (Wang, He, &amp; Mahoney, 2009)</td>
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<td>Relationship satisfaction (e.g., Gainey &amp; Klaas, 2003)</td>
<td>Interorganizational learning and knowledge transfer (e.g., De Clercq &amp; Sapienza, 2005; Nielsen &amp; Nielsen, 2009)</td>
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<td>Willingness to support partner (Wu, 2008)</td>
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<td>Contract flexibility and compliance (e.g., Davies et al., 2011; Faems et al., 2008)</td>
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*b*The leader and other interpersonal referents.

*c*The interorganizational referent only.
trustee has sufficient autonomy to do so (Perrone, Zaheer, & McEvily, 2003). The trustee’s ethical conduct (Bews & Rossouw, 2002) and expectation of the trustee’s loyalty (Rosanas & Velilla, 2003) have been positively linked to interpersonal trust. Integrity has also been viewed through the justice and fairness lens. Drawing on fairness heuristic theory (Lind, 2001), which suggests that fairness of another is viewed as a key indicator of trustworthiness, research has found that the experience of justice from others promotes interpersonal trust (Johnson & Lord, 2010). Integrity is also highly relevant in trust repair. Across different postviolation strategies the trustee can adopt, trust repair appears to be more effective to the extent that the trustor perceives the trustee has repented (Dirks, Kim, Ferrin, & Cooper, 2011). A promise to change behavior has also been found to repair trust effectively (Schweitzer, Hershey, & Bradlow, 2006). In the case that a distributive harm has occurred, large compensations or overcompensations have been found to repair trust so long as the violator is not perceived to have caused the harm intentionally and the compensations are provided voluntarily (Desmet, De Cremer, & Van Dijk, 2010, 2011). Naturally, trust repair after unethical conduct (e.g., deception) has been found to be particularly difficult (Koehler & Gershoff, 2003; Schweitzer et al., 2006).

Integrity also is a highly relevant dimension for individual trust in leaders (Colquitt et al., 2007). Leaders’ behavioral integrity, which refers to word–deed consistency or alignment and includes keeping promises and enacting espoused values, has been hypothesized to be an important antecedent of trust in leaders (Palanski & Yammarino, 2009; Simons, 2002). Both ethical leadership (Brown, Treviño, & Harrison, 2005; Kalshoven, Den Hartog, & De Hoogh, 2011) and ethical stewardship (Caldwell, Hayes, Bernal, & Karri, 2008; Caldwell, Hayes, & Long, 2010) have been linked to trust in leaders. Justice and fairness also are reasons why integrity is critical for the leader referent: Research has found that distributive, procedural, and interactional justice perceptions of leaders and of the organization relate to trust in proximal leaders (e.g., supervisors; Ambrose & Schminke, 2003; Aryee et al., 2002; Cohen-Charash & Spector, 2001; Colquitt, LePine, Piccolo, Zapata, & Rich, 2012; Khazanchi & Masterson, 2011; Lee, Pillutla, & Law, 2000; Li & Cropanzano, 2009; Yang, Mossholder, & Peng, 2009) and in distal leaders (e.g., top management; Mayer & Davis, 1999) even when organizational change is being planned (Korsgaard, Sapienza, & Schweiger, 2002). Participative and consulting decision making that gives followers a voice—a key dimension of procedural justice—also has been found to be a key factor in trust in leaders at the individual level (Dirks & Ferrin, 2002; Gillespie & Mann, 2004; Huang, Iun, Liu, & Gong, 2010). In contrast, HRM decisions based on personal relationships are perceived to violate procedural justice and decrease trust in leaders (Chen, Chen, & Xin, 2004). A breach of psychological contracts (caused by unmet expectations) also has been related to lower levels of trust in leaders (Dirks & Ferrin, 2002). Further, when perceptions of leader fairness are low, perceived injustice of an event such as performance appraisal is more strongly and negatively related to trust in leaders, as compared to when perceptions of leader fairness are high (Choi, 2008).

Unique to the leader referent, leadership styles have been implicated in signaling leaders’ trustworthiness and identified to be critical to followers’ trust in leaders. A wide range of leadership styles, including transformational leadership (Jung & Avolio, 2000; Jung, Yammarino, & Lee, 2009), transaction leadership (Jung & Avolio, 2000), operant leadership (Rubin, Bommer, & Bachrach, 2010), charismatic leadership (Conger, Kanungo, & Menon,
authentic leadership (Avolio, Gardner, Walumbwa, Luthans, & May, 2004), servant leadership (Van Dierendonck, 2011), and empowering leadership (Caldwell & Dixon, 2010), have been proposed to exert a beneficial effect on individual trust in leaders, presumably because these leadership styles address the three dimensions of trustworthiness. Some research indicates that leader behaviors signaling competence and integrity are valued more than those signaling benevolence, particularly when followers are vulnerable (Lapidot, Kark, & Shamir, 2007).

**Shared characteristics between the trustor and trustee.** Beyond factors related to either the trustor or the trustee, research has explored their shared characteristics as antecedents of interpersonal trust at the individual level. Many of these studies draw on social identity theory (Tajfel & Turner, 1979). For example, interpersonal trust is higher when the trustor and trustee share cultural-ethnic similarity (Jiang, Chua, Kotabe, & Murray, 2011) and satisfying past relationships (Kerler & Killough, 2009). In family businesses, family member employees have been found to have higher trust in leaders than do non-family member employees (Davis, Allen, & Hayes, 2010). When subordinates perceive similarity with the leader (Huang & Jun, 2006), when they identify with the leader through shared values (Gillespie & Mann, 2004), or when the leader is prototypical of the team identity (Giessner & Van Knippenberg, 2008), trust in leaders is higher. Interestingly, trust in leaders is also higher when a subordinate fits a leader’s follower prototype, presumably because the leader would trust the prototypical followers more (Sy, 2010).

**Communication processes.** Communication between the trustor and trustee also plays a key role in the development of interpersonal trust at the individual level. Face-to-face interactions facilitate greater trust as compared with online or phone communication (Hill et al., 2009; Murrell, Blake-Beard, Porter, & Perkins-Williamson, 2008; Naquin & Paulson, 2003). However, over time, the difference in trust between online and face-to-face communication diminishes because, as predicted by social information processing theory (Salancik & Pfeffer, 1978), individuals gather additional trust information from others (Hill et al., 2009). Beyond the medium itself, processes that promote smooth and positive communication and interaction, such as engaging in task-unrelated talk (i.e., small talk; Mislin, Campagna, & Bottom, 2011), exchanging gifts (Dolfsma, Van der Eijk, & Jolink, 2009), sharing information (Nguyen & Rose, 2009), being accessible (Cameron & Webster, 2011; Lievens & De Corte, 2008), and referring back to others’ points in previous conversations (Cameron & Webster, 2011), have positive effects on interpersonal trust. Likewise, leaders who engage in positive and transparent communication have high levels of trust from followers (Norman, Avolio, & Luthans, 2010). Communication of emotion also has an effect on trust: Emotional discomfort from cross-cultural negotiation has been found to relate negatively to interpersonal trust (Lee, Yang, & Graham, 2006), while leader genuine emotional display and deep acting have been proposed to increase trust in leaders more than leader surface acting does (Gardner, Fischer, & Hunt, 2009). Communication processes also may attenuate the effect of individuals’ attitudes on trust. For example, communication that allows development of personalized knowledge of the trustee can decrease the effect of the trustor’s predisposed negative attitudes toward the trustee (Becerra & Gupta, 2003).
Finally, the content of the communication also has been considered as an antecedent of trust at the individual level. Interpersonal trust has been found to be higher when the information provided by the trustee was negatively framed compared with when the information was positively framed (Keren, 2007). Accounts (e.g., explanations) have been found to increase positive perceptions of trustworthiness (Sonenshein, Herzenstein, & Dholakia, 2011), particularly when they are easy to understand and carry legitimacy (Elsbach & Elofson, 2000). Communication is influential also after violations have occurred. Timely and sincere apologies are weighted as strongly as past relationship quality by the trustor when deciding whether to rebuild trust (Tomlinson, Dineen, & Lewicki, 2004). The effect of apologies on trust repair also depends on the type of violations, with more success after competence violations than after integrity violations (Kim et al., 2004). However, apologies with an external attribution have been found to be effective for integrity violations (Kim, Dirks, Copper, & Ferrin, 2006).

Network and structural characteristics. Drawing from theories in sociology, research has examined how relational embeddedness (Burt & Knez, 1996; Yamagishi, Cook, & Watabe, 1998) affects trust because social behavior and relationships can be “so constrained by ongoing social relations that to construe them as independent is a grievous misunderstanding” (Granovetter, 1985: 482). Involvement of social networks (e.g., kinship, church, and alumni) in a relationship, for example, has been linked to interpersonal trust (Nguyen & Rose, 2009). When the trustor and trustee do not share a social tie, they often engage in “trust testing” such as questioning the information provided by the other to generate trust and cooperation (McGinn & Keros, 2002). Studies using social network analysis have found that both individual-level and group-level network properties affect interpersonal trust. Different types of network ties between the trustor and trustee may have divergent implications for different forms of trust. For example, task advice and career guidance ties increase cognitive trust, while friendship and career guidance ties increase affective trust (Chua et al., 2008). Network characteristics, such as trust transitivity (defined as having a common trusted third party shared by the trustor and trustee) and structural equivalence (defined as the similarities in the relationships the trustee and trustor have and do not have with others in a network), have been found to promote interpersonal trust (Ferrin et al., 2006). Wong and Boh (2010) found that the trustee’s network density, heterogeneity, and nonoverlapping contacts have positive effects on interpersonal trust, presumably because embeddedness lowers the likelihood that the trustee would “shortchange” the trustor and nonoverlapping contacts provide new and salient information about the trustee.

Relatedly, reputation is also an important antecedent of interpersonal trust at the individual level. Drawing on social information processing theory (Salancik & Pfeffer, 1978), research has shown that interpersonal trust is affected by the trustee’s reputation and information provided by others (Howorth & Moro, 2006). Trust in a coworker is affected by the extent to which the coworker is trusted by the leader (Lau & Liden, 2008). Research has also begun to examine interpersonal trust in online networks (Grabner-Kräuter, 2009). For example, in online markets, reputation of parties’ trustworthiness as indicated by feedback given by others has been found to improve transaction efficiency and cooperation (Bolton, Katok, & Ockenfels, 2004; Dellarocas, 2003).
Factors such as contracts and monitoring, which impose structural constraints on the relationship between the trustor and trustee, also have been considered in relation to interpersonal trust. Binding contracts that aim to promote cooperation can backfire and decrease interpersonal trust. In particular, when such contracts are removed, trust is lowered because the trustor attributes the trustee’s prior cooperation to the constraints of the contract instead of to the trustee’s trustworthiness (Malhotra & Murnighan, 2002). Similarly, while monitoring may be intended to increase cooperation, trust and monitoring have been found to be negatively related (McAllister, 1995). This negative relationship is likely due to the overlap between trust and risk (Rousseau et al., 1998). As trust can only occur when individuals face uncertainty about others (Gambetta, 1988), monitoring eliminates the necessary risk and deprives opportunities for trust to develop (cf. Kramer, 1999). However, Ferrin and colleagues (2007) have hypothesized that, through attribution processes, trust may increase when monitoring is considered appropriate and normative in a relationship such as when parties are unfamiliar with each other.

Organizational and external contexts. Research has also begun to examine the effect of organizational contexts on interpersonal trust. A cooperative organizational context induced by cooperative organizational values and a reward system that encourages teamwork promotes trust in coworkers, while a competitive organizational context induced by competitive organizational values and a reward system that encourages individual achievements strengthens the benefits of face-to-face interactions on trust in coworkers (Hill et al., 2009). The presence of reward structures has been found to foster interpersonal trust when the partner is perceived to share common goals (Ferrin & Dirks, 2003). With the leader referent, improved civility at work also has been associated with an increase in trust in leaders (Leiter & Laschinger, 2011). High-performance work systems, including practices such as employment security, selective hiring, and transformational leadership, lead to high trust in leaders (Zacharatos, Barling, & Iverson, 2005). Consistent with exchange theory, profit sharing with employees indicates organizational reciprocity and has been linked to high trust in leaders (Coyle-Shapiro, Morrow, Richardson, & Dunn, 2002). In addition, perceived organizational support (i.e., perceptions that organizations value employees’ contributions and care about their well-being; Eisenberger, Huntington, Hutchison, & Sowa, 1986) has been found to be a strong predictor of trust in leaders (Dirks & Ferrin, 2002; Treadway et al., 2004), extending social exchange theory to the relationship between the organization and the employees.

Factors external to organizations also can exert an impact on interpersonal trust. When transactions are conducted online, environmental security has been linked to interpersonal trust (Balasubramanian et al., 2003). At the national level, governments that provide structures to facilitate business transactions, including laws and regulations, increase interpersonal trust in business settings (Child & Möllering, 2003; Rao, Pearce, & Xin, 2005). When formal institutions are weak, interpersonal trust that results from guanxi in China or blat in Russia has been reported to be prominent (Puffer, McCarthy, & Boisot, 2010; Tan et al., 2009). Research on national political systems (e.g., neotraditional communistic and modern democratic) also has found that political systems affect employees’ interpersonal trust, as mediated by differences in organizations’ HRM policies and practices (Pearce, Branyiczki, & Bigley, 2000).
Consequences of Individual Trust in Interpersonal Referents

Research on trust in interpersonal referents at the individual level has demonstrated a wide range of attitudinal and behavioral outcomes. For example, trust in leaders is related to attitudinal outcomes such as satisfaction with the leaders, ratings of leadership effectiveness, job satisfaction, and reduced uncertainty at work (Colquitt et al., 2012; Dirks & Ferrin, 2002; Gillespie & Mann, 2004; Zhang, George, & Chan, 2006). Trust in leaders increases support for the leader, even in the face of unfavorable outcomes (Brockner, Siegel, Daly, Tyler, & Martin, 1997), and increases belief in information from leaders and commitment to the decisions made by leaders (Dirks & Ferrin, 2002). Interpersonal trust also affects preferences: the meta-analysis by Colquitt and colleagues (2007) has shown that trust in coworkers and leaders increases risk taking.

Behavioral outcomes affected by interpersonal trust include knowledge sharing, cooperation, communication, viability, and performance. Interpersonal trust has been found to promote knowledge exchange (Andrews & Delahaye, 2000; Golden & Raghuram, 2010; Levin & Cross, 2004; Mäkelä & Brewster, 2009) and trust in leaders in particular has been linked to followers' feedback seeking from the leader (Hays & Williams, 2011). Additionally, interpersonal trust can facilitate future cooperation (Rosanas, 2008) and trust in leaders can increase followers' expression of opinions due to increased willingness to take risk to speak up (Premeaux & Bedeian, 2003), especially when the leader is empowering (Gao, Janssen, & Shi, 2011). For outcomes related to viability, interpersonal trust has been linked to higher virtual work adjustment (Raghuram, Garud, Wiesenfeld, & Gupta, 2001) and lower work-nonwork conflicts (Raghuram & Wiesenfeld, 2004). Trust in leaders is likewise positively related to organizational commitment and negatively related to intention to quit (Dirks & Ferrin, 2002). Finally, interpersonal trust also increases the creativity of both the trustor and the trustee (Ford & Gioia, 2000; Madjar & Ortiz-Walters, 2008; Moran, 2005), decreases counterproductive behavior (Colquitt et al, 2007), and encourages employees to adopt a total quality management orientation at work that includes teamwork and continuous improvement (Coyle-Shapiro & Morrow, 2003).

The relationship between trust in interpersonal referents and individual performance, however, has generally been mixed. Most research in this area focuses on trust in leaders. While some studies found that trust in leaders increased both in-role performance and organizational citizenship behaviors (OCBs; Colquitt et al., 2007; Huang et al., 2010; Palanski & Yammarino, 2011; Yang & Mossholder, 2010), others found that trust in leaders increased OCB but not in-role performance (Mayer & Gavin, 2005). Reflecting on these conflicting findings, Dirks and Ferrin (2002) concluded that the relationship between trust in leaders and performance was weak. It is possible that the relationship between trust in leaders and performance may be distal; for example, trust in leaders has been found to enable employees to focus their attention on their tasks (Mayer & Gavin, 2005). Further, perceived leader trustworthiness may moderate relationships that involve performance, such as the relationship between prosocial orientation and performance (Grant & Sumanth, 2009).

Beyond main effects, trust in leaders has also been examined as a mediator or moderator. It has been found to mediate the relationships between leadership perceptions and voting behavior (Pillai, Williams, Lowe, & Jung, 2003), between perceptions of interactional justice and employee in-role performance and OCBs (Aryee et al., 2002), and between employee...
voice and organizational commitment (Farndale, Van Ruiten, Kelliher, & Hope-Hailey, 2011). Moreover, trust in leaders strengthens the relationship between procedural fairness and cooperation (De Cremer & Tyler, 2007) and mitigates employees’ negative reactions toward organizational change, as their identification with the leader can be broadened to include identification with the organization (Oreg & Sverdlik, 2011).

Other research reveals additional important outcomes of interpersonal trust that are relevant to specific relationships. In negotiations, individuals tend to choose a partner whom they trust even if the partner provides fewer resources over a partner whom they do not trust but who can provide more resources (Fairchild, 2011), and trust in partners increases implementation of negotiated agreements (Mislin et al., 2011). While affective trust has been found to decrease the use of deception, cognitive trust and perceptions of partner trustworthiness have been found to increase the use of deception in negotiations (Olekalns & Smith, 2007, 2009). More generally, interpersonal trust has been found to mediate the negative relationship between media richness and the use of deception in interactions (Rockmann & Northcraft, 2008). Among entrepreneurs, interpersonal trust has been related to increased moral awareness (Bryant, 2009).

There also are important consequences of trust for mentor and advisory relationships. In mentor–protégé relationships, mentors’ affective trust in protégés promotes mentoring functions including role modeling and career and psychosocial support (Wang, Tomlinson, & Noe, 2010). Trust in advisors when making decisions increases the likelihood of following the advisors’ advice and the confidence about the decisions made (Sniezek & Van Swol, 2001). However, this trust can be easily lost with advisor mistakes (Yaniv & Kleinberger, 2000). Trust in an expert colleague increases help seeking in the expert due to positive expectations of the expert and reduced perceived cost of seeking help (Hofmann, Lei, & Grant, 2009).

Antecedents of Individual Trust in Teams

Research on individuals’ trust in teams has received only scant attention. The antecedents of trust in teams can include characteristics of the trustor or trustee, but their effects may depend on the context. For example, the relationship between team integrity and individuals' trust in teams is stronger when individuals are more vulnerable (Lapidot et al., 2007). Likewise, Colquitt and colleagues (2011) found that team members’ integrity led to trust in teams when the task contexts were characterized by high unpredictability and danger; while team members’ benevolence and the trustor’s identification with the team predicted trust in teams when the task contexts were characterized by low unpredictability and danger. Other research on trustee characteristics has focused on category and role-based trust derived from team members’ group membership or functional roles (Kramer, 1999), both of which foster swift trust development (Meyerson, Weick, & Kramer, 1996).

Research has also examined shared characteristics between the trustor and trustee. Drawing on agency theory that concerns conflicts of interest between principles and agents, chief executive officers (CEOs) have been found to be more likely to perceive top management teams (TMTs) to be benevolent when CEOs and TMT members belong to the same family and when there is family ownership of the firm (Cruz et al., 2010). In a similar vein, value consensus (i.e., the degree of similar values shared by group members) has been linked to
high trust in teams due to social identification process (Jehn & Mannix, 2001). However, research has indicated that demographic dissimilarity can be positively related to trust in teams when individuals are minorities and endorse conservative and authoritarian beliefs (Chattopadhyay, 2003).

As demonstrated in this review, research on individual trust in teams has thus far explored a limited set of antecedents. Many of the antecedents identified in the research on individual trust in interpersonal referents, such as communication, networks, and organizational contexts, can be examined. Further, research on the team referent has yet to examine the processes of trust violation and repair.

**Consequences of Individual Trust in Teams**

Studies have found that trust in teams increases satisfaction with the team (Chou, Wang, Wang, Huang, & Cheng, 2008) as well as proactive idea implementation and problem solving (Parker, Williams, & Turner, 2006). Overall, there has been very little research that examines the impact of trust in teams at the individual level on other outcomes such as performance and OCBs, with the exception of one study that found that the relationship between trust in teams and performance was stronger when the task contexts were high on unpredictability and danger compared to when the task contexts were low on these features (Colquitt et al., 2011). This study also found that trust in teams was negatively associated with withdrawal in predictable and safe task contexts and with physical symptoms, such as headache and digestive problems, in unpredictable and dangerous contexts. Finally, trust in members has been found to facilitate group buying behaviors (Jing & Xie, 2011).

**Antecedents of Individual Trust in Organizations**

As with the interpersonal referent, the trustor characteristic of organizational identification is positively related to individual trust in organizations (Deery et al., 2006). Trustee characteristics, including organizations’ ability, benevolence, and integrity, likewise play a critical role in individual trust in organizations (Caldwell & Clapham, 2003). For example, negative publicity due to malfunctioning products reduces consumer trust in organizations, while perceived corporate ability increases it (Lin, Chen, Chiu, & Lee, 2011). A growing amount of research has focused on perceived corporate social responsibility (CSR) and found it increased stakeholders’ trust in organizations (Bhattacharya, Korschun, & Sen, 2009; Castaldo, Perrini, Misani, & Tentatici, 2009; Lin et al., 2011; Stanaland, Lwin, & Murphy, 2011), with participation in CSR initiatives producing a stronger effect (Du, Bhattacharya, & Sen, 2011) and unsustained claims of CSR efforts backfiring (Jahdi & Acikdilli, 2009).

Trustee characteristics also include justice. As with the leader referent, distributive, procedural, and interactional justice has been linked to trust in organizations (Cohen-Charash & Spector, 2001; Khazanchi & Masterson, 2011; Li & Cropanzano, 2009). Organizational justice systems that do not allow voice and require mandatory and binding arbitration have been found to lower trust (Bernardin, Richey, & Castro, 2011). Interestingly, employees at different organizational levels may focus on different forms of justice. Begley, Lee, and Hui (2006)
found that distributive justice better predicted trust in organizations among higher level rather than lower level employees. Other antecedents of individual trust in organizations have focused on psychological contracts. Relational contract breach (e.g., not having career growth or a friendly work environment) has been linked to low employees’ trust in organizations (Montes & Irving, 2008; Restubog et al., 2008), particularly among younger employees (Bal, De Lange, Jansen, & Van der Velde, 2008). Felt violation has been found to mediate the relationship between psychological contract breach and trust in organizations (Dulac, Coyle-Shapiro, Henderson, & Wayne, 2008).

Shared characteristics between the trustor and trustee (i.e., the organization) also play a role in individuals’ trust in organizations. Positive employee-organization relationships that are characterized by mutual investment and supervisor support (e.g., benevolence; Zhang, Tsui, Song, Li, & Jia, 2008) and value congruence with the organization (Edwards & Cable, 2009) have been found to positively relate to trust in organizations. Communication processes such as repeated interactions that are characterized by timeliness, honesty, and empathy from organizations is likewise positive to individual trust in organizations (Strong, Ringer, & Taylor, 2001). When businesses are online, reciprocal interactions with organizations, along with user-friendly sites that allow customization and feedback have been suggested to increase consumer trust in organizations (Koehn, 2003).

Organizational characteristics such as ongoing organizational changes (Kiefer, 2005), the extent to and the length in which an organization uses temporary workers (George, 2003), and perceived politics in organizations (i.e., manipulative behaviors; Chen & Indartono, 2011) have been negatively related to trust in organizations. Perceived organizational support, on the other hand, has been positively related to individual trust in organizations (Whitener, 2001). Studies also have explicitly examined violations to trust in organizations. Nakayachi and Watabe (2005) found that when the organization voluntarily offered provisions of monitoring and sanctions, individuals’ trust in the organization became more positive than when the provisions were involuntarily imposed. Timely ethical failure management also has been proposed to control the erosion of trust in organizations (De Cremer, Tenbrunsel, & Van Dijke, 2010).

As with research on individuals’ trust in teams, research on trust in organizations has not examined antecedents such as network characteristics and factors external to organizations. In addition, Hummels and Roosendaal (2001) proposed that trust in organizations can be differentiated based on whether the trustor is a member or nonmember of the organization and whether the trustor has a direct or indirect relationship with the organization. More research is needed to understand how trust in organizations differs on these distinctions.

**Consequences of Individual Trust in Organizations**

Research has shown that trust in organizations increases employees’ job satisfaction, organizational identification, cooperative employment relations, intention to stay, and OCB (Deery et al., 2006; Edwards & Cable, 2009; Montes & Irving, 2008; Restubog et al., 2008). Trust in organizations may also increase the sharing and receiving of knowledge among employees (McEvily, Perrone, & Zaheer, 2003). Trust in organizations has been found to mediate the relationship between psychological contract breach and loyalty and withdrawal
behavior (Lo & Aryee, 2003), between perceived organizational support and commitment and performance (Chen, Aryee, & Lee, 2005; Whitener, 2001), between workgroup incivility and burnout and turnover intentions (Miner-Rubino & Reed, 2010), between perceived CSR and OCB and turnover intention (Hansen, Dunford, Boss, Boss, & Angermeier, 2011), and between perceived corporate citizenship to its stakeholders or society and employee work engagement (Lin, 2010). Trust in organizations also moderates the relationship between perceived organizational obligations and OCB (Coyle-Shapiro, 2002).

Unlike with other referents at this level, trust in organizations has been linked to many consumer outcomes. When customers trust an organization, they are more likely to have stronger purchase intentions (Lin et al., 2011; Stewart, 2003) and better customer satisfaction (Balasubramanian et al., 2003), to cooperate with the organization (e.g., share personal information and engage in product development; Porter & Donthu, 2008), and to continue business relations with the organization (Saparito et al., 2004). Trust in an online business has been proposed to lower the uncertainty associated with online transactions (Grabner-Kräuter, 2002). Consumers’ trust in organizations has also been found to mediate the relationship between organizations’ brand images and equity (Chen, 2010). Interestingly, distrust in a company has been found to promote consumer information seeking about the company, even in the absence of any purchase intention (Bell & Main, 2011).

**Strengths, Limitations, and Future Directions**

As can be seen in the above review, trust at the individual level has garnered a large body of research. Our review reveals several notable strengths of research at this level. Research has considered a wide range of antecedents. Particularly noteworthy is research that utilizes cross-level models to investigate the effects of team-level factors (e.g., network characteristics) and organizational-level factors (e.g., reward systems) on individuals’ trust. Some implicit commonalities in individual trust across different referents can be observed. For example, similarities between the trustor and the trustee have been examined with interpersonal, team, and organization referents (Chattopadhyay & George, 2001; Edwards & Cable, 2009; Gillespie & Mann, 2004; Jehn & Mannix, 2001). At the same time, Table 1 illustrates that there is great potential for cross-fertilization of antecedents applied to one referent to be examined with another referent. For example, trustor characteristics such as attachment style have been found to affect trust in leaders, yet some of these characteristics have not been applied to other referents. Likewise, network structures that have been found to affect interpersonal trust have yet to be studied as an antecedent of the leader, team, and organization referents. Leaders’ own networks, for instance, may influence employees’ trust (cf. Sparrowe & Liden, 2005, for effects of leaders’ networks): To the extent that leaders are central in their own professional networks, the followers’ trust in leaders may be higher.

There are also a number of common outcomes of trust in different referents at the individual level, including satisfaction with the referent and performance (e.g., Chou et al., 2008; Colquitt et al., 2007). However, unique outcomes are also evident; for example, consumer outcomes are also evident; for example, consumer outcomes are affected by trust in organizations (Lin et al., 2011; Saparito et al., 2004). As with antecedents, it will be fruitful to cross-fertilize the outcomes examined for different referents. For example, both feedback seeking and virtual work outcomes for the interpersonal referents can be examined as outcomes for the team and organization.
referents. Future research should continue to examine unique outcomes to a referent. For example, organizational climate might be especially relevant to trust in organizations, and team conflict might be especially relevant to trust in teams.

Further, while research on trust at this level has covered multiple referents, our review found that the referent is not always clearly identified in that some research does not specify the trust referent or uses different referents interchangeably. Mayer and colleagues (1995) warned that failure to specify referents can lead to confusion in levels of analysis. It is particularly important, as research has demonstrated that trust in different referents, such as in colleagues and organizations, are related but distinct constructs (Zaheer et al., 1998). Ingenhoff and Sommer (2010) found that trust in companies tended to be higher than trust in CEOs and that the trustworthiness dimension of benevolence was more relevant to trust in companies than to trust in CEOs. Further, information processing and judgment making can differ with individual versus group referents (Hamilton & Sherman, 1996). These studies underline the importance to clearly identify the trust referent in future research.

We note that the vast majority of the literature focuses on employees’ trust and that there has been comparably little research on trust in employees (e.g., from leaders’ perspective) or on employees being trusted (e.g., Alge, Ballinger, & Green, 2004; Ruppel & Harrington, 2000). Ruppel and Harrington (2000) found that an ethical work climate that emphasizes benevolence was positively related to manager’s trust in employees, which in turn was related to higher employee commitment and innovation. When employees feel they are trusted by the organization, their perceptions of interactional and procedural justice are higher (Kickul, Gundry, & Posig, 2005). Similarly, Dirks and SKarlicki (2009) found that when employees were perceived to be high on the trustworthiness dimensions of ability and integrity by coworkers, the employees’ performances were higher. Future research should continue to explore this topic. For example, leader–member exchange theory clearly suggests that leaders form divergent relationships with different employees and may trust them differently (Brower, Schoorman, & Tan, 2000; Graen & Uhl-Bien, 1995). Along the same lines, relatively few studies have examined trust violations committed by employees (e.g., Den Nieuwenboer & Kaptein, 2008) and the consequences of low trust in employees.

The above review also illustrates that fit may be important for trust across referents. For example, fit on some dimensions between the trustor and the trustee, such as value and vision, appears to be essential for trust to occur, regardless of who the referent is (Chattopadhyay & George, 2001; Edwards & Cable, 2009; Gillespie & Mann, 2004; Jehn & Mannix, 2001). At the same time, different dimensions of fit are likely relevant for different referents. For example, interpersonal trust may be particularly affected by shared backgrounds and perspectives among trustors and trustees, whereas trust in leaders might be more affected by similarity in goal alignment. More generally, we see additional opportunities for trust research to incorporate theories from the fit literature. Borrowing from its terminology (Cable & Edwards, 2004; Ostroff & Schulte, 2007), the effect of the trustee’s ability to meet the trustor’s need on trust, such as a leader’s ability to improve a follower’s professional development, can be understood as trust arising from need–supply or complementary fit. The effect of the trustee’s benevolence and integrity on trust, such as demonstrated care and shared values among team members, can be understood as trust arising from value congruence or supplementary fit.

Finally, our review of individual-level trust illustrates that diverse theoretical perspectives have been brought to bear on the antecedents and consequences, including social exchange
theory, the embeddedness perspective, social information processing, attribution theory, and social identity theory. Across the referents at this level, however, research has drawn heavily on social exchange theory. The review also reveals that there are some theoretical perspectives associated with different referents. For example, the embeddedness perspective and social information processing theory have been adopted in trust in interpersonal referents but not in team and organizational referents. Although many studies rely on one dominant theoretical perspective, we suspect that many antecedents of trust can be informed by multiple theoretical perspectives. For example, the positive effect of shared ties and networks on trust (Ferrin et al., 2006) can be explained by embeddedness perspective, social information processing theory, and attribution theory. Similarly, while the positive relationship between fairness and trust typically is explained through social exchange theory, attribution theory also appears to be relevant. We observe the same with several consequences. Both attribution theory and social identity theories may explain the relationship between trust in a referent and positive perceptions about the referent, and both social identity and social exchange theories can explain why trust prompts individuals to engage in OCB in organizations.

The Team Level

The past decade has seen the number of studies at the team level steadily grow. The distinction between trust at the individual level and trust at the team level is critical. For example, compared to individuals, teams have been shown to have lower trust in one another (Song, 2009). It is also important to note the distinction between teams as a referent and as a level of analysis. As a referent, trust in teams can be at the individual, team, or organizational levels. As a level of analysis, trust at the team level refers to trust collectively shared among team members, regardless of the trust referent.

Several prominent theoretical perspectives, many of which have been discussed at the individual level, have been adopted by research at this level. For example, research has drawn on social exchange theory and the principle of reciprocity to explain interteam trust (Serva, Fuller, & Mayer, 2005). Similarly, social information processing theory has been used to understand how members in teams make sense of their relationships and trust one another (Walumbwa et al., 2011). A related theory is the media richness theory (Daft & Lengel, 1986), which has frequently been drawn upon in research on trust in virtual teams (Wilson, Straus, & McEvily, 2006). When considering team trust among diverse members or interteam trust, many studies have drawn on social identity theory and in-group and out-group dynamics (Tajfel & Turner, 1986). In particular, promotion of an “us and them” comparison (Brewer, 1979) has been found to decrease trust at this level (Newell, David, & Chand, 2007; Polzer et al., 2006; Tsai & Ghoshal, 1998). Unique to this level of analysis is the perspective of conflict management theory due to the primacy of social interdependence in teams (Hempel, Zhang, & Tjosvold, 2009).

Antecedents of Team Trust

Research at this level has focused on the effects of trustee characteristics. For example, different leadership styles have been examined as antecedents of team trust in the leader
referent. Schaubroeck and colleagues (2011) found that servant leaders increased team-level affective trust in leaders while transformational leaders increased cognitive trust in leaders. Drawing on social exchange theory, interteam trust can be influenced by reciprocity, initiated by the trustee. Risk-taking exhibited by one team has been found to signal trust in a partner team, which prompts the partner team to reciprocate trust in the risk-taking team (Serva et al., 2005). In interactions between top management teams and middle managers, to the extent that both parties demonstrate cognitive flexibility and engage in integrative bargaining, their trust in each other has been proposed to be higher (Raes, Heijltjes, Glunk, & Roe, 2011).

Shared characteristics between the trustor and trustee have also been examined, particularly in research on trust between teams. Frequent interaction and shared vision have been found to increase interteam trust (Tsai & Ghoshal, 1998), presumably because these factors increase knowledge about the commonalities between teams. Additionally, geographical differences between teams when teams are physically in different locations have been found to be negatively related to interteam trust (Polzer et al., 2006). Drawing from the faultline research (Lau & Murnighan, 1998), Polzer and colleagues further found that interteam trust at team level was lower between two teams than among three or more teams, and when teams were homogeneous as compared to heterogeneous. Because of the concern for managing interdependence in teams, communication processes have been identified as another key antecedent of team-level trust in teams. Communication behaviors such as giving timely and substantive responses, communicating enthusiasm, taking initiative, and transiting from a procedural to task focus have been found to increase team trust in teams (Jarvenpaa & Leidner, 1999). The medium of communication is another antecedent. Team trust in computer-mediated teams has been found to be lower than in face-to-face teams (Wilson et al., 2006). While the use of information and communication technologies generally lowers trust, the negative impact of virtual technologies on team trust decreases as team leaders and members become more adept at communicating virtually (Alge, Wiethoff, & Klein, 2003; DeRosa, Hantula, Kock, & D’Arcy, 2004). Research has also examined the effect of the information communicated. Transparency in information shared was found to be positively related to team trust in teams, mediated by team behavioral integrity (word–deed consistency; Palanski, Kahai, & Yammarino, 2011).

Team conflict is another critical antecedent of trust in teams at the team level. Conflict occurs when differences exist between individuals and groups (De Dreu & Gelfand, 2008). Conflicts within a team often arise from diversity such as differences in beliefs (Olson, Parayitam, & Bao, 2007) and geographical and cultural distances as in the case of virtual teams (Jarvenpaa & Leidner, 1999; Newell et al., 2007). Different types of conflict have been found to affect trust at the team level. For example, relationship conflicts in teams were found to decrease team trust in teams (Langfred, 2007), while task conflicts were not. Conflict management strategies also affect trust at this level. Cooperative conflict management in teams that focuses on mutual benefit in resolving conflicts promotes team trust in teams, while competitive conflict management that focuses on winning in resolving conflicts in teams decreases team trust in teams (Hempel et al., 2009). Structural characteristics have also been explored in trust at this level. Inspirational leaders who conveyed collective messages and team missions were found to increase team trust in teams and this effect was stronger for teams that were geographically dispersed (Joshi, Lazarova, & Liao, 2009).
Consequences of Team Trust

Team trust has been linked to a wide range of positive outcomes. Research has examined different components of team trust in leaders. For example, affective team trust in leaders increases team psychological safety, while cognitive team trust in leaders increases team potency (Schaubroeck et al., 2011). Team trust in leaders has also been shown to have a positive effect on team-level sales, profits, and turnover rates, supporting the notion that team trust in leaders provides a competitive advantage (Davis et al., 2000). Interestingly, team trust in leaders has been found to be a stronger predictor of team performance than team trust in teams (Dirks, 2000), suggesting divergent effects for team trust in different referents.

Likewise, research has examined outcomes of team trust in teams. Team trust in teams has been found to increase team-level satisfaction with the team (Costa, 2003), information sharing (Howorth, Westhead, & Wright, 2004), team learning (Bogenrieder & Nooteboom, 2004), team member autonomy and task interdependence (Langfred, 2007), team affective commitment (Costa, 2003), and team OCB and performance (Hempel et al., 2009; Joshi et al., 2009; Langfred, 2004; Walumbwa et al., 2011). De Jong and Elfring (2010) found that the effect of team trust in teams on performance was mediated by factors such as team adaptability and team effort, presumably due to an increase in promotion focus among team members. Team trust in teams also predicts team decision-making effectiveness, but only when the team interdependence is high (Alge et al., 2003). Interteam trust has been found to increase resource and knowledge exchange, which in turn boosts the innovation of the teams (Tsai & Ghoshal, 1998), but the trust and knowledge exchange relationship is weaker if the knowledge being transferred is unspecified and its function is ambiguous (Szulanski, Cappetta, & Jensen, 2004).

Team trust in teams has also been examined as a moderator. It has been shown to strengthen the relationship between cognitive diversity and task conflict, which has a positive effect on team decision making (Olson et al., 2007); to mitigate the negative effect of negative feedback received by the team on subsequent team relationship conflict (Peterson & Behfar, 2003); and to strengthen the effect of average training proficiency of teamwork skills on performance in virtual teams (Kirkman, Rosen, Tesluk, & Gibson, 2006). When team trust in teams is low, task conflicts can be misattributed to be relationship conflicts (Simons & Peterson, 2000). Team trust among TMT members has been found to mitigate the negative impact of a CEO’s right to instruct other TMT members, which typically lowers the comprehensiveness of the decisions made by the team (Talaulicar, Grundeil, & Werder, 2005).

Strengths, Limitations, and Future Directions

Trust at the team level is a newly developed area. As can be seen in our review, despite the relatively small number of studies, existing research demonstrates considerable strengths. For example, researchers have begun to compare and contrast the effects of different referents (Dirks, 2000), and studies also have successfully linked trust at the team level to objective outcomes (Davis et al., 2000). Further, research has examined antecedents particularly relevant to this level, such as different conflict management strategies (e.g., Hempel et al., 2009).
Nevertheless, our review indicates that the set of antecedents and outcomes at the team level is relatively small. As Table 1 illustrates, team trust across referents has a good number of antecedents that have yet to be examined, such as trustor characteristics, justice and fairness, organizational characteristics, and factors external to organizations.

Additionally, research at the team level has thus far underutilized social network analysis, which is surprising considering that research at the individual and organizational levels has capitalized on this approach. An interesting future direction is to examine the relationship between intrateam and interteam network characteristics and trust at this level. Network closure, density, and subnetworks, for instance, should promote trust and cooperation (Coleman, 1988; Millar & Choi, 2009). Research can also explore whether dense network structure and high team trust lead to unintended negative consequences. For example, Langfred (2004) found that high team trust in autonomous teams lowered team monitoring, which in turn lowered team performance.

Likewise, future research at this level should examine additional outcomes. Cross-level and multilevel research will be particularly fruitful. Studies can compare the effects of trust in the same referent but at the individual versus team levels. Understanding when trust at different levels has similar and dissimilar effects carries important theoretical and practical implications. Dirks and Skarlicki (2004), for example, suggested that the magnitude of the relationship between trust in leaders and performance at the team level may be stronger than that at the individual level. In addition, interpersonal trust at the individual level has been linked to creativity (e.g., Ford & Gioia, 2000), as reviewed previously, and creativity has yet to be examined as an outcome at the team level of analysis. We would suspect that while trust has a positive effect on creativity at the individual level, very high team trust in teams may lead to groupthink and lower creativity. As another example, the construct of being trusted, or felt trust, has been examined at this level: Salamon and Robinson (2008) found that employees’ collective felt trust by management predicted team performance above and beyond their trust in the management. This effect can be compared to the effect of felt trust at the individual level.

As with the individual level, the above review shows that divergent theoretical perspectives have been brought to bear on the antecedents and consequences of trust at the team level. While there are commonalities in theories between the two levels, new theoretical perspectives on trust that have been adopted at this level can be applied to the individual or organizational levels, such as conflict management. At the same time, research at this level has not drawn on some perspectives that have been discussed at the individual level. For example, research has rarely examined how attribution influences team trust, which can be a particularly valuable approach in cases of violations or team conflicts. Within this level, social exchange theory has been adopted across the three referents, but other perspectives have been associated with some referents but not others. For example, research on team trust in leaders can draw on social information processing theory and social identity theory. Further, we suspect that some of the antecedents of team trust can be informed by multiple theoretical perspectives. For example, both social exchange theory and social identity theory can explain the positive relationship between team trust in teams and team information sharing (Howorth et al., 2004). Overall, we see the theoretical diversity as a strength of the field and encourage researchers to explore additional theoretical perspectives.

An important agenda for future research is to increase greater theoretical specification in the nature of the team trust construct—whether for team-level trust in teams, in leaders, in
other units, or in organizations. Studies are sorely needed to explore how trust emerges at the team level. Bliese (2000) proposes that attitudes among team members are nonindependent, such that one member’s trust in the team is expected to affect and be affected by other members’ trust in the team, which could be likened to a process of “trust contagion.” Yet, there is little research on the factors that affect the spread of trust across team members. Leaders are likely a key driver of the emergent process, given their roles as climate engineers (Dansereau & Alutto, 1990; Naumann & Bennett, 2000) and their capability to signal what is valued and expected among team members. Likewise, team processes, such as conflict and managing conflict productively, should affect both the degree and emergence of team trust. In particular, because trust has an emotional component (Jones & George, 1998; Williams, 2007), those team processes that involve emotion, such as emotion contagion and emotional tuning, may play an important role. We note that it is also possible that emergent processes of team trust depend on the specific referent, such that team processes may be particularly relevant to the emergence of team trust in teams, while leadership behaviors may be particularly relevant to the emergence of team trust in leaders.

The Organizational Level

Research on trust at the organizational level is a thriving area, especially on interorganizational trust, as our review illustrates below. As with trust at the individual and team levels, social exchange theory serves as a main theoretical perspective to understand the underlying process of trust at this level, with the specific aspects of the social exchange different from those at the lower levels. For example, to the extent HRM indicates commitment and support, employees are more likely to trust the organization (Collins & Smith, 2006; Hodson, 2004).

For interorganizational trust, the perspective of transactional cost economics has been dominant in research (Verbeke & Greidanus, 2009), but some research (e.g., Lado, Dant, & Tekleab, 2008) has differentiated between transactional cost economics theory and relational exchange theory. The principle of equity and reciprocity also has been frequently applied to interorganizational trust (Dekker & Van den Abbeele, 2010; Gainey & Klaas, 2003; Gulati & Sytch, 2007; Scheer, Kumar, & Steenkamp, 2003). Furthermore, research has examined how relational embeddedness, including shared networks and reputational concerns, affects interorganizational trust (Glückler & Armbrüster, 2003). Attribution theory has been used to explain how trustors make sense of a negative incident and of the relationship with the trustee, such as in the case of interorganizational violations (Janowicz-Panjaitan & Krishnan, 2009). Finally, research at this level has drawn on the perspective of structuralism, which considers forces both systematic and external to an organization. Factors such as labor composition and market affect all employees and thus can facilitate or hinder their trust in organizations (Hodson, 2004).

Antecedents of Organizational Trust

With regard to trustor characteristics, organizational identification has been linked to organizational trust in organizations (Maguire & Phillips, 2008). When the referent is another
organization such as in the case of interorganizational relations, relationship satisfaction has been linked to interorganizational trust (Davies, Lassar, Manolis, Prince, & Winsor, 2011). Research has likewise examined trustee characteristics in relation to the organization referent. Organizational-level integrity is positively related to organizational trust in organizations (Palanski & Yammarino, 2009). Further, the organizational climate of trust in coworkers has been found to coincide with a climate that emphasizes morale, leadership credibility, and reward equity (Burton, Lauridsen, & Obel, 2004). When consumers are uncertain about an organization’s products, their trust in the organization is expected to be low (Choi, Eldomiaty, & Kim, 2007). Trustee characteristics also influence interorganizational trust. Assistance received from the partner (Dyer & Chu, 2000), task competence and quality assurance (Gullett et al., 2009), equity and fairness (Das & Teng, 1998; Robson et al., 2008; Scheer et al., 2003), business ethics (Kasper-Fuehrer & Ashkanasy, 2001), and cultural diversity values (Stahl, Larsson, Kremershof, & Sitkin, 2011) have been positively related to interorganizational trust.

Shared characteristics between the trustor and trustee are also important. For organizational trust in coworkers, holding common principles among organizational members has been found to be positive (D’Iribarne, 2003). Numerous shared characteristics between organizations have been found to predict interorganizational trust. For example, both prior experience and collaboration (shadow of the past; Abramov, 2010; Dekker & Van den Abbeeke, 2010; Inkpen & Currall, 2004) with a partner and expected future relationship (shadow of the future; Inkpen & Tsang, 2005) have been found to promote trust in the partner organization. In particular, shadow of the future has been found to mediate shadow of the past in fostering interorganizational trust (Poppo, Zhou, & Ryu, 2008). Relatedly, McCarter, Mahoney, and Northcraft (2011) suggest that, when alliance partners engage in a pilot project prior to a large-scale cooperation, uncertainty about the partner is reduced and interorganizational trust is facilitated. Along the same lines, personal relationships of the entrepreneurs have been found to foster interorganizational trust among emerging firms (Hite, 2005). Other antecedents in this category that have been identified include: relationship length (Gulati & Sytch, 2007); partner similarity (Robson, Katsikeas, & Bello, 2008); shared network (Glückler & Armbrüster, 2003); joint dependence and shared location (Gainey & Klaas, 2003); a common business understanding (Kasper-Fuehrer & Ashkanasy, 2001); and mutual adaptation (Carson et al., 2003).

Communication is another key antecedent at this level. Two-way communication (Van Marrewijk, 2004) has been identified to facilitate organizational trust in organizations. Between organizations, effective communication (Gainey & Klaas, 2003); communication quality (Stahl et al., 2011) and interactional courtesy (Gullett et al., 2009) have been found to be beneficial. In virtual interorganizational relations, trust is proposed to be higher when organizations are able to effectively communicate their trustworthiness (Kasper-Fuehrer & Ashkanasy, 2001). Research has likewise examined the effects of structural factors. In the case of organizational violations, voluntary compliance with external regulations can facilitate shared organizational trust in organizations (Gillespie & Dietz, 2009). For interorganizational trust, asset specificity of the exchanged resource (i.e., the extent to which the invested assets cannot be transferred, which limits the likelihood of contract breach) has been found to have a positive effect (Gainey & Klaas, 2003; Katsikeas, Skarmeas, & Bello, 2009). The effects of different features of contracts have also been explored. Collaboration provisions
have been found to increase competence-based trust; while control provisions have been found to increase competence-based trust but decrease benevolence- and integrity-based trust (Malhotra & Lumineau, 2011). When organizations belong to the same corporate network, a clear and transparent reward structure should facilitate interorganizational trust (Inkpen & Tsang, 2005). After an acquisition, the acquired organization’s trust in the acquiring organization is higher when the post-acquisition integration takes a short amount of time and the change in job security and rewards is positive (Stahl et al., 2011).

A number of studies have examined how organizational characteristics, particularly organizational practices, affect trust across referents at this level. For shared organizational trust in coworkers, research has shown the positive effects of relational and commitment-based practices and policies, such as a relationship-oriented culture that focuses on promoting positive relations among employees, informal meetings, and development of employee competence (Collins & Smith, 2006; Six & Sorge, 2008). Using ethnographic methods, Hodson (2004) found that factors such as supportive employment practices and management competence led to perceptions of organizational trustworthiness among employees. Other organizational practices, including fair, transparent, and coherent policies, also can facilitate shared organizational trust in organizations (Gillespie & Dietz, 2009; Pučėtaitė & Lämsä, 2008).

In addition to these organizational practices, factors external to organizations such as unstable markets have been predicted to affect perceptions of organizational trustworthiness from employees (Hodson, 2004). Interorganizational trust is also subject to external factors. It is higher when partners share similar risks and when there is competition for partners (Croonen, 2010). Research has also suggested that trust may be a more important consideration for service firms, nonprofit organizations, or firms involved in social investment as they place a greater emphasis on people, training, and knowledge (Brouthers & Brouthers, 2003; Rivera-Santos & Rufin, 2010; Scarlata & Alemany, 2010). As with research at lower levels, the role of government has been explored. In particular, while some government policies are conducive to interorganizational trust, other policies such as providing business subsidies and zoning industrial districts may impose constraints that are detrimental (Neergaard & Ulhøi, 2006).

Trust repair also has been examined in interorganizational relations. While Neergaard and Ulhøi (2006) have found that a single incident of violation does not necessarily have a strong effect, early violations of benevolence in interorganizational relationships have been found to damage trust significantly (Bell, Oppenheimer, & Bastien, 2002). Trust repair becomes increasingly difficult when violations from another firm occur at higher levels of that organization (i.e., the corporate level) as compared with violations that occur at lower levels of the organization (i.e., the branch or operational level; Janowicz-Panjaitan & Krishnan, 2009).

**Consequences of Organizational Trust**

Research is beginning to show that organizational trust in organizations has important consequences for attitude and preference outcomes. When organizational members share high interpersonal trust, members should also share high compassion for one another (Dutton, Worline, Frost, & Lilius, 2006) and are more interested in discussing ethical issues (Trapp,
Shared trust in organizations has been found to ease the introduction of organizational change (Sonpar et al., 2009). In interorganizational relations, organizations are likely to choose an alliance partner based on interorganizational trust and are less likely to search for alternative partners as a result (Dekker & Van den Abbeelee, 2010), especially when the process of interorganizational projects is difficult to manage and outcomes are ambiguous (Shah & Swaminathan, 2008). When interorganizational trust is high, satisfaction with the partner and relationship (Gainey & Klaas, 2003; Gulati & Sytch, 2007), willingness to support the partner (Wu, Wang, Chen, & Pan, 2008), and evaluation of partner performance (Jap & Anderson, 2007) are also high. Post-acquisition job satisfaction is positively related to trust in the acquiring firm (Stah et al., 2011).

Trust at this level also has implications on knowledge sharing and learning outcomes. Shared interpersonal trust among employees in organizations facilitates their engagement in learning by experimenting, which can be effective for continual performance improvement (Pablo, Reay, Dewald, & Casebeer, 2007). A climate of interpersonal trust combined with cooperation and shared languages and lingos used in communication have been found to increase knowledge exchange, which has a positive effect on firm performance including sales growth and new product revenue (Collins & Smith, 2006). Organizational trust in organizations has been found to increase firm-specific knowledge resources (Wang, He, & Mahoney, 2009). As with the other referents at this level, knowledge transfer and interorganizational learning are important outcomes of interorganizational trust (Faems, Janssens, & Van Looy, 2007; Kale, Singh, & Perlmutter, 2000; Lui, 2009; McEvily & Marcus, 2005; Muthusamy & White, 2005; Nielsen & Nielsen, 2009) with implications to firm competitiveness (Wu, 2008). This effect of interorganizational trust is particularly strong when the organizations are high on interdependence and the environment is competitive (Krishnan et al., 2006) or when the knowledge is tacit rather than explicit (Becerra, Lunnan, & Huemer, 2008; Li, Poppo, & Zhou, 2010). After an acquisition, organizational trust in acquiring organizations increases information sharing (Stahl et al., 2011).

Communication, cooperation, and conflicts is another important group of consequences at this level. Collective perceptions that the organization is trustworthy can decrease conflicts between employees and management (Hodson, 2004). The positive effects of interorganizational trust have been shown to include: decreased negotiation costs and conflict (Zaheer et al., 1998); reduced transaction costs (Dyer & Chu, 2003; Gulati & Nickerson, 2008); contract flexibility (Faems et al., 2008); contract compliance (Davies et al., 2011); positive interaction patterns (Lado et al., 2008; Lui & Ngo, 2005); willingness to cooperate (Stahl et al., 2011), and continued and increased collaboration (Jensen, 2003; Malhotra & Lumineau, 2011). Interorganizational trust has been found to sustain cooperation when there is a lack of formal legal mechanisms (Lyon, 2006) but in some cases can be substituted by strong institutional forces (Yoo & Lee, 2009).

Given these beneficial effects, it is not surprising that organizational trust also affects performance. Collective perceptions that the organization is trustworthy can promote OCBs at the organizational level (Hodson, 2004). Organizational trust in organizations has also been found to increase alignment of objectives within the organization and its adaptability (e.g., ability to respond quickly to market changes; Gibson & Birkinshaw, 2004), to mitigate the risk that human resource practices become dysfunctional (Beatty, Ewing, & Tharp, 2003). Consumers’ collective trust in organizations has been proposed to promote marketing
success (Audi, 2008). A climate of interpersonal trust also moderates the relationship between positive affect climate and organizational-level employee productivity and task performance (Menges et al., 2011).

Interorganizational trust has also been linked to performance (Gulati & Nickerson, 2008; Lane, Salk, & Lyles, 2001), and the effect is stronger when the alliance size is small (Robson et al., 2008), the interorganizational relationship is young, the external market is stable, risk is shared equally among parties (Luo, 2008), parties have high interdependence (Katsikeas et al., 2009), and parties engage in few, if any, opportunistic behaviors (Jap & Anderson, 2003). When the relationships between buyers and suppliers are trust based and characterized by autonomy or equal power, the relationships are more sustainable (Drake & Schlachter, 2008) and the business of the suppliers is less likely to fail (Hoetker, Swaminathan, & Mitchell, 2007). Procedural justice has been found to increase the financial performance of strategic alliances indirectly through interorganizational trust (Luo, 2008).

Despite these positive outcomes, research at this level also illustrates that trust can be a liability. For example, while a lack of extant interorganizational trust can undermine the success of a new venture (Morse, Fowler, & Lawrence, 2007), too much interorganizational trust could lead to damaging effects such as stunting growth (Morck & Yeung, 2004) and overlooking signs of partner failure (Blois, 2003). Patzelt and Shepherd (2008) found that a combination of high control governed by rules and social reputation and high trust increased the likelihood that managers decided to continue investment in underperforming alliances. Too much trust between representatives in interorganizational relationships can also result in ethically questionable transactions (Saini, 2010). Research has further demonstrated that the relationship between interorganizational trust and an organization’s innovation forms an inverted U shape such that a medium level of trust in the partner firm leads to the highest level of innovation in an organization (Molina-Morales & Martínez-Fernández, 2009). The relationship between interorganizational trust and learning may be complex too, as De Clercq and Sapienza (2005) found a negative relationship. Finally, some research has suggested that trust and controls can be complementary in interorganizational relations (Alvarez, Barney, & Bosse, 2004; Das & Teng, 1998; Poppo & Zenger, 2002; Woolthuis, Hillebrand, & Nooteboom, 2005), while other research indicates that interorganizational trust can relieve only minor but not stringent contractual provisions in strategic alliances (Reuer & Ariño, 2007).

**Strengths, Limitations, and Future Directions**

Trust at the organizational level is an exciting area awaiting further investigation. Current studies have exhibited the strength of considering numerous antecedents, such as organizational practices and external environment, and consequences such as knowledge exchange and organizational adaptability (Collins & Smith, 2006; Gibson & Birkinshaw, 2004; Hodson, 2004). Research on interorganizational trust has accumulated a sizable number of studies, many of which have successfully incorporated variables from the micro, individual level to the macro, interorganizational level, including antecedents such as relationship history (Dekker & Van den Abbeele, 2010), joint dependence (Gulati & Sytch, 2007), and open communication (Das & Teng, 1998), as well as outcomes such as contract compliance, knowledge transfer, and relationship satisfaction (Davies et al., 2011; Gainey & Klaas, 2003; Lui, 2009).
While existing studies predominantly focus on the interpersonal and organization referents and interorganizational trust, we note that trust at the organization level can have additional referents. For example, research has yet to study trust in leaders and trust in customers at this level. Further, we suspect that, as with trust at the lower levels, the antecedents and consequences could differ across referents. For example, consistent HRM policies could be particularly important in fostering organizational trust in organizations, while relational HRM policies could be particularly important in fostering organizational trust in coworkers (Gillespie & Dietz, 2009; Six & Sorge, 2008). Moreover, research at this level can explore antecedents that have been fruitfully examined at lower levels, such as conflicts within and between organizations. Research can also expand on the range of outcomes to examine the aggregate level of employee attitudinal and behavioral outcomes (e.g., commitment and turnover). In the next section on integration across levels of analysis, we discuss how organizational trust may serve as a moderator for relationships at a lower level of analysis.

We note that while different theoretical perspectives have been brought to bear on various referents at this level, there are opportunities for cross-fertilization. For example, research on the organization referent, for the most part, has not explored attribution and social information processing theories, which have been useful at lower levels. These theories may also be useful in understanding how employees within an organization come to agree on trust in a referent (cf. Nishii, Lepak, & Schneider, 2008). Research on the interpersonal and interorganizational referents can also incorporate social identity theory and in-group and out-group dynamics to examine how these processes influence organizational trust.

Like trust at the team level, research on trust at the organizational level can benefit from greater specification of the composition models. A natural direction for future research is to examine the trust climate construct, which can be assessed using the direct consensus or referent-shift models (Chan, 1998). This line of work can create synergy between organizational climate research and the trust field, which thus far have been relatively isolated. Organizations high on trust climate may have important multilevel consequences. The presence (or absence) of trust climate, for instance, can be a key to the success of other climate dimensions, such as learning, innovation, and customer service. The climate of trust can thus be examined in conjunction with other climate dimensions as a system (Schulte, Ostroff, & Kinicki, 2006). Further, the strength of the trust climate, defined as the within-unit agreement on the degree of trust in a referent shared by unit members (Ostroff, Kinicki, & Tamkins, 2003), is akin to the dispersion composition model (Chan, 1998) and presents an important avenue for future research. Climate can also be applied to interorganizational trust. For example, Carson and colleagues (2003) examined the norms of trust perceived in interorganizational relationships. To the extent that trusting partners and being trustworthy are perceived as normative, interorganizational trust should be higher and the business relationships may be stronger.

Another limitation of current research at this level is that the extant studies overwhelmingly used informants, such as boundary spanners (Janowicz-Panjaitan & Noorderhaven, 2009) and alliance managers (Muthusamy & White, 2005), to assess interorganizational trust. While this approach has proved to be useful, as evidenced by the preceding review, some scholars have cautioned against the use of informants in understanding organizational-level phenomena (Bagozzi & Phillips, 1982; Currall & Inkpen, 2002; Kozlowski & Klein, 2000). Because of the reliance on a single informant from each organization, the level of analysis for trust at this level is not always clean-cut. While these studies tend to come from the macro
end of the field and assume that individuals who are surveyed are adequate representatives of
the organization as a whole, the measurement level that is actually implemented can be
argued to reside at the individual level. Additionally, there is some indication that interorga-
nizational trust affects interorganizational exchange more than the interpersonal trust of the
boundary spanners does (Barden & Mitchell, 2007).

Future research needs to consider assessing interorganizational trust through the aggre-
gation method. Because assessing trust from all employees in multiple organizations poses
practical difficulties, researchers can survey from a carefully selected set of key players,
depending on the specific interorganizational relations, such as TMT members in strategic
alliances and research-and-development scientists in joint research projects. Alternatively,
research can clarify whether trust of an informant is shared by other organizational mem-
bers relevant to the interorganizational relation. It is also possible that decisions to use
reports from an informant or from an aggregation of groups of employees depend on the
nature of the relation. Currall and Inkpen (2002) suggest that both the trustor and trustee of
a joint venture can be an individual, a group, or a firm. We concur with them that research-
ers should be explicit about the level of analysis associated with the level of trustor to
ensure that the measurement is aligned with the theory. More research is needed to investi-
gate if these forms of interorganizational trust differ and if they lead to similar or divergent
outcomes.

Finally, as with trust at the team level, research needs to specify the mechanisms through
which trust emerges at the organizational level. In other words, how do organizational mem-
bers come to share their trust in a referent? In the climate literature, multilevel factors have
been identified to affect the formation of climate, including organizational structure and
practices, employee homogeneity, social interaction, leadership, and workgroup influence
(Ostroff et al., 2003; Schneider & Reichers, 1983). Depending on the specific referent, some
of the factors are expected to be more relevant than others (e.g., CEO statements on organi-
zational trust in leaders and organizational practices on organizational trust in organizations).
We also expect that there are emergent processes particularly relevant to the construct of trust
itself. For example, because consistency is a critical concern in trust (Mayer et al., 1995), the
alignment between espoused and enacted organizational values could be essential in trust
emergence at this level.

Integration Across Levels of Analysis

Building on the foundation this review has laid, we now turn to a discussion of the impor-
tance of examining multilevel and cross-level models in trust research. Trust within any one
level does not occur in a vacuum and needs to be considered in the context of trust and related
factors at other levels. Our analysis reveals that the field is beginning to accumulate research
at different levels of analysis and that the time is ripe for integration across levels.

Investigating Quasi-Isomorphism Across Levels

Construct quasi-isomorphism. Our review indicates that the conceptualizations of trust
across levels share some similarities and differences. Many of the definitions across levels
and referents generally represent trust as including positive expectations of trustworthiness, willingness to accept vulnerability, or both. At the same time, there are differences in the construct at different levels: Trust at the team and organizational levels denotes collective beliefs and attitudes from members within a unit. Trust at the organizational level as a shared climate (e.g., Shockley-Zalabak et al., 2000), for instance, is clearly different from trust at the individual level as an individual’s psychological state.

To further understand the similarity and differences in conceptualizations of trust in future research, it is necessary to begin generating guidelines for the measurement of trust within and across levels. The measurement of trust has arguably been more fragmented than the definitions of trust. Lamenting this state, McEvily and Tortoriello commented, “It appears to be the case that different researchers use different measurement instruments to meet the idiosyncratic purposes of a particular study” (2011: 24). Nevertheless, a number of scales have been particularly influential across levels of analysis, such as those of Mayer and Davis (1999) and McAllister (1995), which vary based on their different conceptualizations. In moving forward, we strongly urge researchers to (1) use measures that follow closely their definitions of trust to adequately measure their constructs; (2) demarcate clearly what is and is not within the construct space of trust and distinguish in measurement between the antecedents and consequences of trust, such as attachment and voice behavior, respectively, and trust itself; and (3) identify the referents clearly in the trust measures and use them consistently across items. There is a risk of misinterpretation of results if a misalignment exists among construct, theory, and measurement.

When studying trust at higher levels of analysis, we suggest drawing upon Chan’s (1998) composition models of direct consensus and referent-shift consensus to distinguish different forms of aggregation. In the direct consensus model, the aggregated, unit level of trust is the variable of interest, but it is meaningful only when there is sufficient consensus among the unit members. Demonstrating consensus is thus necessary to justify aggregation for the direct consensus model. For example, researchers may hypothesize that the performance of a team can be high only when most members are in agreement that they trust their leader. The referent-shift model focuses on individuals’ perceptions of whether unit members trust the leader (e.g., “members in this team trust the leader”). This distinction can be potentially important because, theoretically, it is possible that team members believe that members in the team tend to trust the leader, while they do not actually trust the leader. In addition to using the aggregation method, researchers can use the group decision process or representatives of teams to examine trust at the unit level. Song (2009) found that trust rated by representatives was lower than trust based on group decisions. More research is needed to understand the implications of these methods.

As trust research on higher levels of analysis accumulates, we note that the dispersion composition models are also ripe for investigation. In the dispersion model, the variable of interest is the extent to which unit members share their levels of trust in a referent, or the degree of agreement among members. Future research needs to understand the effects of various degrees of agreement of trust in units. For example, the trust and unit performance relationship demonstrated by research on team trust in leaders (Davis et al., 2000; Dirks, 2000; Walumbwa et al., 2011) may be realized only when there is a high degree of agreement.
among team members. Additionally, the degree of unit agreement of trust may exert effects on outcomes above and beyond the unit level of trust.

Future research is needed to examine whether the assumption of construct quasi-isomorphism is supported by examining the factor structure of trust across levels of analysis to confirm that trust across levels consists of the dimensions of positive expectations and willingness to be vulnerable and that the relationship between these two dimensions are comparable across levels. Chen, Bliese, and Mathieu (2005) reviewed different methods to test the homology of constructs across levels of analysis: (1) within and between analysis (WABA; Dansereau & Yammarino, 2000), (2) multilevel structural equation modeling (SEM; Muthén, 1994), and (3) levels of similarity. While WABA has been used previously, the method is limited by requiring all data to be collected at the lowest level of analysis. Multilevel SEM is an adaptation of the SEM approach (cf. Jöreskog & Sörbom, 1993) that does not require all measures at the lowest level, but it is highly sensitive to small sample sizes at the higher level (i.e., number of units). Accordingly, Chen, Bliese, et al. (2005) recommended the levels of similarity method, which examines two forms of similarity: configural and scalar. Configural similarity addresses similar patterns in relationships among dimensions in a construct across levels, while scalar similarity addresses the numerical proportionality of such relationships across levels. Future research is needed to examine whether trust is indeed quasi-isomorphic across levels using these methods.

**Theoretical quasi-isomorphism.** Our review revealed great theoretical diversity across levels, which can be considered a strength that contributes to our understanding of trust in organizations and should continue to be leveraged in future research. Applying diverse theoretical perspectives in research would be particularly valuable for research at higher levels of analysis, as the theoretical approaches that have been used are somewhat limited. We maintain that theories need not reside at a particular level and can be fruitfully applied to understand trust at other levels. For example, social information processing theory and attribution theory adopted at the individual level might be useful for understanding the dynamics of trust at the team and organization levels. Similarly, the embeddedness perspective that has proved to be fruitful at the individual and organization levels can be drawn on at the team level, and social identity theory can be applied to the organization level in addition to the individual and team levels. More generally, research on trust at different levels has largely existed in its own “intellectual silos,” and testing principles from other levels can potentially provide a valuable and parsimonious understanding about trust in organizations (Klein et al., 1994). There is indeed some evidence for theoretical quasi-isomorphism. For example, research across levels and referents has drawn heavily on social exchange theory, as evident in our review.

**Antecedent and consequence quasi-isomorphism.** Beyond construct conceptualization and theoretical perspectives, research is needed to examine whether certain antecedents and consequences are applicable across levels. Our review, summarized in Tables 1 and 2, indicates that research at one level tends to focus on a particular set of variables while overlooking other possibilities. Put differently, while certain considerations are especially relevant to a level, we believe that many antecedents and consequences can be fruitfully examined at other levels of analysis. Research at the team level, for example, has not examined how
characteristics of the trustor, the organization, and the external environment affect trust in various referents. Likewise, research on trust in teams at the individual level can examine the effects of these three characteristics.

Special attention should be given to functional quasi-isomorphism, which occurs when constructs and relationships function in similar ways at different levels. For example, it is possible that the effects of network characteristics on trust have some similar effects across levels. More research is needed to confirm these quasi-isomorphic patterns, as few studies have examined the role of networks in trust processes at the team level and at the organizational level. As another example, research on trust repair has predominantly focused on the individual level (Kramer & Lewicki, 2010), and there is a great need to understand trust repair at the team and organizational levels, given the repeated occurrences of infamous trust failures at higher levels, such as the Enron bankruptcy and American International Group bailout scandals. Cross-fertilization of trust antecedents and consequences across levels holds promise to advance our understanding of trust and increase the creativity of the field.

Cross-Level Models

How trust at one level may be affected by or has an impact on trust or constructs at different levels is an exciting area for future research. Research on trust at the individual level, for example, would benefit from considering how factors at higher levels affect interpersonal trust, trust in teams, and trust in organizations. Drawing from the theory of structuration (DeSanctis & Poole, 1994; Giddens, 1984), it could be posited that trust at the individual and dyadic levels is embedded in the social structure of the organization and it in turn perpetuates that social structure. Thus, the social interactions among individuals and the organizational structure can be understood as mutually constraining.

Research has indeed shown that trust between individuals is influenced by factors in the social environment. For example, Chou and colleagues (2008) found that the likelihood of teammates trusting each other and being trusted at the individual level depended on the shared values at the team level. Ambrose and Schminke (2003) found that the relationship between justice dimensions and trust in leaders depended on the organizational form. Interactional justice had a stronger effect than procedural justice in organic organizations, whereas the opposite was the case in mechanistic organizations. Other researchers have similarly found that trust at the individual level is affected by values at the system level (Shamir & Lapidot, 2003). This type of cross-level, top-down effect should also influence trust at the team level and organizational level. For example, market conditions external to the organization can affect trust at the organizational level (Hodson, 2004) and likely also at the team level. Similarly, bottom-up effects are another direction for future research. Little research has been done to examine how trust at higher levels may be subject to factors at lower levels. For instance, trust at the organizational level may be impacted by the quality of relationships within individual teams and between teams.

In addition to cross-level models, mixed-determinant models, in which trust at one level may be affected by factors from multiple levels of analysis, will be important to explore (Klein et al., 1994). For example, trust at the individual level may be influenced by factors
across levels, including team cohesion, organizational climate, and interorganizational competition. Likewise, mixed-effect models, in which trust may affect outcomes across levels (Klein et al., 1994), should also be considered. Trust at the organizational level, for example, may affect team and individual outcomes. It is also possible that trust moderates factors at other levels: Dirks and Ferrin (2001) proposed that trust tends to serve as an amplifier or suppressor of the effects of other variables.

In considering these different cross-level and multilevel relationships, it is important for the coherence and advancement of the field that researchers are explicit about the models they test and use similar terminology that draws from the levels-of-analysis literature. Knowledge about how antecedents and consequences at various levels relate to trust at a given level will provide a holistic perspective on trust within organizations and facilitate synergistic integration between trust and other micro and macro topics in organizational sciences.

**Interrelation of Trust Across Referents and Levels**

The relationship of trust across referents and levels of analysis provides an additional promising avenue for future research. For example, does trust in organizations trickle down to affect trust in other referents? Shamir and Lapidot (2003) found that individual trust in leaders reflected trust in organizations, as leaders were perceived to represent the organization. At the team level, research has found a spillover effect between within-team cooperation and between-team cooperation (Keenan & Carnevale, 1989). It is thus possible that team trust in teams (or a lack thereof) can affect interteam trust. Further, we suspect that trust in some referents mediates or moderates trust in other referents. Research at the individual level, for example, has found that trust in organizations mediates the relationship between trust in coworkers and employee commitment and performance (Tan & Lim, 2009). Trust in an interpersonal referent in another organization and trust in the other organization has been hypothesized to interact to affect interorganizational relationships (Jeffries & Reed, 2000). More research is sorely needed to understand the relationship among trust in different referents. It is possible that, for instance, trust in one referent may be a requisite of trust in another referent. Alternatively, trust in one referent might act as a substitute for trust in another referent in achieving desirable outcomes. Research should continue to examine various referents such as peers, subordinates, and customers, among others, and investigate if they lead to unique antecedents and consequences.

In a similar manner, trust at one level may influence trust at another level through mediation or moderation. For example, Janowicz-Panjaitan and Krishnan (2009) discussed how trust violation at one level could affect trust at another level and how violations at the interpersonal level may be different from those at the organizational level. Other possibilities are that the trust climate at the organizational level may moderate the effects of trust at the individual level and that trust at the team level may mediate the effect of trust at the organizational level. Above all, we would encourage researchers to consider different trust referents across levels and keep them distinct in their studies in order to compare and contrast their effects.
A Decade of Trust Research: Lingering Questions

The past 10 years have seen significant advances in trust research. Our multilevel–multireferent review summarizes developments during this period and highlights the current research directions. We close with some lingering issues that arise from our review and that are important to consider in future research.

Power and Trust

One variable that has yet been systematically explored in relation to trust, as evident in our review above, is power. This is surprising given that trust inherently involves dependence and vulnerability. Further, although there are numerous studies on trust in leaders and among parties with divergent levels of power, little research has focused on how power differences affect trust dynamics. Research that does exist suggests that power is a critical variable in trust and that the two are interrelated (Tomlinson, 2005), but their relationship appears to be complex. For example, low-power individuals tend to pay more attention to the trustworthiness information of high-power individuals, as compared with the reverse (Kramer, 1996), possibly because the low-power party benefits more from the high-power party’s trustworthiness (Greenwood & Buren, 2010). Sniezek and Van Swol (2001) found that low-power trustors were more motivated to evaluate their trust in a high-power trustee and to trust the high-power trustee, rather than the opposite. At the same time, Schoorman and colleagues (2007) suggested that because high-power individuals can afford more risk, they are more likely to trust than low-power individuals are. Further, individuals might have different types of trust depending on their relative power in relationships. For example, Chua and colleagues (2008) found that trustors had high cognitive trust but low affective trust toward trustees who outranked them. Power can also moderate the relationships between trust and other variables. When employees perceive a larger power difference from the leader, such as in high-power-distance cultures, the relationship between procedural justice and trust in leaders has been found to be smaller (Lee et al., 2000). Overall, interpersonal trust can be more difficult to develop when two parties have power differences than when they hold similar power (Korczynski & Ott, 2005). However, the situation could be reversed if the power difference is expected or even deemed appropriate. For example, in mentor–protégé relationships, protégés with mentors in high-power positions have more trust in the mentors (Murrell et al., 2008). As this analysis demonstrates, most of the existing research on power and trust resides at the individual level. Research at the team and organization levels needs to explore the effects of power on trust across referents. For example, in addition to interpersonal trust, power differences might be an important antecedent for interteam and interorganizational trust. It remains a question whether the relationship between power and trust is similar across levels.

Power likely has important implications for trust violation and repair. Misuse of power erodes trust within organizations (Small, 2002), but high-power people may be less vigilant toward potential violations and pay less attention to expectation-inconsistent information than low-power people are (Mannix, 1993). During trust repair, high-power trustees are more likely to convince trustors to give them the benefit of the doubt; however, because
individuals with high power are perceived to be in control, it may be more difficult for the high-power violator to attribute the violation to situational forces (Kim, Dirks, & Cooper, 2009). Indeed, Van Dijke and colleagues (2010) showed that violations of procedural justice from high-power leaders were more damaging then from low-power leaders. Again, we note that research should extend beyond the individual level. Trust at the organizational level in reactions toward organizational wrongdoings, for instance, can be affected by the power the organization has over the employees. As another example, power from a wide range of sources may influence the extent to which an organization’s violations influence its partners’ interorganizational trust.

**Emotions and Trust**

As with power, emotion is an antecedent that has been underexplored. To date, trust research has examined the affective components associated with trust such as satisfaction, commitment, and attachment (Chua et al., 2008; McAllister, 1995), but little research has focused on the relationship between trust and affect (e.g., mood and emotion). Jones and George (1998) proposed that affect provides information that can assist trustors in their trust decisions. Because of the role emotions play in trust processes, research has suggested that the trustee’s interpersonal emotion regulation of the trustor, such as modulating emotional responses, can play an important role in building and maintaining trust (Williams, 2007). Despite these theoretical works, the number of studies that examine trust and affect remains limited. In work on leadership succession, the affective reactions felt when the predecessor left were found to predict how employees trusted a new leader (Ballinger & Schoorman, 2007; Ballinger, Schoorman, & Lehman, 2009). More generally, Lount (2010) found that a positive mood prompts people to trust based on situational cues: If situation cues suggest trust, people in a positive mood are likely to increase interpersonal trust and vice versa. Research has even found that incidental emotions unrelated to the relationship (i.e., primed experimentally prior to encountering the trustee) can be misattributed and affect interpersonal trust (Dunn & Schweitzer, 2005). Most studies thus far focus on the individual level, with a few exceptions. For example, the negative emotions felt by some team members due to leader favoritism or insincerity have been proposed to spread to the rest of the team through emotion contagion and to produce a low level of team trust in the leader (Dasborough, Ashkanasy, Tee, & Tse, 2009). At higher levels of analysis, socioemotional processes such as expressivity, contagion, and regulation should influence how members in a unit trust.

Different discrete emotions may have divergent implications in trust development, dissolution, and repair. For example, gratitude and empathy both may increase trust but through different processes, such as reciprocity and social identification, respectively. Likewise, anger and disappointment may lead to different forms of trust dissolution. Understanding how emotions are implicated in trust should be especially relevant during trust violations, as violations are emotionally charged events for trustors (Schoorman et al., 2007). The effectiveness of trust repair may depend on the particular types of emotions the trustor experiences and the trustee expresses (cf. Kim et al., 2009). Again, more research is needed to examine the effects of discrete emotions on trust across referents and levels. At higher levels, the
relationship between affect and trust is expected to be more complex given team dynamics and organizational processes.

Dynamics of Trust: Symmetric and Asymmetric Trust

The research on trust discussed in this review has tended to examine trust as a static phenomenon and from one party’s (i.e., the trustor’s) perspective. An interesting frontier of future research is to consider the alignment of trust from both entities and to explore the antecedents and consequences of asymmetric trust and symmetric trust (Schoorman et al., 2007; Zaheer & Zaheer, 2006). Limited research has examined these concepts at different levels of analysis, with symmetric trust being linked to positive outcomes and asymmetric trust to negative ones. Mutual trust has been found to increase strategic-resource exchanges between individuals (Bouty, 2000). When both the leader and the follower trust each other, the follower exhibits more individual-directed OCB (Brower, Lester, Korsgaard, & Dineen, 2009). At the team level, trust asymmetry among team members weakens the relationship between team trust level and team performance (De Jong & Dirks, in press). In interorganizational relations, power dynamics and competitive external environments have been related to asymmetric trust (Graebner, 2009), and in international business, asymmetric trust has been proposed to be likely when parties come from nations with notable institutional and cultural differences (Zaheer & Zaheer, 2006). Given these findings, more research is needed to understand symmetric and asymmetric trust and to directly compare the effects of the two across levels and referents.

Additionally, the alignment between the trustor’s trust and the trustee’s trustworthiness warrants investigation, such as between leaders’ trust in employees and the trustworthiness of the employees. A match between trust and actual trustworthiness is rare because individuals cannot have complete information about the trustee (Graebner, 2009). Mismatches, on the other hand, have costs and benefits. If one trusts more than the actual trustworthiness warrants, termed “over-trust” by Goel and Karri (2006), there is the potential benefit of self-fulfilling prophecy through which trustworthiness may increase, but the trustor also risks violations. Further, interpersonal over-trust has been suggested to increase “leniency in judging the trustee, delay in perceiving exploitation, and increased risk-taking” (Goel, Bell, & Pierce, 2005: 203). Under-trust similarly poses a dilemma. Trust research across referents and levels should explicitly investigate the antecedents and outcomes of over-trust and under-trust.

Another Level of Analysis: Culture

A growing amount of research has examined trust from a cross-cultural perspective, but more is still needed. As social processes differ across cultures (Markus & Kitayama, 1991; Triandis, 1989) and trust is fundamentally social, we suspect that trust at each level will differ to an extent across cultures. A perusal of this review illustrates that we need to directly test assumptions of universality in future research, given that the vast majority of research on this topic is based upon Western samples, which have been argued to be WEIRD (Western, Educated, Industrialized, Rich, and Democratic; Henrich, Heine, & Norenzayan, 2010). Indeed, recent works on the intersection of culture and trust (Dietz, Gillespie, & Chao, 2010;
Johnston & Selsky, 2006) question whether currently uncovered factors and processes related to trust are universal.

There are many findings in the trust literature that would benefit from cross-cultural investigation. For example, Lewicki and Bunker (1996) proposed that trust relationships move from calculus-based trust to identification-based trust. However, the extent to which this is the case may depend on the level of interdependence of a culture. In a similar vein, benevolence may play a stronger role in perceptions of trustworthiness in cultures outside of the United States (Sheppard & Sherman, 1998). Emic dimensions of trustworthiness are likely to be found in other cultures. For example, in their qualitative analysis in China and Turkey, Wasti and Tan (2010) revealed that in collectivist cultures, employees refer to factors other than ability, benevolence, and integrity in developing trust in leaders. In addition, research has brought into question the construct and structure equivalence of the existing trust measures across cultures. Wasti, Tan, Brower, and Önder (2007) showed that the commonly adopted trust scale by Mayer and Davis (1999) exhibited substandard psychometric properties in the United States, Turkey, and Singapore. As this discussion implies, there are likely universal and culture-specific aspects of trust. This is consistent with Ferrin and Gillespie’s (2010) argument that the conceptualization and function of trust is variform universal (Bass, 1997; Lonner, 1980) in that the general theories and measures are likely applicable across cultures, but additional modifications are needed to take emic constructs and local practices into account.

We would further note that the research that does exist on culture and trust tends to focus on the dimension of individualism and collectivism (IC) or on the nations that are typically considered representative of these dimensions (e.g., the United States and China, respectively). These studies have found main effects such that people in collectivistic cultures tend to have lower generalized trust than people in individualistic cultures (Bohnet, Herrmann, & Zeckhauser, 2010; Realo, Allik, & Greenfield, 2008). The antecedents of trust also have been found to vary. For interpersonal trust, economic exchange and ties with third parties have a more positive effect among Chinese managers, while friendship has a more positive effect among American managers (Chua, Morris, & Ingram, 2009). Likewise, perceptions of fairness and preference for equity affect Americans’ trust in organizations but not that of the Chinese (Chan, Lam, & Liu, 2011). Research has further illuminated the moderating effects of IC. For example, people from collectivistic and individualistic cultures draw from different sources in forming interpersonal trust: Collectivistic trustors prefer situational information and interpersonal ties, whereas individualists prefer dispositional information and common category membership (Branzei, Vertinsky, & Camp, 2007). We would encourage researchers to look beyond IC. Cultural dimensions such as tightness–looseness; power distance; masculinity or femininity; and the logics of honor, dignity, and face all have implications for trust processes (Ackerman, Hu, & Wei, 2009; Bohnet et al., 2010; Doney, Cannon, & Mullen, 1998; Fulmer & Gelfand, in press; Gunia, Brett, Nandkeolyar, & Kamdar, 2011; Schoorman et al., 2007). For example, soft commitment and timely communication have been found to be positively related to interorganizational trust in Turkey (Wasti & Wasti, 2008), a culture that emphasizes honor logics. Research would also benefit from taking a profile approach and examining multiple cultural dimensions together (cf. Gelfand, Erez, & Aycan, 2007). Aside from cross-cultural comparisons, it will be critical to examine trust at the intercultural interface. Dietz and colleagues (2010) and Kramer (2010) posited that trust becomes
even more important in intercultural interaction, yet research in this context is extremely limited.

Finally, we note that culture has implications on trust research in all permutations of the multilevel–multireferent framework we present. For example, culture is highly relevant for interorganizational trust with the growing occurrences of international joint ventures (IJVs). Multiple studies have indeed examined the impact of trust in interorganizational relations and provide a good example of how, together, the findings provide a picture of cultural impact on trust in this referent at the organizational level. Scholars have generally found that interorganizational trust differs in quality and quantity across cultures (Bachmann, 2010; Czaban, Hocevar, Jaklic, & Whitley, 2003: Dyer & Chu, 2000). Naturally, cross-cultural differences and a lack of trust inhibit effective collaboration between local and foreign firms (Fang, 2011). Brouthers and Bamossy (2006) proposed that language training, personnel exchange, and open communication can reduce cultural differences and increase trust between firms in IJVs. Interorganizational trust across cultures can also be generated from the macro structure, such as common membership in intergovernment organizations and immigration flows between the home and host countries (Rangan & Sengul, 2009). In sum, we encourage future research to examine the influence of culture systematically at other levels and in other referents to improve our understanding of the effects of culture on trust.

Broadening the Methodological Toolkit: Expanding Research Methods of Trust

Our review indicates that the methods used to examine trust are diverse, yet they are highly uniform within each level of analysis. Specifically, research has relied heavily on experiments and surveys at the individual and team levels and on case studies and surveys at the organizational level. Future trust research would benefit from incorporating field experiments: quasi-experiments provide a compromise between experimental control and real-world relevance (Grant & Wall, 2009). Additionally, trust across levels has been conceptualized as a dynamic process that fluctuates over time (Dirks, Lewicki, & Zaheer, 2009; Lewicki & Bunker, 1996; MacKenzie, 2008; Spedale, Van Den Bosch, & Volberda, 2007). For example, research has found that perceived trustworthiness of another is associated with demographic similarity early in a relationship and with shared perspectives in developed relationships (Levin, Whitener, & Cross, 2006). To capture the patterns of change and the different phases of trust—building, dissolution, and repair—experiential sampling (Alliger & Williams, 1993) or other repeated measures are useful to identify nonlinear patterns in trust processes (Fulmer & Gelfand, in press).

In the next decade, trust researchers should continue exploring additional research methods. For example, subliminal priming has been used to demonstrate how trust can be affected by cues outside of conscious awareness (Huang & Murnighan, 2010). Mathematical modeling of trust is also an area ripe for future research (e.g., Marsh, 1994; Mui, Mohtashemi, & Halberstadt, 2002; see Sabater & Sierra, 2005, for a review). Finally, neuroscience has been used to examine trust (e.g., De Dreu et al., 2010; Krueger et al., 2007; see Becker, Cropaanzano, & Sanfey, 2011). Above all, a particular method need not be limited to one level of analysis, and we encourage methodological diversity in the study of trust to illustrate the convergence of research findings.
Conclusion

Trust has implications across multiple levels in organizations, from employee performance (Colquitt et al., 2007), teamwork (Davis et al., 2000; Dirks, 2000), and leadership success (Dirks & Ferrin, 2002) to organizational and interorganizational performance (Collins & Smith, 2006; Gulati & Nickerson, 2008; Robson et al., 2008). The significance of trust in organizations is expected to continue to increase as knowledge-based assets become more prominent in our economy (Adler, 2001), teamwork becomes the norm in the workplace (Burke et al., 2007), and the environment becomes more dynamic (Painter-Morland, 2008).

This review illustrates that research on trust is in many ways thriving. To capture the complexity in the past 10 years of research, we advance a multilevel–multireferent framework to examine the intellectual territory in which trust research resides. Through this review, we have shown that we need to differentiate trust in a referent and trust at a level. We have identified common and distinct antecedents and consequences across referents and levels of analysis; highlighted the strengths, limitations, and new directions for future research at each level; and illustrated the great potential for cross-level integration. A truly multilevel view of trust will ultimately inform both researchers and practitioners on this fundamental process in organizations.

Notes

Table S1 is available online at http://jom.sagepub.com/supplemental.

1. Economists (Bohnet & Zeckhauser, 2004; Schelling, 1960; Williamson, 1993), game theorists (Axelrod, 1984; Berg, Dickhaut, & McCabe, 1995), and some sociologists (Gambetta, 1988; Granovetter, 1985; Yamagishi, Cook, & Watabe, 1998) view trust as represented by cooperative choices directly observable as a behavior capable of impacting outcomes. Because in our view this related construct is a proxy for trust and does not directly assess the construct of trust, papers that examine trust as a behavioral choice were excluded.

2. Because of space limitations, it was not possible to include an exhaustive list of citations, and as such, we included representative papers when discussing research findings.

3. Our review draws mainly on research in organizational sciences; however, because trust is a central topic in diverse disciplines, we also included some papers from other fields such as social psychology, sociology, and experimental economics. For a review of the trust literature in other disciplines, readers can see Sztompka (1999) in sociology; Corsín Jiménez (2011) in anthropology; La Porta, Lopez-de-Silanes, Shleifer, and Vishny (1997) in economics; and Levi and Stoker (2000) in political science.

4. Given space limitations, we cannot discuss all possible referents; for example, while it is theoretically possible to review research on trust in peers, subordinates, customers, and external stakeholders, to date there is not enough literature to do so. We accordingly discuss interpersonal referents as one generalized category and return to the need in future research to further differentiate referents therein.

5. The team referent is different from coworkers or other general groups of people in the interpersonal referent who do not necessarily work as an interdependent team. We adopted the definition of teams by Guzzo and Dickson: “A work group is made up of individuals who see themselves and who are seen by others as a social entity, who are interdependent because of the tasks they perform as members of a group, who are embedded in one or more larger social systems (e.g. community, organization), and who perform tasks that affect others (such as customers or coworkers)” (1996: 308-309). Both as a referent and as a level of analysis, people within a team are considered as a social entity.

6. We thank an anonymous reviewer for very helpful comments on this point.
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