

PERCEIVED TRUSTWORTHINESS OF KNOWLEDGE SOURCES: THE MODERATING IMPACT OF RELATIONSHIP LENGTH

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ABSTRACT

Exploring an extension of social identity theory using manager-subordinate relationships, we found that trust is based on different expectations at different stages in relationships: depersonalized social attraction (e.g., demographic similarity) in new relationships; individualized social attraction (e.g., shared perspective) in longer relationships; and trustworthy behaviors, only transitionally, during middle-stage relationships.

INTRODUCTION

When people seek out others for knowledge and information, they often turn to (Tsai & Ghoshal, 2001) and learn from those they trust (Levin & Cross, in press). Thus, an important research question is determining on what basis people decide to trust others. Traditionally, scholars have explored a number of antecedents to trust, such as similarity between people and social processes like reciprocity (Blau, 1964); behaviors related to perceptions of trustworthiness (e.g., Whitener, Brodt, Korsgaard, & Werner, 1998); and shared ways of thinking or discovery of internal similarities (e.g., McAllister, 1995). A comparative model might help determine the relative importance of these variables, but it would yield misleading results if the bases of trust—the root of the expectations underlying trust—differ at different stages in relationships. Ironically, the construct of relationship length or stage has been largely neglected in the trust literature. In a meta-analysis of trust-in-leadership, fewer than 5% of the studies (5 of 106 independent samples) even measured relationship length (Dirks & Ferrin, 2002).

Trust is often conceptualized at a global level as a willingness to be vulnerable based on positive expectations of others (Mayer, Davis, & Schoorman, 1995). However, there is growing evidence that trust in these types of situations may be a multi-dimensional construct (e.g., Mayer et al., 1995; McAllister, 1995). We focus here on the benevolence dimension, since this dimension is so closely intertwined with relationships and perceptions of relationships.

Drawing on self-categorization and extended social identity theory (Hogg & Terry, 2000), we bring together various strands concerning the bases of trust—such as demographic

similarity, trustworthy behaviors, shared perspective—into a single theory that recognizes the role of time. After developing this thesis, we describe a study in which we tested these ideas in manager-subordinate relationships—where dependence, vulnerability, and hence benevolence trust are likely to be salient—in three different firms in different industries and countries.

SOCIAL IDENTITY THEORY FOUNDATIONS OF TRUST

Hogg and Terry (2000) proposed an extension of social identity theory that explains the role of expectations at different stages of relationships. They posit that individuals are motivated to reduce uncertainty and establish their similarity and difference with others to enhance self-esteem and self-identity and engage in processes of social comparison to confirm their distinctiveness, value, and self-worth. Prototypes play a critical role in this social comparison process. “Prototypes [the cognitive representations of the defining features of in-groups and out-groups] embody all attributes that characterize groups and distinguish them from other groups, including beliefs, attitudes, feelings, and behaviors” (Hogg & Terry, 2000: 123-124). The social comparison process focuses on the prototypical features of the group (e.g., a team or category of individuals) in order to maximize similarities within the group and differences with other groups.

Time and continuing social interaction change the context and relative importance of these features of comparison. In early stages, individuals do not interact as “unique individuals, but rather as embodiments of the relevant prototype—a process of *depersonalization*” (Hogg & Terry, 2000: 123). People’s commitment and attraction to the group is rooted in the impersonal prototypic feelings, attitudes, and behaviors associated with their group. In contrast to this “depersonalized” social attraction, however, group members who have interacted with each other, developed personal relationships, and learned each other’s idiosyncrasies have more of an “individualized” social attraction. The features of similarity and attraction and the sense of social identity are not those associated with the depersonalized prototypes of a group but rather the personal and unique feelings, attitudes, and thought processes of well-known individuals.

Missing from this type of formal model, however, is a description of any intervening stage that bridges the gap between one social cognition (depersonalized social attraction based on group membership) and another (individualized social attraction based on what Hogg and Terry call “idiosyncrasies and complementarities”; 2000: 126). We propose a middle stage that represents a focus on observation and perception of the other person’s behavior. That is, in between basing trust on a depersonalized group prototype and basing it on individualized social attraction, we argue, is a stage where benevolence trust is “determined by the content of the behavioral exchanges between the parties—exchanges experienced psychologically, through the evolving attitude developed toward the other party” (Jones & George, 1998: 536).

Therefore, consistent with extended social identity theory (Hogg & Terry, 2000), we propose that trust in another’s benevolence is built on positive expectations and that the bases of those expectations differ by relationship length or stage. In particular, we propose that in new relationships, this trust is rooted in depersonalized, prototypic expectations—especially those associated with demographic similarity. When there has been some direct social interaction, however, this trust can be rooted in expectations based on observations of actual behavior. The efficacy of this behavioral basis of trust, however, is somewhat limited, as causal ambiguity and attribution errors often make it hard to draw meaningful conclusions. So for individuals who

have had a chance to gather information about each other's idiosyncrasies and perspectives, expectations can be rooted in knowing if they share the same goals, perspective, and self-identity. Trustors early in relationships, however, do not have reliable information in this area and so must rely on other means (demographics, behaviors) for gauging benevolence. Although the bases of expectations differ, the underlying motivations are the same—reducing uncertainty and seeking identity and value in relationships. Of course these different bases of trust will not necessarily form a causal chain. For while there may be a developmental path over time, our aim is only to document the differences at different points in a relationship. Therefore, we predict:

H1: The positive association between demographic similarity—i.e., (a) same age and (b) same gender—and level of trust in another party's benevolence will be stronger in new/short relationships than in medium or old/long relationships.

H2: The positive association between trustworthy behavior and level of trust in another party's benevolence will be stronger in medium relationships than in new/short or old/long relationships.

H3: The positive association between shared perspective and level of trust in another party's benevolence will be stronger in old/long relationships than in new/short or medium relationships.

METHODS

Sample and Procedures

This study's data came from a larger study of knowledge-seeking networks among employees working on projects in a U.S. pharmaceutical firm, British bank, or Canadian oil and gas firm. For the current study, we focused on ratings of either a respondent's manager or subordinate, yielding 88 observations after a listwise deletion of missing values. Most respondents were male (66%), in their 30s or 40s (73%), and college graduates (63%). They had worked on average in their division for 5.8 years; company, 10.7 years; and industry, 16.4 years.

Measures

For our 3-item outcome variable, perceived trustworthiness, we focused on benevolence trust (e.g., s/he looked out for my interests, cared what happened to me). We measured same gender by asking respondents if they were the same gender (1) as the other party or not (0)—68% were the same gender, with 49% male-male and 19% female-female; same age within plus or minus five years (1) or older or younger by five or more years (0); trustworthy behaviors with 9 Likert-type items exploring the extent to which the other was discreet, open, receptive, and available; and shared perspective as the 6-item composite of shared language (e.g., understood the other, on the same wavelength) and shared vision (e.g., same goals, concerns, and purpose).

To reduce skewness and account for how relationship length is felt psychologically, we calculated the logarithm of the number of months (plus one) that the respondent reported having known the other party. We then followed the standard approach recommended by Aiken and West (1991) and tested interaction effects using the mean (1.33) and one standard deviation (0.71) above and below the mean; for theoretical reasons, we also tested new relationships as

well. With the logarithm, this meant that “short” relationships (one standard deviation below the mean) were about three months long; average-length, about a year and two-thirds; and long relationships, about nine years. Based on our experience, these different lengths appeared to have face validity.

We also included five control variables: five-year ranges for respondent age; respondent education on a five-point scale; respondent gender; if a knowledge source was the respondent’s direct supervisor (1) or subordinate (0); and a two-item measure of communication frequency.

Analysis

We analyzed the data using hierarchical multiple regression. To create interaction terms between our independent variables and relationship length (RL), we mean-centered the variables before multiplying them. To test for a curvilinear interaction effect (H2), we included a squared term (RL^2) and a squared term interaction (trustworthy behaviors * RL^2) (Aiken & West, 1991).

RESULTS

As in previous research (Dirks & Ferrin, 2002), the correlation between relationship length and trust was nonsignificant ($r = .16$, $p = .135$). However, as hypothesized, we found that relationship length significantly moderated the bases of benevolence trust. By inserting specific values for relationship length into the full regression equation, we could compute simple slopes and t-tests of those slopes to examine the nature of these interactions (Aiken & West, 1991).

The interaction effect of same age with relationship length was in the direction hypothesized by H1a (i.e., stronger in shorter relationships than in longer ones) but was not statistically significant.

The interaction effect of same gender and relationship length, as predicted by H1b, was significant ($p = .014$) and in the hypothesized direction. The results indicated that the shorter the relationship, the greater the association between same gender and trust. Specifically, same gender had a positive and significant association with trust in new relationships (slope = 1.33, $p = .009$) and in short relationships (slope = .82, $p = .014$), but not in average-length (slope = .23, $p = .265$) or long relationships (slope = -.36, $p = .222$).

As predicted by H2, the curvilinear interaction term (trustworthy behaviors times the square of relationship length) was negative and statistically significant ($p = .026$). This result indicates that the association of trustworthy behaviors with benevolence trust was greatest in relationships that were neither very short nor very long, but in-between (Aiken & West, 1991). We computed the simple slopes by taking the partial derivative (with respect to trustworthy behaviors) of the full regression equation, yielding a formula of $.42 - 1.00(RL) - .68(RL^2)$. Based on the procedures outlined in Aiken and West (1991), we found no association between trustworthy behaviors and trust in new relationships (slope = .56, $p = .170$), a positive and significant association in short relationships (slope = .80, $p = .001$), a marginal association in average-length relationships (slope = .42, $p = .052$), and no association in long relationships (slope = -.64, $p = .108$). Post-hoc, we also determined the relationship length for which the association of trustworthy behaviors with trust was at its maximum by setting the partial derivative (with respect to relationship length) of the simple slopes formula (above) equal to zero

(Aiken & West, 1991); i.e., $-1.00 - .68(2)(RL) = 0$, which simplifies to $RL = -.74$. Thus, we found that trustworthy behaviors had the strongest association with trust when the relationship length variable's mean-centered score was $-.74$, which corresponds to a relationship length of about 2.9 months. This value is just slightly shorter than what we have been calling a "short" relationship (i.e., one standard deviation below the mean).

As predicted by H3, the longer the relationship, the greater the association between shared perspective and trust ($p = .002$). Specifically, shared perspective had no association with trust in either new relationships (slope = $-.40$, $p = .252$) or short relationships (slope = $.12$, $p = .608$), but had a positive and significant association in average-length (slope = $.73$, $p < .001$) and long relationships (slope = 1.33 , $p < .001$).

To rule out alternative explanations (e.g., that relationships of different lengths in our cross-sectional sample were different from each other in other fundamental ways as well), we checked to see if adding more control variables would alter our results: (a) respondent (age, gender, education); (b) relationship (two-item measure of nonwork-related friendship, supervisor vs. subordinate, communication frequency); and (c) organizational context (company, ongoing vs. completed project, length of respondent's project involvement, respondent satisfaction with project outcomes, perceived helpfulness (most vs. least) of knowledge source to respondent's work on the project). Despite reduced power, our hypothesized regression coefficients remained statistically significant. Thus, our results for relationship length seem fairly robust to differences in the respondent, relationship, and organizational context.

DISCUSSION

We set out to determine whether different bases (i.e., determinants) of interpersonal trust matter differently for relationships of different lengths. Consistent with predictions derived from self-categorization theory, we found that relationship length did not have a direct association with a person's trust in another party's benevolence, but rather a complex and curvilinear one. While some trust scholars have suggested models based on relationship length (e.g., Lewicki & Bunker, 1996), little research in the trust area has even measured relationship length (Dirks & Ferrin, 2002). The results of our study address this issue and (in a follow-up analysis) were consistent across three firms in three industries and countries. They are also robust to a number of controls and alternative explanations.

Specifically, and as predicted by H1-H3, we found that, in new/early relationships, the bases of trust in another party's benevolence are rooted primarily in expectations associated with demographic prototypes; in medium-length relationships, they are rooted primarily in behavioral expectations gathered from moderate social interaction; and in old/long relationships, they are rooted primarily in personal knowledge of shared perspectives. In particular, we found that gender similarity was significantly associated with trust only in new and short relationships; trustworthy behavior was associated with trust only in short and average relationships; and shared perspective was associated with trust only in average and long relationships.

Thus, we find evidence that how other people *look* (depersonalized social attraction, such as demographic similarity) is mainly associated with benevolence-related trust initially; how people *act* (trustworthy behaviors) is mainly associated with such trust only for relationships of

medium length, perhaps as a kind of transitional or intervening stage; and how people *think* (individualized social attraction, such as shared perspective) is only associated with such trust after much time has passed. These findings are suggestive of a three-stage model of trust formation and are particularly important in the knowledge-seeking context, where trust has been shown to play an especially crucial role in how people gain useful knowledge from others (Levin & Cross, in press; Tsai & Ghoshal, 1998). By better understanding the three major bases on which people decide to trust the benevolence of knowledge sources in a formal reporting relationship, scholars can in turn better understand how an organization makes use of its collective knowledge and expertise to enhance its ultimate effectiveness.

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