In Context We Trust:
A Social-Cognitive Theory of Trust

BY

TIMOTHY S. CARSEL
B.S., Illinois Institute of Technology, 2014
M.A., University of Illinois at Chicago, 2017

THESIS

Submitted as partial fulfillment of the requirements
for the degree of Doctor of Philosophy in Psychology
in the Graduate College of the
University of Illinois at Chicago, 2020

Chicago, Illinois

Defense Committee:

Dr. Daniel Cervone, Committee Chair & Advisor
Dr. Sylvia Morelli
Dr. Alexander Demos
Dr. Linda Skitka
Dr. Tomas Staahl

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

SUMMARY

Interpersonal trust is an important facet of relationships, but current theories and research paradigms on interpersonal trust are incomplete. Trust has traditionally been studied as either a trait of the individual or a facet of a specific relationship between two people. Although both approaches highlight different and important aspects of the psychology of trust, both approaches are limited in their ability to uncover more minute dynamics.

In this paper, I propose and test a goal-specific theory of interpersonal trust, the Interdependent Goal Model of Interpersonal Trust (IGM). I argue that the trust between two people varies across the contours of their relationship and that this variability is important for understanding interpersonal relationships. Further, if trust does in fact vary meaningfully within a given relationship, then trait and relationship approaches to trust will be unable to investigate this meaningful variability.

To test some of the hypotheses derived from the IGM, I employed a novel and ideographically-tailored survey in which participants described their current goals and best friend and were asked to what extent they would trust their best friend across some of their most and least important goals. In line with my hypotheses, participants' reported trust in their best friend varied across goals, and the degree to which participants' best friend's strength was relevant to the goal predicted the trust my participants reported placing in their best friend. In contrast to my hypotheses, participants reported greater trust in their best friend for more relative to less important goals, and the relevance of the best friends' weaknesses to the goal was not predictive of trust. At present it is unclear whether the hypotheses were in fact wrong or that the findings I report are specific to the population from which I sampled. More research is needed because there is meaningful variability in interpersonal trust within a single relationship.

1. INTRODUCTION

Trust is a fundamental aspect of relationships. Trust affords people with opportunities to pursue valued interdependent goals (Rusbult & Van Lange, 2003) and increases relationship satisfaction (Sanderson & Cantor, 1997). Despite the importance of trust in relationships, research on trust has been plagued by conceptual ambiguity and a lack of a coherent theoretical framework (Mayer, Davis, & Schoorman, 1995; Rousseau, Sitkin, Burt, & Camerer, 1998).

The question that typically guides psychological research and theory in trust is "Does Person X trust Person Y?" An important implication is that current paradigms overlook the possibility that Person X might trust Person Y differently across various contexts. For example, imagine a pair of college roommates who take classes together named Tim and Andy. Andy and Tim share the household chores, and Tim knows he can trust that Andy will do his part to maintain their apartment. However, Andy is not a good student, and he cheats in his classes. Consequently, Tim does not trust Andy in group projects. Such possibilities will remain invisible under the present scientific focus.

From the current theoretical orientation, stable aspects of the trustor—such as their generalized anxiety (Kenworthy & Jones, 2009), attachment style (Collins & Read, 1990), and group membership (Brewer, 1979; Williams, 2001)—or facets of the relationship between and trustee (e.g., degree of risk-taking behaviors; Serva, Fuller, & Mayer, 2005)—are used to predict whether or not Person X will trust Person Y. However, such an analysis does not consider the person in context and can only examine average levels of trust between people.

In addition to theoretical blind spots, ignoring the potential contextual nature of trust has important practical implications. Practitioners, whether they are clinical psychologists, relationship counselors, contract and business negotiators, or mid-level managers, are not currently equipped to identify contexts that are characterized by distrust for the individual and the factors

that lead to such distrust. By being able to identify when, why, and how people come to trust others in context, practitioners will be better equipped to implement workplace policies that facilitate trust between individuals, counsel their clients on how to regain trust that was lost in their relationship, or identify clients' pathological levels of (dis)trust in specific contexts that facilitate maladaptive behavior within those contexts.

An alternative question that draws attention to the potential variability in trust between individuals across contexts is "*When* does Person X trust Person Y?" In this paper, I propose a novel theoretical orientation to trust that emphasizes the contours of the individual's relationships. After, I describe the results of an idiographic survey that tested some of the core predictions from this new orientation.

1.2. Current State of Trust Research

Trust is the social glue that coheres people into societies (Lewis & Weigert, 1985). Because of this importance, trust has been formally studied in psychology for decades (Rotter, 1971; Rousseau et al., 1998). However, as with many concepts in the social sciences, there has been a great deal of debate about what trust is and how it should be studied.

There are many definitions of trust, but most contain core features of expectations about another's behavior and risk (Das & Teng, 2004; Rousseau et al., 1998). A common definition employed by psychologists is an aggregate definition created by Rousseau and colleagues (1998, p. 395): "trust is a psychological state comprising the intention to accept vulnerability based upon expectations that another's words, actions, and decisions will result in beneficial outcomes for the perceiver" (e.g., Dirks & Ferrin, 2001; Dunn & Schweitzer, 2005; McEvily, Perrone, & Zaheer, 2003).

The above definition is "variable-centered." In other words, the definition implicitly directs attention to the average amount of trust that Person X (e.g., Tim) places in Person Y (e.g., Andy).

Indeed, a review of the empirical literature reveals that the predominant investigation focuses on trust as a stable aspect of the person, such as a stable trait of the individual (e.g., Mikulincer, 1998; Rotter, 1971; 1980), or a stable aspect of a person's relationship with a specific other (e.g., Ferrin, Dirks, & Shah, 2006; Holmes & Rempel, 1989; Jones & Shah, 2016; Yakovleva, Reilly, & Werko, 2010).

1.2.1. Trust as a Trait

Originally, the concept of trust was examined as a stable trait of the individual (e.g., Rotter, 1971; 1980). In fact, the definition of trust that was commonly employed was "[trust is] a *generalized expectancy* held by an individual that the word, promise, oral or written statement of another individual or group can be relied on" (emphasis added; Rotter, 1980, p. 1). As such, researchers examined participants' generalized trust in others. Specifically, participants were asked how much they trusted a range of individuals, and their responses were averaged across people and contexts to indicate how much they tended to trust people relative to others (Rotter, 1971).

Empirical investigations of the sort just characterized focused on identifying aspects of the individual that facilitated or hampered the individual's general level of trust in others. Features of the individual that were considered static, such as the individual's attachment style (e.g., Mikulincer, 1998), were therefore of primary importance. In other words, researchers asked whether and to what extent Tim tends to trust other people on average.

Although a trait approach to understanding trust might be a useful place to start, it has clear limitations. An obvious limitation is that a trait approach lacks the tools and capacity to capture the fact that people trust others differently across relationships (Fiske, 1992). To address this limitation, researchers were specifically instructed to avoid studying individuals' trust in their parents and friends. Rotter noted that "[I]f one is trying to get a good measure of a generalized

expectancy, one should avoid stimuli with which the individual has had a great deal of previous, specific experience, such as father, mother, lover, and friend…" (Rotter, 1980, p. 2). This advice directs investigation away from some of our most important relationships. Because an understanding of trust premised exclusively on the relationships between strangers is incomplete, researchers began examining the trust people have in others across their relationships.

1.2.2. Trust as a Facet of Relationships

In contrast to trait approaches, later conceptualizations of trust acknowledged that people behave differently within different relationships (Fiske, 1992; Klohnen, Weller, Luo, & Choe, 2005). From the division of obligations and entitlements (e.g., Deutsch, 1983) to the rules that govern such allocations (Fiske, 1992), the people with whom we interact exert a push and pull onto our behavior such that the same person may seem like someone else entirely under a variety of circumstances. In fact, this point has not been lost on researchers who may lament that "[e]fforts to predict trust in specific close relationships from measures of generalized trust have been unsuccessful" (Holmes & Repel, 1989, p. 190). Consequently, scientists began looking for relationship-specific patterns in the psychology of trust (e.g., Ferrin et al., 2006; Holmes & Rempel, 1989; Jones & Shah, 2016; Yakovleva et al., 2010).

From a dyadic, or relationship-specific orientation toward trust, each relationship follows a relatively unique trajectory, influenced by the reciprocal interactions between the people involved (Jones & Shah, 2016; Yakovleva et al., 2010). Consequently, the trust a person places in each individual in their life is viewed as an emergent property of the unique pattern of interactions across each relationship. In other words, Tim trusts his friend Andy to a different extent than he trusts his friend Lance. See Figure 1 for a depiction of the dyadic approach to trust.

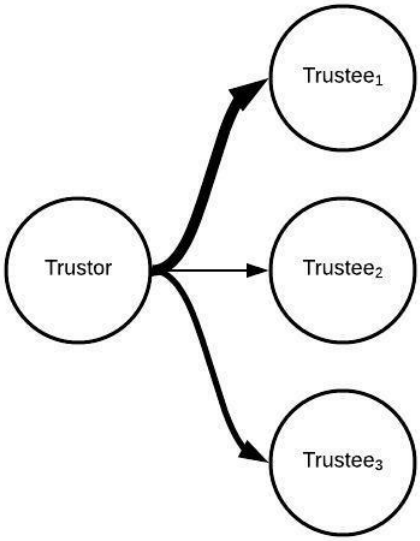

Figure 1. Depiction of the dyadic approach to trust. The width of the arrow refers to degrees of trust between trustor and trustee, with wider arrows referring to greater trust in the trustee.

We have learned much from the dyadic approach to trust. For instance, research has revealed that trust grows within a relationship iteratively as each member becomes more likely to accept greater risks in response to their partner's acceptance of risk; when one person exhibits behaviors indicative of trust, their partner is more likely to respond similarly (Serva et al., 2005). As a consequence, both partners escalate their trust in each other in a tit-for-tat manner.

For example, in a study of college students, participants were tasked with forming their own and monitoring another team's information system over a 6-week period (Serva et al., 2005). Risk-avoidant behaviors were defined as any steps taken to monitor the other team, delineating expectations in writing, or limiting the scope of the other team's work. Lower frequencies of such behaviors were categorized as behavioral indicators of greater trust. Across the 6-week period,

reductions in risk-avoidant behaviors on the part of one team predicted reductions in risk-avoidant behaviors by the other team, which was associated with greater reported trust between each of the teams. Similarly, Ferrin and colleagues (2008) found that perceived trustworthiness and cooperation are reciprocally related and mutually reinforcing in mock business ventures. These findings provide further impetus for the assertion that trust is unique to each persons' relationships because of the specific levels of cooperation between individuals.

Despite the superiority of the relationship approach because of its more granular focus relative to the trait approach, it is limited in much the same way as the trait approach. Specifically, researchers argued that trait approaches were unable to uncover meaningful patterns of cross-relationship variability (Holmes & Rempel, 1989; Jones & Shah, 2016; Lewis & Weigert, 1985). Similarly, averaging the trust across the contours of a specific relationship is unable to uncover potentially meaningful patterns of cross-contextual variability within that relationship. In other words, although the distinctive patterns of interactions a person has with their partners, parents, and peers is finally center-stage, it remains unclear as to what extent individuals exhibit cross-contextual consistency versus variability in intra-relational interpersonal trust.

1.3. Problems with the Current Approaches

All scientific paradigms are limited by the periodicity of the phenomena of interest and that of the tools used to investigate the phenomena. In the case of trust, the trait paradigm can only investigate antecedents and consequences that correspond to other individual differences, and the relationship paradigm can only investigate between-relationship differences. You cannot, for example, investigate the different relationships of an individual under a trait approach because a trait approach averages across those relationships. Similarly, a relationship approach cannot investigate what happens *within* any given relationship. However, this is not a limitation if there is no meaningful variation of trust within relationships.

Evidence is beginning to mount that the trust one person places in another is more dynamic and contextually-specific than has previously been appreciated. Although the findings are, on the surface, disparate and unconnected, they in fact appear to point to a solution. Specifically, it seems that interpersonal trust in vivo is predicted by the way people understand and evaluate their present status. Let's start by examining a facet of individuals that was historically viewed as relatively immutable: Attachment styles.

1.3.1. Attachment and Trust

When it comes to patterns of trust individuals exhibit with others, researches have often applied an attachment style framework (e.g., Mikulincer, 1998). Attachment theory posits that people learn how to relate to others from their early interactions with their parents during childhood (Bretherton, 1985). Specifically, according to attachment theory the way in which caretakers respond to infants' needs determines the degree to which that person will learn that they can rely on others (Collins & Read, 1990). In general, there are two broad types of attachment: Secure attachment refers to people who learned from their infancy that they can rely on their parents and others, and insecure attachment is a collection of subtypes of people who learned they cannot rely on their parents or others (Benoit, 2004).

Originally, research on attachment viewed the concept as a stable aspect of the person (Ainsworth, 1979; Bowlby, 1969). However, social-cognitive reinterpretations of the construct have revealed that people tend to store attachment styles as schemas for relating to others (Baldwin, 1992; Baldwin, Keelan, Fehr, Enns, & Koh-Rangarajoo, 1996; Holmes, 2000). Specifically, people report having relationships characterized by secure *and* insecure attachment; and attachment styles can be primed, resulting in the individual trusting others more or less in context (Baldwin et al., 1996; Green & Campbell, 2000). More importantly, if these relational models can be primed in the lab, then perhaps contextual features might similarly affect interpersonal trust in the wild.

1.3.2. Context and Trust

In all or nearly all definitions of trust, researchers invoke the concept of risk (Das & Teng, 2004). These definitions range from situating trust as simply a subset of risk to locating risk as an antecedent to trust (Das & Teng, 2004). As might be expected then, the present risks to the individual do indeed affect the individual's trust in others (Evans & Krueger, 2011). Specifically, people trust less frequently in a trust game[1] as the potential cost of betrayal increases (Evans & Krueger, 2011). Because the risks to the trustor are not constant across contexts, even if they are similar to past interactions between the trustor and trustee, we should expect interpersonal trust to calibrate to the specific demands of the interaction. Indeed, the identification of risk as an important antecedent to trust highlights a potential mechanism whereby the context should influence online experiences of subjective trust: emotions.

Emotional states provide the individual with important information about their current situation (Clore, Gasper, & Garvin, 2001). Indeed, affect is an important indicator of the potential risks to the individual for a given choice (Bechara, Damasio, Tranel, & Damasio, 1997). If variation in risk affects interpersonal trust, and if affect is the mechanism by which individuals become aware of possible risks, then perhaps incidental affect might also affect interpersonal trust.

Incidental affect does indeed influence trust evaluations. Emotions that are characterized by appraisals of other-control (e.g., gratitude and anger) affect individuals' reported trust in another such that people are less trusting when angered but more trusting when experiencing feelings of gratitude (Dunn & Schweitzer, 2005). Similarly, individuals with low self-esteem in a

[1] A trust game is an economics game with at least two players. In the first round, one player (i.e., Trustor) is given an allotment of money and they have the option of whether to keep the status quo or trust. If the Trustor decides to keep the status quo, then only they will receive their initial allotment. If the Trustor decides to trust, then some apportionment of their money is increased in value and transferred to another player (i.e., Trustee). If the Trustor chooses to trust, then the second move is decided by the Trustee, who can choose fairness or betrayal. If the Trustee chooses fairness, then both receive the same payment, which will be higher than the original status quo amount. If the Trustee chooses betrayal, then they keep the money, and the Trustor loses that amount.

committed relationship react to momentary threats to their self-esteem with reduced confidence in their partner's commitment to their relationship (Murray, Holmes, MacDonald, & Ellsworth, 1998).

Incidental affect does not have an unequivocal effect on trust, however. Instead, emotions appear to affect the degree to which people rely on cues of trustworthiness on the part of the trustee (Lount, 2010). That is, affect increases the influence of available and relevant cues on individuals' likelihood of accepting interpersonal risk (Lount, 2010). Importantly, these results are echoed in more biologically-oriented investigations.

1.3.3. Converging Evidence from Biological Perspectives

Biological approaches to studying trust are similarly converging on the consensus that trust must be studied in context. For example, researchers' understanding of the effects of oxytocin has become far more nuanced as of late. The old conception of oxytocin as the "love hormone" (e.g. Alleyne, 2010) has given way to a new understanding of its role in affiliation. Instead of eliciting domain-general prosociality, it is now believed that oxytocin exerts an effect of social behaviors via a more nuanced route that incorporates the individual's momentary goals and situational appraisals (Bartz, 2016; Bartz, Zaki, Bolger, & Ochsner, 2011; Mikolajczak, Gross, Lane, Corneille, de Timary, & Luminet, 2010).

For example, although oxytocin facilitates cooperation and trust with ingroup members, it inhibits cooperation and trust with outgroup members (De Dreu, 2012a; 2012b; De Dreu et al., 2010). In other words, the effects of oxytocin are contingent on individuals' momentary appraisals of their current situation. Therefore, endogenous fluctuations in oxytocin are likely to affect online interpersonal trust, and the effect that these fluctuations have on trust should be contingent on the individual's characterization of their present context.

The evidence, then, suggests that one person's trust in another is not consistent across contexts. The trust Tim has in Andy likely varies across the contours of their relationship. Indeed, some authors have called for contextual approaches to trust in light of this emerging evidence of situated fluctuations in trust (e.g., Bauer, 2020; Bauer & Freitag, 2018; Chen, Saparito, & Belkin, 2011; Lewicki, McAllister, & Bies, 1998). Despite such calls, how a contextual approach to trust might be realized remains unclear because the above findings must be incorporated parsimoniously into a new theory of trust.

1.4. A Social-Cognitive Approach to Trust

The preceding discussion suggests a new organizing research question. Instead of examining whether and to what degree an individual trusts others, the focus should be on the potentially varying levels of trust across the various contours *within* individuals' relationships with others. In other words, the motivating question becomes "Person X trusts Person Y for what?"

A careful reading of "trust" indicates that we often say "trust" when people share a goal. That is, a "shared goal" is a prototype case of trust.[2] More precisely, many instances of trust are the reliance on another person for the attainment of an interdependent goal. Therefore, one place to begin formulating a contextual theory of trust is to use a goal-centric approach. However, a goal-centric approach requires a new theoretical lens.

Reorienting trust research toward investigating the individual's goals requires a new research strategy. The standard for psychological research on trust, as reviewed above, has been to classify relationships along a dimension of low trust to high trust and identify which variables best predict this classification. The finding, then, is that "X does or does not correlate with average levels of trust." Indeed, even approaches to identify "situational and individual" influences on trust

[2] This prototype might be called "Relying on." Another prototype of trust, such as when individual's share secrets with each other, might be called "Confiding in." Although I am inclined to believe that both prototypes might similarly be explained by my theoretical approach, I will constrain my discussion to the "Relying on" prototype throughout the rest of this paper.

(e.g., Scott, 1980) have done so from this perspective. By contrast, a goal-centric approach to trust requires a social-cognitive theoretical treatment.

Social-cognitive theories seek to understand the causal mechanisms and their interrelations that give rise to a phenomenon (Cervone, 2004; Cervone, 2005). In the case of interpersonal trust, this would translate into examining the relationship between Person X (e.g., Tim) and Person Y (e.g., Andy) in Goal Context Z (e.g., maintenance of shared living spaces).

1.4.1. Interdependent Goals Are at the Heart of Trust

Goals are a class of desired end-states that are at least passively pursued and considered at least minimally possible (Kruglanski, Shah, Fishbach, Friedman, Chun, & Sleeth-Keppler 2002). Goals can be distantly- versus immediately-desired end states that guide and cohere behavior over long periods of time—as in the pursuit of a Ph.D.—or over a matter of moments—as in the avoidance of the further angering of an agitated advisor (Cervone, 2004). Importantly, all prototype or semi-prototype cases of "goal" involve attainments or achievements that occur in some identifiable context (Kruglanski, et al., 2002). For example, even if we say we want another person "to be helpful" we mean "to help in the achievement of goal x," in almost all cases (Cervone, 2004).

Some goals require assistance from others for their completion. Working with others and trusting them to do their part for the completion of a shared goal allows people to obtain greater benefits than they could obtain individually (Fehr & Gintis, 2007; Sachs, Mueller, Wilcox, & Bull, 2004). However, pooling resources leaves people vulnerable to the actions of others (e.g., Murray & Holmes, 2009). The people we rely upon may be incompetent, unscrupulous, or both. They may try to cheat us or harm us, or they may simply be incapable of performing the duties for which we rely on them. In such cases—when an individual's well-being relies at least in part on the behavior

of one or more other people—they are said to be in a state of dependence or interdependence (Emerson, 1962; Rusbult & Van Lange, 2003, 2008).

An interdependent goal is a desired end-state that relies at least in part on the action or inaction of another person for its attainment. Because the attainment of an interdependent goal relies on the behaviors of others, the individual's progress toward that goal may be helped or hindered by the other person or persons. Consequently, it would be beneficial for people to consciously calculate the likelihood of each potential behavior of a (potential) cooperative partner and the likely outcomes of each potential behavior. However, people have neither the time, motivation, nor requisite abilities to perform such a complicated and resource-intensive task (Epley, Keysar, Van Boven, & Gilovich, 2004; Evans & Krueger, 2016).

Trust makes interdependent goals possible. Instead of consciously calculating the probabilities of another person's potential behaviors, people act as if the other person will cooperate (Lewis & Weigert, 1985). Such 'pre-cooperation' is the hallmark of trust. Indeed, the phrase "acceptance of vulnerability" in the definition of trust often refers to the dedication of one's own resources and energies toward the completion of the interdependent goal under the assumption (or hope) that the other person will not abscond with those resources. Trust is therefore an aspect of interdependent goals. According to the present perspective, the trust between individuals is predicated on their interdependent goals.

Examining trust through the lens of interdependent goals maintains all elements of the commonly accepted definitions of trust and intuitions regarding how trust operates while also illuminating new facets of the construct. Recall that the principal definition of trust is that it is "a psychological state comprising the intention to accept vulnerability based upon expectations that another's words, actions, and decisions will result in beneficial outcomes for the perceiver." Specifying that an important subset of trust is explicitly under the domain of interdependent goals

maintains the intuition that trust requires risk to the individual. From this perspective, the acceptance of vulnerability arises from the fact that the other person may choose not to cooperate on the interdependent goal. Instead, they may use the resources and energies offered up by the individual to achieve their own preferred ends rather than the interdependent goal, or they may even use their own resources to thwart the interdependent goal. If trust is at the heart of interdependent goals, then the other's ability to perform their part and their intent to do so constrains the likelihood of obtaining the desired end state. Thus, the leap of faith inherent in trust is that people cannot force their partner's behaviors to ensure that they are willing and able to perform the task for which they are relied upon.

Placing interdependent goals explicitly at the center of interpersonal trust extends formal models of trust while simultaneously constraining them. Investigations of trust are extended through the connection to theories and models of goal striving (e.g., Kruglanski et al., 2002; Little, 1983). This move also situates the study of trust nicely into recent theories of relationships (Fitzsimons, Finkel, & Vandellen, 2015; Orehek, Forest, & Barbaro, 2018). This reframing, however, also constrains the topic into a well-defined subset of experience because not every goal requires the contribution of others.

The definition of the subset of trust this paper will examine is "Trust is the degree to which an individual is willing to rely on another person for the achievement of an interdependent goal." Before moving further, I will be a bit more precise in some of the terms of this definition of trust. By "willingness" I mean that the individual is favorable toward tying their own fate with that of another in the pursuit of a specific interdependent goal.[3] By "rely on" I mean the individual's actions and beliefs are structured such that the individual is in some way vulnerable to the actions

[3] Of course, the person may not follow through on their prior "willingness" to engage in the interdependent goal for a variety of reasons. Consequently, this definition of trust, like the principal definition, presents the concept as a state of the individual that is in anticipation of a future state.

and decisions of the trustee for the completion of the goal. For example, if Tim enters into a lease with Andy, and Tim could not afford rent on his own, he would be said to trust Andy with assistance in paying for a place to live. Both Tim and Andy are acting under the assumption that the other person will do their part by paying their apportionment of rent.

An approach to trust that is characterized as the willingness to rely on others for the accomplishment of an interdependent goal directs attention toward individuals' momentary motivational states. Such an account inherently incorporates the idiosyncrasies of the individual and the context because although there are many goals that are culturally shared, many are not (Markus & Kitayama, 1991). Moreover, how people interpret and pursue culturally-shared goals is similarly idiosyncratic (Kruglanski & Kopetz, 2009). Consequently, any account of the psychology of how people navigate interdependent goals must address this inter- and intrapersonal variability and consistency.

1.5. The Interdependent Goal Model of Interpersonal Trust

According to the Interdependent Goal Model of Interpersonal Trust (IGM), trust is a psychological state of the individual that is in service of accomplishing interdependent goals. As such, the IGM applies a person-centered interactionist approach to account for the dynamics of goal striving.

The IGM, following in the tradition of person-centered interactionist approaches (e.g., Bergman & Magnusson, 1997), assumes that the individual is a complex system. In other words, the focus should be on the functioning of whole persons within their environment. Accordingly, the IGM assumes (1) that the operation of trust is partly specific to the individual, (2) that trust involves a complex system of potentially many subsystems that may be related in complicated ways, (3) that although the structure of the factors influencing interpersonal trust might be complicated and complex, there is a coherent and emergent pattern, (4) the system functions as a

whole, so that the meaning of a particular factor is derived in part by its relation to the other factors, and (5) the complexity of the system is greater at lower levels than higher levels (Bergman & Magnusson, 1997).

Keeping the above premises in mind, it is necessary to delineate some of the components of interpersonal trust. That is, although it is necessary to identify the elements and structures of interpersonal trust, it is important to remember premise (4): the system functions as a whole, so that the meaning of a particular factor is derived in part by its relation to the other factors. A careful inspection of the literature (e.g., Cervone, 1997; Cervone, 2004; Cervone, Mor, Orom, Shadel, & Scott, 2004) reveals two broad categories that parsimoniously organize the social-cognitive variables into coherent and useful sets: Knowledge and appraisals.

1.5.1. Knowledge

An individual's knowledge is their enduring "mental representation of [past,] current, or prospective features of [them]self, others, or the environment" (Cervone, 2004, p. 186). In other words, knowledge structures refer to the (relatively enduring) collections of beliefs and mental representations that people have about things, such as themselves, different contexts, and other people (Cervone, 2004).

Knowledge structures are inherently idiosyncratic. The unique background of each individual, including their past interactions with others (Read & Miller, 2013), their experience within a domain (Wyatt & Rabinowitz, 2010), and the culture within which they are embedded (Markus & Kitayama, 1991), all contribute to the individual's beliefs, normative standards, and goals (Cervone, Shadel, Smith, & Fiori, 2006). Similarly, the perceived relevance of a particular knowledge structure to a given circumstance is unique to each individual (Cervone, 1997). Consequently, the diversity of beliefs between individuals is propagated further into diversity of belief connectivity.

The idiosyncrasies in people's knowledge and knowledge structures are not trivial. People evaluate their past, present, and future circumstances through the lens of their present beliefs (Conway, Singer, & Tagini, 2004; Szpuner, Spreng, & Schacter, 2014). Knowledge structures guide and constrain situated behavior through the activation of accessible beliefs that are perceived relevant to the demands of the present context (Loersch & Payne, 2011). That is, knowledge structures exert a direct influence on the individual's appraisal processes (Smith & Lazarus, 1990).

1.5.2. Appraisals

In contrast to knowledge structures, appraisals are "evaluations of the relation between oneself and occurrences within particular encounters" (Cervone, 2004, p. 186). Accordingly, while people are embedded within a given situation, they are theorized to evaluate the context to identify which beliefs are perceived as relevant to that context and then evaluate the situations' implications to their own beliefs (Cervone, 2004). Consequently, the conjunction of beliefs and appraisals accounts for both behavioral coherence and variability (Cervone, 2004; Mischel & Shoda, 1995).

Whereas beliefs or knowledge are about something, appraisals are relational evaluations that reference a given context and the individual's knowledge structures. Appraisals are therefore inherently dynamic (Cervone, 2004). Appraisals are evaluative dimensions along which people extract the meaning of the present experience (Ellsworth & Scherer, 2003; Smith & Lazarus, 1993). Concomitant with the stream of experience, people are tracking the novelty, pleasantness, and goal relevance (among others) of the circumstances within which they are embedded (Ellsworth & Scherer, 2003). The result of this process is the individual's affective experience and propensity to act (Smith & Lazarus, 1993). Thus, appraisals correspond most proximally to the situated behavior of the individual.

Appraisals add the much-needed component of emotion to the concept of trust. Although trust violations are clearly emotionally evocative (Dulac, Coyle-Shapiro, Henderson, & Wayne,

2008; Tomlinson & Mayer, 2009), the role of emotions in the antecedents and experience of trust has been relatively less understood (Schoorman, Mayer, & Davis, 2007). Parsing the psychological elements of trust into knowledge and appraisals fills this conceptual gap and highlights the importance of the person in context.

The distinction between knowledge and appraisals clears up a longstanding debate about the role of affect in trust. Some accounts of trust have been criticized for neglecting emotional processes altogether (e.g., Lewicki et al., 1998; Lewis & Weigert, 1985), whereas others appear to overly emphasize the rather dubious distinction between emotions and cognitions (e.g., Lewicki, Tomlinson, & Gillespie, 2006; Schoorman et al., 2007). Although the relative strength of more versus less affectively-laden processes on various predictors and indicators of trust are dissociable (Johnson & Grayson, 2005; Johnson-George & Swap, 1982), when emotionality might emerge as an important feature of trust remains elusive in current theories and models of trust that are not grounded in theories of emotion. However, the findings regarding the relationships between risk and affect and trust highlighted above (e.g., Das & Teng, 2004; Dunn & Schweitzer, 2005; Evans & Krueger, 2011) fit neatly into the IGM.

According to the IGM, relevant knowledge is activated under the motivational circumstances of interdependent goals, which in turn guide behavior through the appraisal process. Because trust is only relevant under situations of interdependence, the activated knowledge structures should correspond to features of the interdependent goal, the trustee, and the trustor in context. Consequently, the IGM predicts that the activation of these knowledge structures as they relate to perceived opportunities and threats to goal pursuit will activate more emotional processes.

1.5.3. Knowledge and Appraisals of Interdependent Goals in Context

The organization of beliefs and associated appraisals of the trustor in contexts of trust is theorized to be directed by the trustor's interdependent goal pursuit. In other words, the

motivational state of the trustor coheres the behaviors and cognitions of the trustor so as to facilitate goal pursuit. Accordingly, the relevant knowledge and appraisals about the goal, the trustee, and the trustor should correspond to those beliefs that are most proximal to the likelihood of goal attainment.

1.5.3.1. Knowledge about the Goal

The IGM posits that the goal-directedness of the individual is the lens through which the individual perceives contexts characterized by opportunities for trust. Potential resources, such as other people, acquire their character in relation to the interdependent goal (Kruglanski et al., 2002; Orehek et al., 2018a). This is to say that another person is only a potential resource so long as they are perceived to be useful for the attainment of a presently-pursued end. The embedded individual's knowledge is therefore assumed to be organized so as to facilitate goal pursuit (Smith & Semin, 2004).

Beliefs about the nature of the goal, like the necessary and alternative means for its attainment, should affect interpersonal trust. For example, a particular goal may be accomplished by many potential trustees or only a few (Orehek et al., 2018a). The trustor might even think that some of their goals may only be accomplished with the help of a single other person. Consequently, the degree to which an individual will be more or less selective in their choice of trustees will depend on the trustor's beliefs about the possibilities of goal attainment. Because an important subset of trust is the degree to which an individual is willing to rely on a particular other for the achievement of an interdependent goal, the potential alternatives to goal attainment will affect the interpersonal trust placed in a specific other.

Alternatively, a trustor may be more focused on the goal itself than the means to its attainment. Even when the trustor believes that relying on a given trustee for a particular goal is risky, the magnitude of the potential outcome can overcome the probability of the outcome in the

mind of the trustor (Kahneman & Tversky, 2013). In other words, a highly valued goal may overwhelm the individual's evaluation about the probability of achieving that goal in directing the individual's behavior. For example, although the odds of winning the lottery are infinitesimally small, thousands of people every week spend their money with the hopes of achieving their dreams of winning a large sum of money (Auter, 2016).

Trusting scenarios are similarly susceptible to such effects (Das & Teng, 2001; 2004). The more an individual values a desired end state, the more likely they should be to rely on any other person for the achievement of that goal (Evans & Krueger, 2011). Consequently, gathering information about a potential trustee on a given goal may become more or less important depending on the trustor's desire to achieve that goal. If the goal is very important to the trustor, relative to an unimportant goal, then they should be more likely to calibrate their trust to the information they have about the trustee's potential for helping them achieve that goal. Such a state of affairs might best be described as an outcome orientation because the individual is primarily concerned with the tangible outcomes for themselves from goal pursuit.

Conversely, individuals may rely on another person simply to strengthen the relationship between themselves and the trustee. Some relational partners allow the individual to pursue more and more valued goals, but these relationships are relatively infrequent (Orehek, Forest, & Wingrove, 2018). Therefore, the weight of all interdependent goals for which the trustee might be relied upon is likely compared to the individual's desire to attain one specific goal. In many cases, the number and magnitude of the shared goals with the trustee is sufficient to induce the trustor to enact and pursue the interdependent goal of maintaining their relationship with the trustee (Orehek, et al., 2018a). This would refer to a relationship orientation because the individual is primarily concerned about their connection to the trustee.

The principal goal orientation of the trustor—outcome versus relationship orientation—will coordinate the individual's beliefs regarding the advancement of their presently-desired aim. Indeed, a host of phenomena relevant to trust, such as fairness orientations (e.g., Skitka & Wisneski, 2012) and relational schemas (e.g., Fiske, 1992), are similarly organized around the individual's goal orientation. As a consequence of this knowledge coherence, the relative importance of the interdependent goal to the trustor (i.e., outcome orientation) versus the importance of maintaining the relationship with the trustee (i.e., relationship orientation) should exert a push and pull on the affective systems of the trustor during goal pursuit. In other words, the interplay between goal importance and relationship importance should predict different goal orientations. More important goals should press for an outcome orientation whereas less important goals should press for a relationship orientation, and more important relationships would require even more important goals to trigger an outcome orientation than less important relationships.

1.5.3.2. Appraisals about the Goal

Beliefs about others' potential impact on goal attainment will guide and constrain the individual's appraisal, and therefore emotional, processes (Cervone, 2004; Ellsworth & Scherer, 2003; Smith & Lazarus, 1993). That is, the evaluation of the present circumstances vis-à-vis the individual's welfare (i.e., the appraisal process) is also organized according to the individual's present goals (Bagozzi, Baumgartner, & Pieters, 1998). In turn, this emotional system provides feedback to the individual about their progress toward their goal and the present opportunities and threats to their present goal pursuit (Cervone et al, 2006). This interplay between the individual's knowledge and appraisals enables flexible, situated action (Baumeister, Vohs, DeWall, & Zhang, 2007).

Circumstances that direct the attention of the trustor toward the potential trustee will imbue those trust-relevant instances with a greater affective quality. Because appraisals encode the

relationship between the trustor and their present wellbeing, including the relevance of the situation to their presently-pursued goals, a greater focus on the trustee will result in more information about the trustee's relevant behavior for the trustor's wellbeing and goals. Thus, these circumstances should be more affective in tone.

For example, the extent to which an individual's goal attainment depends on another person may increase the extent to which the individual attends to that person (Galinski, Magee, Inesi, & Gruenfeld, 2006; Galinski, Rucker, & Magee, 2016). That is, as the degree to which the trustor depends on the trustee increases, so too should the degree to which the trustor gathers information about the trustee increase. In fact, even the subjective sense of power is inversely related to an individual's tendency to take the perspective of another person (Galinski et al., 2006).

The likelihood that an individual will attempt to gather more information about a trustee via perspective-taking is likely to become exacerbated to the extent that their reliance on the trustee is asymmetric (Drigotas, Rusbult, & Verette, 1999). Trustors who must rely on a given trustee for a highly valued goal, while also being unable to ensure faithful action on the part of the trustee, will therefore be in a highly emotional state. Indeed, such circumstances place the trustor under a great deal of anxiety and worry (Rusbult & Van Lange, 2003). This affective state should then direct the trustor to search for relevant information about the trustee.

1.5.3.3. Knowledge about the Trustee

Theories of trustworthiness (e.g., Mayer et al., 1995) and interpersonal perception more broadly (e.g., Abele, Cuddy, Judd, & Yzerbyt, 2008) provide important insight regarding the types of beliefs about the trustee that are relevant to interpersonal trust. Yet, without a motivating theory of trust, that information is difficult to organize. Under the IGM, these beliefs cohere: The important and relevant knowledge about the trustee under situations of trust will correspond to those features of the trustee that are most likely to affect goal pursuit.

1.5.3.3.1. Trustee Intent

One of the key pieces of information an individual may attempt to infer from their partner's behavior is whether they are working toward the same goal[4] (Holmes & Rempel, 1989; Parks, Henager, & Scamahorn, 1996). Indeed, a recent study indicates that manipulating beliefs about their partners' likelihood of cooperating in a public goods game affects the degree to which the observer cooperates and the speediness with which they make their decision (Santa, Exadaktylos, & Soto-Faraco, 2018). In fact, the degree of goal congruence (or perceptions thereof) has held a central place in a variety of research programs, including trust (e.g., Holmes & Rempel, 1989) and person-perception more broadly (e.g., Cuddy, Fiske, & Glicke, 2008).

The intent of the trustee to work cooperatively with the trustor, however, is not the only factor that will predict goal attainment. A cooperative yet ineffective trustee can be just as damaging to goal attainment as an unscrupulous trustee. Therefore, trustors should calibrate their trust in a particular trustee relative to their perceived competence on a particular task.

1.5.3.3.2. Trustee Competence

If trust is the degree to which an individual is willing to rely on another individual for the attainment of an interdependent goal, then beliefs about the potential trustee's capability to perform the duties for which they relied upon is an important class of knowledge structures in trust contexts. Indeed, perceptions of competence appear to be another fundamental dimension along which people classify themselves and others (Abele et al., 2008; Cuddy et al., 2008).

Beliefs about an interdependent partner's competence most plainly demonstrates the necessity of a contextual approach to trust. What could it possibly mean for somebody to be perceived as universally competent or incompetent? Indeed, "work competence" is specifically defined as those sets of knowledge and skills of the individual they use during a specific activity

[4] I use the terms "intent," "goal congruence," and "covariation of interests" interchangeably.

(Sandberg, 2000). Consequently, a potential trustee's attributes make them more or less "competent" for a given task, as perceived by the trustor, depending on the relevance of their strengths and weaknesses to that task (Sandberg, 2000).

To return to our roommate example, Tim would be said to rely on Andy for all possible goals, from fixing problems with their plumbing to growing all of their food. Instead, trust should be sensitive to the demands of the situation. Tim may believe that Andy could in theory perform a wide range of functions, but he likely recognizes that it is in his best interest to rely on people in contexts where they are most capable, or at least more capable than alternatives within his available resources (e.g., Lewicki & Bunker, 1995; Moore, Cheng, & Dainty, 2002; Rusbult & Van Lange, 2003; Sandberg, 2000). In other words, Tim will likely call a plumber to fix the plumbing and go to the grocery store to purchase his food instead of relying on Andy for such goals, assuming he has the resources to do so. This conceptualization corresponds with the most prominent model of trustworthiness in the literature with its incorporation of perceptions of competence or "ability" (Mayer et al., 1995).

Although many authors have discussed trust in terms of the competencies that a partner may have (e.g., Cook & Wall, 1980; Das & Teng, 2001; 2004; Deutsch, 1960; Jones, James, & Bruni, 1975; Mayer et al., 1995; Nooteboom, 1996; Sitkin & Roth, 1993), surprisingly few studies have actually sought to examine the relationship between a partner's perceived competencies and trust. One study found a correlation between managers' perceived competence and trust in general (Mayer & Davis, 1999), but the crucial claim presented here is that beliefs about an interaction partner's goal-specific competencies should predict contextual trust. Consequently, more work is needed to examine this claim.

1.5.3.4. Appraisals of the Trustee

If beliefs about the trustee's likelihood in assisting goal pursuit are the principal sources of knowledge to which trustor's will attend, then it is those very same beliefs that will guide the appraisal process. Congruent with appraisal theories of emotion (Lazarus & Smith, 1988), the trustor is theorized to monitor the behavior of the trustee and evaluate those behaviors relative to interdependent goal pursuit. Behaviors that violate the trustor's expectations and are perceived relevant to goal pursuit will trigger an affective response. Behaviors on the part of the trustee that diminish the trustor's evaluation of the probability of successful goal pursuit should evoke anger and potentially feelings of unfairness in the trustor (De Cremer & Ruiter, 2003; Van den Bos, 2001). Indeed, feelings of unfairness have long been considered to be the response to violations of expectations (Van den Bos & Lind, 2002; Van den Bos, Vermunt, & Wilke, 1996). According to the present perspective, those expectations are the beliefs about the trustee's behavior during interdependent goal pursuit that motivated the trustor's willingness to rely on the trustee (i.e., trust itself). Therefore, the relationship between (un)fairness and trust is clear: Perceived violations of trust and feelings of unfairness are one in the same.

1.5.3.5. Knowledge about the Self

According to the IGM, knowledge of the trustee should not exist within a vacuum when individuals decide whether or not to rely on them. For example, the trustor's self-perceptions of their own task-relevant competencies (i.e., self-efficacy) should affect their perceptions of the trustee's task-relevant competencies. Because the trustor's competencies for the relevant tasks related to the goal also affect the likelihood of goal attainment, the capabilities of the trustor should be an important predictor of their willingness to rely on the trustee.

The trustor's task-relevant competencies should moderate the degree to which the trustee's competencies affect interpersonal trust. Someone who is completely incapable of performing a

given task (or at least perceives themselves as such) might be more willing to rely on anyone. For example, Tim might see himself as so mechanically disinclined that he would be willing to rely on almost anyone to help him assemble his chair. Similarly, someone who is highly competent on the task may be less selective in whom they trust because their expertise allows them to notice earlier signs of incompetence or unscrupulousness on the part of the trustee, assuming the individual is able to monitor the other's progress. Such would be the case for mentors and mentees; the mentor can trust the mentee because they know what must be done and how, so they can mitigate any potential for loss to goal striving at the earliest signs that the trustee is failing their responsibilities.

By implication, competence should be most relevant when the trustor is only moderately competent in the task. This prediction represents a departure and more concrete specification of the role of competence in trust decisions and judgments than previous theories (e.g., Mayer et al., 1995). This is not to mean that people will not seek out highly competent trustees if they are able, but instead the claim is meant to relate to the perceived importance of competence in trust. The trustee's task-specific competence should be less important when the trustor is very competent or very incompetent at the goal-relevant task.

1.6. Putting It All Together: A New Approach to Trust

The Interdependent Goal Model of interpersonal trust suggests a new organizing question: *When* does Person X trust Person Y? To address this question, the IGM argues that trust is predicated on the interdependent goals of the trustor. Accordingly, the trustor's willingness to rely on another for the achievement of an interdependent goal (i.e., trust) is a function of the trustor's knowledge and appraisals as they relate to the likelihood of goal attainment. See Figure 2 for a diagram of the present theory.

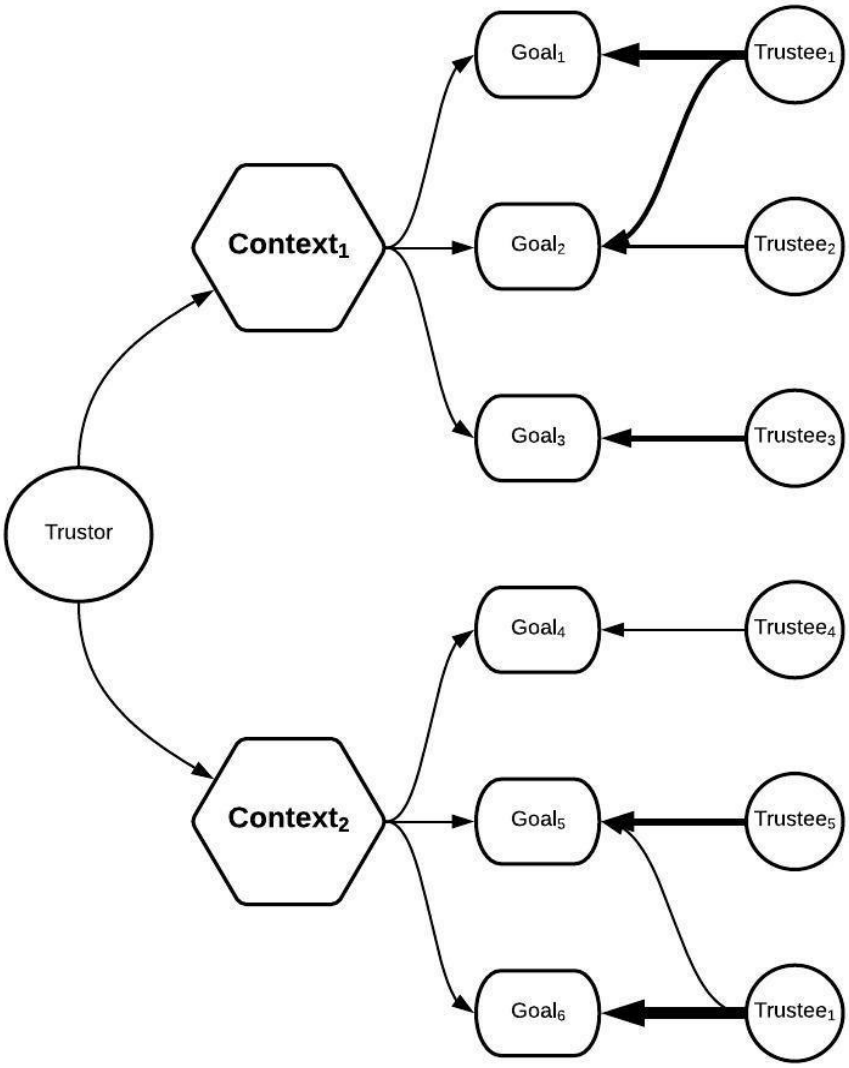

Figure 2. Diagram of the Interdependent Goal Model of interpersonal trust. Lines from $Trustee_N$ represent the trust for $Trustee_N$ on $Goal_N$. Width of line refers to trust for $Trustee_N$ on $Goal_N$, with thicker lines depicting more trust. Note that $Trustee_1$ appears in two contexts and is trusted for a total of 4 goals, but the trust placed in $Trustee_1$ is not constant for each goal or in each context.

In addition to a new motivating question, the Interdependent Goal Model of Interpersonal Trust implies a new research strategy to the study of trust. If interpersonal trust is the result of the trustor's knowledge and appraisals during interdependent goal pursuit, then it is imperative to

actually measure the trustor's beliefs under the relevant circumstances. Indeed, identifying the circumstances that the individuals themselves deem relevant to trust is a necessary first step.

Instead of the variable approach that has dominated trust research, the present theory suggests a person-centered approach. Under a person-centered approach, the focus is on understanding the antecedents of the behavior of the individual, which may or may not correspond to the antecedents of another's behavior under the same or similar circumstances (Bergman & Magnusson, 1997; Cervone, 2004). Consequently, measures of individual differences are inappropriate for understanding the operation of interpersonal trust.

In replacement of individual difference measures, the IGM presses for the application of idiographic assessments (i.e., idiomeasures). Because one person's relevant beliefs during interdependent goal pursuit may or may not correspond to the relevant beliefs of another, it is important to elicit those beliefs from the individuals themselves.

1.7. Present Study

In the following study, I tested some of the core premises of the Interdependent Goal Model of interpersonal trust. Because the IGM is a goal-centric theory of trust, it makes several novel predictions regarding interpersonal trust.

The first major premise of the IGM is that trust is inherently instrumental for the individual's goal pursuit. Specifically, the IGM argues that an important prototype of trust is the willingness of a person to rely on another for the achievement of a desired end and therefore is in preparation of an act of social risk taking. Consequently, people should be sensitive to the probability of goal attainment that is associated with relying on a particular person for a particular goal. In other words, people should be more likely to trust another person if they believe they are competent to perform the task at hand and less likely to trust another person if they believe they are *in*competent to perform the task. The first hypothesis of the present study is that interpersonal

trust will increase as the relevance of a best friend's strength to a given task increases, and interpersonal trust will decrease as the relevance of a best friend's weakness to a given task increases.

The second major premise of the IGM is that trust is not merely a calculative decision in a one-shot interaction. Instead, trust is the result of a push and pull between the importance the individual places in the goal versus the importance of the relationship with the trustee. Although people should calibrate their trust relative to the demands of the goal, some relational partners allow the individual to pursue more and more valued goals (Orehek et al., 2018a). For those relationships, the individual may be more likely to trust them across a range of goals, even if they are not perceived as the best-suited for the tasks, because doing so makes the trustee feel valued (Inagaki & Orehek, 2017). However, as the importance of accomplishing the goal increases for the trustor, they may again become more selective in their choice of trustee. Therefore, the second hypothesis of the present study is that individuals will place lower trust in another person on average across a range of highly important goals relative to goals of lower importance.

Combining the above premises suggests that the lower trust in relational partners across more important goals will be driven by the trustor being more selective in whom they trust for those important goals. That is, people will not simply lower their trust in their best friend, for example, across their most important goals simply because those goals are important. Instead, the lower trust should be explained by the trustor relying on the relational partner for goals the trustor believes could be accomplished with the help of the trustee and not relying on the relational partner for goals the trustor believes could not be accomplished with the help of the trustee. Specifically, the third hypothesis of the present study is that for more important goals, people will be more likely to trust an important relational partner (e.g., best friend) if they believe the trustee's strengths are relevant to the task and less likely to trust that relational partner if they believe the trustee's

weaknesses are relevant to the task. For goals that are less important, beliefs about the trustee's strengths and weaknesses will be less relevant.

2. METHOD

2.1. Participants

Based on a series of six simulations (see Appendix A), I recruited 399 participants (62.41% female). The average age of my participants was 19.08 (*SD* = 1.42), and my sample was ethnically diverse. Forty-nine (12.7%) of my participants identified as White or European American, 28 (7.2%) identified as Black or African American, 147 (38%) identified as Latinx or Hispanic, 135 (34.9%) identified as Asian or Asian American, 1 (0.3%) identified as an American Indian or Alaska Native, 2 (0.5%) identified as Native Hawaiian or Pacific Islander, and 5 (1.3%) identified as multiracial. The remaining 32 (8%) participants chose not to identify their ethnicity. Participants completed the study in the lab and were compensated with course credit for their participation.

2.2. Procedure

This study was a three-part survey. The entire survey was completed in one session in the lab to reduce the potential for attrition between survey components. At the beginning of the study, participants came to the lab and sat at a lab computer. In Part 1 participants identified the goals they were currently working toward or maintaining (see Part 1 below). In Part 2, participants identified their best friend and generated and ranked their best friend's most descriptive strengths and weaknesses. Finally, in Part 3, participants answered the primary dependent measure (i.e., trust for each goal), one nomothetic measure of trust and one of trustworthiness, and completed a short demographic survey.

2.2.1. Part 1

The purpose of Part 1 was to identify the goals in which participants were currently and actively engaged. This was participants' first task to ensure that goal elicitation (described below) was not influenced by other facets of the survey. Specifically, I attempted to reduce the likelihood of participants identifying only those interdependent goals they would engage in with their best

friend by having participants identify and describe their goals *before* identifying and describing their best friend.

Prior to starting the survey, participants consented to their participation. Upon signing the informed consent, participants completed a series of questions based in part on the Personal Projects Analysis (PPA), which is a proprietary idiographic assessment developed by Brian Little (Little, 1983; Little & Coulombe, 2015). Whereas goals are desired end states, personal projects are a "set of interrelated acts extending over time, which is intended to maintain or attain a state of affairs foreseen by the individual" (Little, 1983, p. 276). In other words, personal projects are the series of actions enacted by the individual in service of accomplishing a goal. The methodological benefit of the PPA is that it focuses on the set of concrete actions the individual identifies as being necessary and sufficient for the completion of the goal (Little, 2008). The PPA approach, then, enables the rest of the questions of the survey to be focused on specific and concrete actions, which is in accord with proper survey design (Krosnick & Presser, 2010).

2.2.1.1. Project elicitation

The first part of the survey defined for the participants "personal projects" and then asked them to list their personal projects. Participants were given 25 spaces to list personal projects and were not able to advance past the project elicitation page for 5 minutes to ensure they thought carefully about their personal projects. Participants must have generated at least six projects to have been able to proceed to the subsequent pages to ensure they had three that could be called "most important" and three that could be called "least important" for reasons I explain next.

Project elicitation was conducted via open-ended text boxes, which enabled me to embed participants' project names throughout the survey (i.e., 'piping'). All measures described below incorporated piping.

2.2.1.2. Project Ranking and Importance

After participants listed their personal projects, they were asked to rank them according to the "most important for understanding who they are as a person." Specifically, participants categorized and ranked their three most important goals and their three least important goals by dragging those six project descriptions into boxes labelled Most Important Projects and Least Important Projects. This categorical variable of goal importance (most important, least important) is the primary measure of goal importance in the following analyses. Once participants ranked their three most and three least important projects, they rated those six projects on a 10-point Likert scale of importance with anchors at 1 = *not at all important*, and 10 = *extremely important* for use as a manipulation check.

2.2.1.3. Project Categorization

To ensure that project importance was not confounded with the kinds of projects they generated, and to get a sense of the projects participants' generated, participants categorized each of their three most and least important projects into one of seven categories (i.e., academic, occupational, health/body, interpersonal, intrapersonal, leisure, and maintenance-related). These categories are in accord with past research and the standard PPA protocol (Presseau, Sneihotta, Francis, & Gebhardt, 2010).

2.2.1.4. How Laddering

Finally, participants engaged in a modified version of "how laddering," whereby participants identified specific and concrete tasks they performed in service of accomplishing their larger projects. This was conducted to reduce potential ambiguity in the following goal-specific trust items. Specifically, for each of the six projects identified in the previous step, participants were asked:

> For your project [$PROJECT_N$], we would like you to ask yourself: "What smaller projects am I working on or planning that will allow me to achieve this project?"
>
> For example: If one of your initial projects was "Pass first-year psychology," you might ask yourself what smaller projects you are undertaking to ensure you do pass psychology? You might decide there are a few, including: "Keep up with my reading in the course," "Attend each lecture," "Get experimental credits," etc. Remember personal projects may be activities you are currently engaged in or considering.
>
> When you have decided which smaller project(s) your initial project is related to, select it (or them) from the drop-down menu. You may also decide there is no smaller project connected with your initial project, in which case go on to the next project.
>
> If the list does not contain the smaller project you're thinking about, write it in the blank below.

Participants' full list of their original projects and five additional text boxes for including new subordinate projects were provided to participants from which to select subordinate projects.

Once participants indicated all of the subordinate projects to the project they were currently describing, participants were then asked to rank those projects from "smallest" to "largest." The smallest project from each of the three most and least important projects were used for the remainder of the survey as concrete tasks for which participants answered the primary dependent variables. Participants were explicitly told to generate six unique "Smallest Projects," one for each of their larger projects.

2.2.2. Part 2

Immediately after Part 1, participants were directed to Part 2 of the survey, which was modeled after idiomeasures used to examine the KAPA model from which the IGM was derived (e.g., Cervone, 2004). This facet of the survey served to identify an important person in the individual's life to provide a strong test that people vary in the degree to which they trust others across goals.

2.2.2.1. Friend Generation

Participants were asked to generate the first name of their best friend. Specifically, participants read:

> In the first part of this survey, you identified some of the projects you are currently pursuing in your life. For this part of the survey, we are going to ask that you think about the people in your life. What is the first name of your best friend? (You can also choose to type your best friend's initials or a nickname instead).

Participants then typed the first name of their best friend in an open-ended text box.

2.2.2.2. Friend Attributes

After they identified their best friend, participants were asked to generate up to five adjectives that best described their friends' strengths and five adjectives that best described their friends' weaknesses. To advance, participants must have listed at least one strength and one weakness. After participants generated the personal attributes of their friend (strengths and weaknesses), they were asked to rank those attributes such that the highest ranked strength and weakness were the best descriptors of their best friend. The highest ranked strengths and weaknesses served as the indication of task relevant competence of the trustee (Sandberg, 2000). Specifically, the friend's strength was an indication of task-relevant competence if it was rated as

relevant to the participant's personal project, and the friend's weakness was an indication of task-relevant incompetence if it was rated as relevant to the participant's personal project.

2.2.3. Part 3

After generating and describing their personal projects in Part 1 and identifying and describing their best friend in Part 2, participants completed Part 3 of the study, which included the primary dependent measures and control measures.

2.2.3.1. Task Relevance

After describing their best friend, participants were told to imagine that their friend offered to help them accomplish each of the smallest goals they identified in Part 1. Specifically, participants read the following prompt:

> During Part 1 of this study, you identified some of the personal projects you are pursuing in your life. These may be goals that you pursue independently, or they may be goals that you pursue with the help of others. Imagine that [BEST FRIEND] has offered to help you with each of these goals. To what extent would their personal strength and weakness be relevant to each of the tasks you identified for you to achieve your goals?

Participants then indicated the degree to which their best friends' most descriptive strength and most descriptive weakness were relevant to each of their smallest projects on a 5-point Likert scale (0 = *not at all relevant*, 1 = *slightly relevant*, 2 = *moderately relevant*, 3 = *very relevant*, 4 = *extremely relevant*).

2.2.3.2. Interpersonal Trust

After rating the degree to which their best friends' most descriptive strength and weakness were relevant to each of their smallest projects, participants rated the degree to which they would trust their best friend to help them for each of the smallest projects identified in Part 1 of the survey.

2.2.3.3. Nomothetic Measures of Trust and Trustworthiness

Participants completed the specific interpersonal trust scale (SITS; Johnson-George & Swap, 1982) and the measure derived from the currently dominant Ability, Benevolence, And Integrity model of trustworthiness (ABI; Mayer & Davis, 1999; Mayer et al., 1995) after they generated and ranked the attributes of their best friend. The specific items from each of the measures are described below, and these measures were included as statistical controls.

2.3. Measures

2.3.1. Goal Importance

There was a two-level categorical measure of goal importance and a continuous measure of goal importance. The goals identified by the participants as the three most important and three least important goals were categorized as Most Important and Least Important, respectively. This variable was the primary measure of goal importance included in all analyses.

The continuous measure of goal importance was a 10-point Likert scale of importance with anchors at 1 = *not at all important*, and 10 = *extremely important*. Participants responded to this question for each of their 6 goals (i.e., 3 most important and 3 least important), and this measure was used as a manipulation check.

2.3.2. Task Relevance

Task relevance was defined as the degree to which the most descriptive attributes of participants' best friends influenced their ability to perform the behavior necessary to accomplish the given task (Cervone, 2004). Specifically, participants were presented with each of the smallest

projects they generated for each of their six personal projects (three most and three least important) in Part 1 and rated the degree to which their best friends' strength and weakness were relevant to that task on a 5-point Likert scale (1 = *not at all relevant,* 2 = *slightly relevant,* 3 = *moderately relevant*, 4 = *very relevant,* 5 = *extremely relevant*). The relevance of participants' best friend's strength and weakness were correlated at $r(2342) = 0.28$, $p < .001$, 95% CI[0.24, 0.32], indicating that participants in general tended to view their best friend's strength and weakness as relevant to different projects. This finding indicates that simulation models Model 2, Model 4, and Model 5 are the most relevant.

2.3.3. Specific Interpersonal Trust Scale

Participants completed the Specific Interpersonal Trust Scale (SITS; Johnson-George & Swap, 1982), which is a nomothetic measure of trust and asks a series of questions about the participants' expectations of another person under a variety of contexts. Participants responded on 9-point bipolar agreement scales anchored by "Strongly disagree" and "Strongly agree," and the items were averaged to form the three subscales:

(1) Overall Trust: "If [BEST FRIEND] gave me a compliment, I would question if [BEST FRIEND] really meant what was said (reverse-coded)," "If we decided to meet somewhere for lunch, I would be certain [BEST FRIEND] would be there," I would go hiking with [BEST FRIEND] in unfamiliar territory if [BEST FRIEND] assured me they knew the area," I wouldn't buy a piece of used furniture from [BEST FRIEND] because I wouldn't believe their estimate of it's worth (reverse-coded)," "I would expect [BEST FRIEND] to play fair," "I could rely on [BEST FRIEND] to mail an important letter for me if I couldn't get to the post office," "I would be able to confide in [BEST FRIEND] and know they would want to listen," "I could expect [BEST FRIEND] to tell me the truth," and "If I had to catch an airplane, I could not be sure [BEST

FRIEND] would get me to the airport on time (reverse-coded).” The overall trust subscale had poor internal reliability (α = 0.60).

(2) Emotional Trust: “If [BEST FRIEND] unexpectedly laughed at something I did or said, I would wonder if they were being critical and unkind (reverse-coded),” “I could talk freely to [BEST FRIEND] and know that [BEST FRIEND] would want to listen,” “[BEST FRIEND] would never intentionally misrepresent my point of view to others,” “If [BEST FRIEND] knew what kinds of things hurt my feelings, I would never worry that they would use them against me, even if our relationship changed,” “I would be able to confide in [BEST FRIEND] and know that they would want to listen,” ”If [BEST FRIEND] didn’t think I handled a certain situation very well, they would not criticize me in front of other people,” and “If I told [BEST FRIEND] what things I worry about, they would not think my concerns were silly.” The emotional trust subscale had adequate internal reliability (α = 0.75).

(3) Reliability (SITS R): “If my alarm clock was broken and I asked [BEST FRIEND] to call me at a certain time, I could count on receiving that call,” “If [BEST FRIEND] couldn’t get together with me as planned, I would believe their excuse that something important had come up,” “If [BEST FRIEND] promised to do me a favor, they would follow through,” “If [BEST FRIEND] were going to give me a ride somewhere and didn’t arrive on time, I would guess there was a good reason for the delay,” “If we decided to meet somewhere for lunch, I would be certain [BEST FRIEND]would be there,” “If I were injured or hurt, I could depend on [BEST FRIEND] to do what was best for me,” and “If [BEST FRIEND] borrowed something of value and returned it broken, [BEST FRIEND]would offer to pay for the repairs.” The reliability subscale had adequate internal reliability (α = 0.77).

2.3.4. Ability, Benevolence, and Integrity Measure

Participants completed the Ability, Benevolence, and Integrity measure (ABI; Mayer & Davis, 1999), which is a nomothetic measure of trustworthiness and asks participants to rate an individual on the three categories of beliefs that are theorized to contribute to perceptions of trustee trustworthiness (ability, benevolence, and integrity). Participants responded on a 5-point bipolar agreement scale (-2 = *Disagree strongly*, -1 = *Disagree*, 0 = *Neither agree nor disagree*, +1 = *Agree*, +2 = *Agree strongly*), and the items were averaged to form the three subscales:

(1) Ability (ABI Ability): "[BEST FRIEND] is very capable of performing their job," "[BEST FRIEND] is known to be successful at the things they try to do," "[BEST FRIEND] has much knowledge about the work that needs done," "I feel very confident about [BEST FRIEND's] skills," "[BEST FRIEND] has specialized capabilities that can increase my performance," and "[BEST FRIEND] is well qualified." The ability subscale had good internal reliability ($\alpha = 0.81$).

(2) Benevolence (ABI Benevolence): "[BEST FRIEND] is very concerned about my welfare," "My needs and desires are very important to [BEST FRIEND]," "[BEST FRIEND] would not knowingly do anything to hurt me," "[BEST FRIEND] really looks out for what is important to me," and "[BEST FRIEND] will go out of their way to help me." The benevolence subscale had adequate internal reliability ($\alpha = 0.75$).

(3) Integrity (ABI Integrity): "[BEST FRIEND] has a strong sense of justice," "I never have to wonder whether [BEST FRIEND] will stick to their word," "[BEST FRIEND] tries hard to be fair in dealings with others," "[BEST FRIEND's] actions and behaviors are not very consistent (reverse-coded)," "I like [BEST FRIEND's] values," and "Sound principles seem to guide [BEST FRIEND's] behavior." The integrity subscale had poor internal reliability ($\alpha = 0.59$).

2.3.5. Goal-Specific Trust

Goal-specific trust is the primary criterion measure of the present study. Participants rated the extent they would trust their best friend for each of the concrete tasks necessary to accomplish each of their personal projects. Specifically, the trust items were: "If [BEST FRIEND] offered to help you with [$TASK_A$], would you trust or distrust [BEST FRIEND] with [$TASK_A$]or are you unsure?" and "Would you be willing to rely on [BEST FRIEND] for [$TASK_A$], or are you unsure?" Responses were *trust/yes*, *distrust/no*, and *unsure*. Participants were then asked to indicate the degree to which they would trust or distrust the person they nominated with the following question "To what extent would you (dis)trust [BEST FRIEND] to help you with [$TASK_A$]?" and "To what extent would you be (un)willing to rely on [BEST FRIEND] for [$TASK_A$]?"

Participants who responded with "unsure" were asked "If you had to say which way you lean, do you lean toward [trusting/willing to rely on] [BEST FRIEND] for [$TASK_A$] or [distrusting/unwilling to rely on] [BEST FRIEND] for [$TASK_A$]?" I coded all responses to be on an 8-point bipolar scale (-4 = *extremely distrust/unwilling*, -3 = *very much distrust/unwilling*, -2 = *moderately distrust/unwilling*, -1 = *slightly distrust/unwilling*, +1 = *slightly trust/willing*, +2 = *moderately trust/willing*, +3 = *very much trust/willing*, +4 *extremely trust/willing*). People who indicated that they leaned toward (dis)trusting were coded the same as those who indicated that degree in the original branching question. For example, someone who initially indicated that they are unsure whether they would trust or distrust their friend and then in the branching item indicated that they lean toward trusting their friend was coded as indicating that they slightly trust their friend. These items were correlated at $r(2389) = 0.79$, $p < 0.001$, 95% CI[0.78, 0.80], so they were averaged to form a composite measure of trust for each goal.

3. RESULTS

3.1. Model Details

In the following analyses, I used multilevel models to test my hypotheses. For my random effects, I included only a random intercept in each of the models I report below (see Table IV). Because the maximal random structure failed to converge across some models, I used parsimonious fitting (Bates, Kliegl, Vasishth, & Baayen, 2015) to systematically reduce the random terms. The basic intercept only model was the only random structure that converged across all analyses, so those are the models I report to facilitate comparisons between models. The pattern of results does not change if a random slope of project importance using the two-level measure of project importance (i.e., most important versus least important) is included with the random intercept (see Tables XI and XII in Appendix B).

In all analyses, I centered each predictor within each participant so that the findings are most relevant to my hypotheses. In other words, I subtracted each participants' average value taken across all measurements for each predictor from each repeated measure. For example, if someone rated the relevance of their best friend's strengths to each project as a 1, 2, 3, 4, 5, and 6, then the average relevance to strength would be 3.5 and the values would be recoded as -2.5, -1.5, -0.5, 0.5, 1.5, and 2.5, respectively. In so doing, I tested the hypotheses relative to *each participant*. The pattern of results does not change when I use globally-centered predictors, with one exception. I discuss this difference in Table XIV of Appendix B.

3.2. Nomothetic Measures of Trust and Trustworthiness

In the first set of analyses, I included all subscales of the Ability, Benevolence, and Integrity (ABI; Mayer & Davis, 1999) and Specific Interpersonal Trust Scale (SITS; Johnson-George & Swap, 1982) measures, which are commonly used nomothetic measures of trustworthiness and trust, respectively. However, each of the nomothetic measures demonstrated

severe restrictions of range (see Table I). Specifically, the standard deviations on the subscales ranged from 0.51 at the lowest to 1.11 at the highest. See Figures 3 and 4 for histograms of the SITS subscale of general trust and the ABI subscale of ability, which are representative of the other subscales for each of the nomothetic measures (see Appendix C for the histograms for all subscales).

Table I

Means, Standard Deviations, and Correlations Between Measures of Trust and Trustworthiness

Variable	*M*	*SD*	1	2	3	4	5
1. SITStrust	2.20	0.80					
2. SITSemotional	2.73	1.11	.50** [.47, .53]				
3. SITSreliability	2.85	1.00	.67** [.64, .69]	.55** [.52, .58]			
4. ABIability	1.27	0.51	.46** [.43, .49]	.35** [.31, .38]	.47** [.44, .50]		
5. ABIbenevolence	1.37	0.54	.45** [.42, .48]	.51** [.48, .54]	.48** [.45, .51]	.55** [.52, .57]	
6. ABIintegridy	1.05	0.51	.43** [.40, .46]	.46** [.43, .49]	.48** [.45, .51]	.57** [.54, .60]	.53** [.50, .56]

Note. *M* and *SD* are used to represent mean and standard deviation, respectively. Values in square brackets indicate the 95% confidence interval for each correlation. The confidence interval is a plausible range of population correlations that could have caused the sample correlation (Cumming, 2014). * indicates $p < .05$. ** indicates $p < .01$. SITStrust, SITSemotional, and SITSreliability represent the Specific Interpersonal Trust Scale subscales of overall trust, emotional trust, and reliability, respectively. ABIability, ABIbenevolence, and ABIintegridy represent the Ability, Benevolence, and Integrity measure subscales of ability, benevolence, and integrity, respectively.

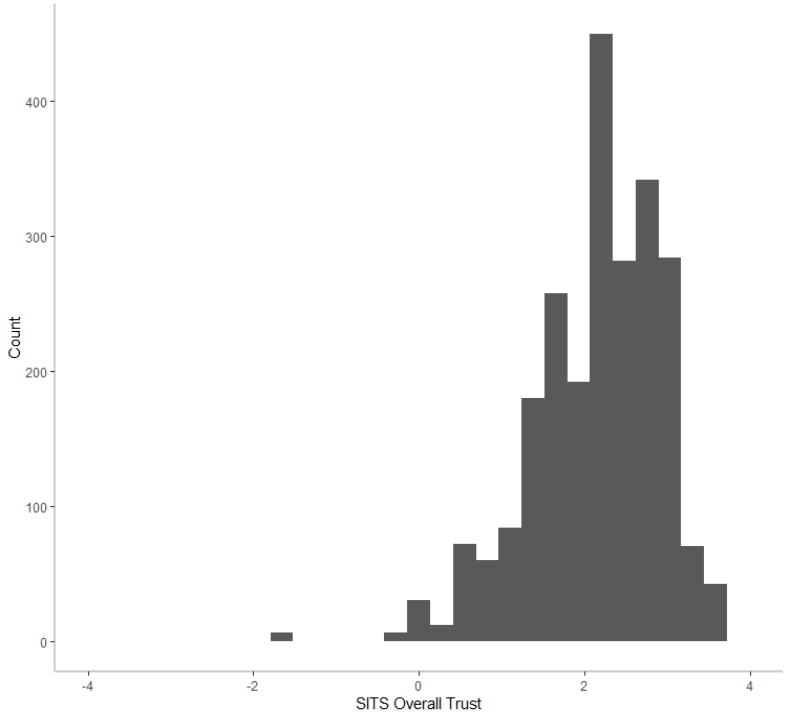

Figure 3. Histogram of the Specific Interpersonal Trust Scale subscale of overall trust.

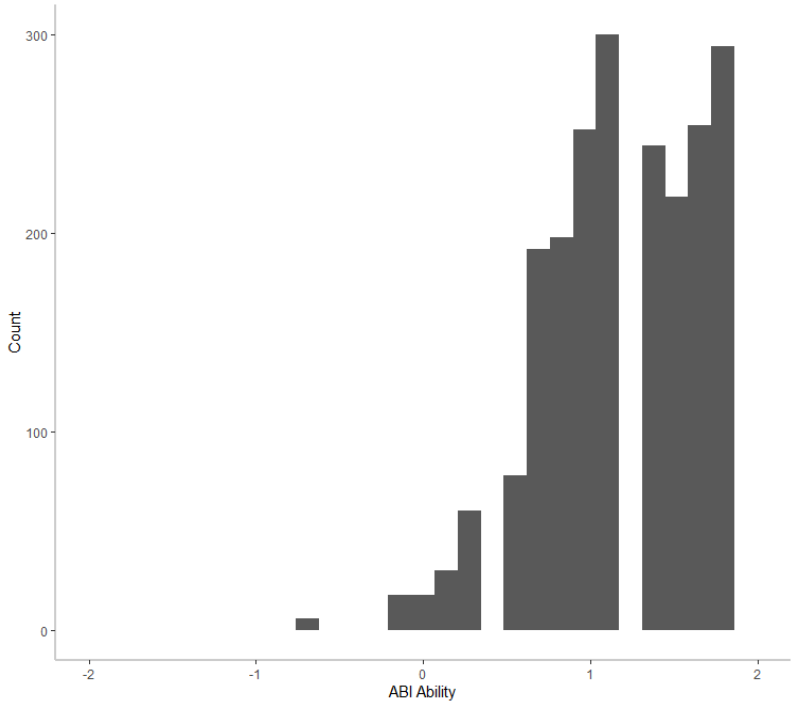

Figure 4. Histogram of the Ability, Benevolence, and Integrity measure subscale of ability.

The nomothetic subscales were not predictive of goal-specific trust (see Table II). Consequently, I do not include these measures in the rest of the analyses I report below. However, the pattern of results does not change when these measures are included (see Tables XI and XII in Appendix B).

Table II

Main Effects of Nomothetic Measures of Trust (Specific Interpersonal Trust Scale) and Trustworthiness (Ability, Benevolence, Integrity Measure) on Goal-specific Trust

Source	SS	Numerator *df*	Denominator *df*	MS	*F*	*p*
SITStrust	9.25	1	402.23	9.25	2.59	0.11
SITSemotional	1.47	1	402.29	1.47	0.41	0.52
SITSreliability	1.61	1	401.25	1.61	0.45	0.50
ABIablity	4.54	1	403.35	4.54	1.27	0.26
ABIbenevolence	0.33	1	401.49	0.33	0.09	0.76
ABIintegridy	0.20	1	402.72	0.20	0.06	0.81

Note. SITStrust, SITSemotional, and SITSreliability represent the Specific Interpersonal Trust Scale subscales of overall trust, emotional trust, and reliability, respectively. ABIability, ABIbenevolence, and ABIintegridy represent the Ability, Benevolence, and Integrity measure subscales of ability, benevolence, and integrity, respectively.

3.3. Personal Projects

Participants generated a median of 13 projects (M = 13.92), and the range was from 6 projects to 25. The three most frequent project categories were Academic, Leisure, and Health, respectively (see Table III below).

Figures 3 and 4 (below) show the three most important and three least important projects, along with the smallest project associated with each, for two randomly selected participants. As can be seen from the figures, the projects my participants generated were as might be expected from a university subject pool population, and the smallest projects were more concrete tasks associated with the larger projects.

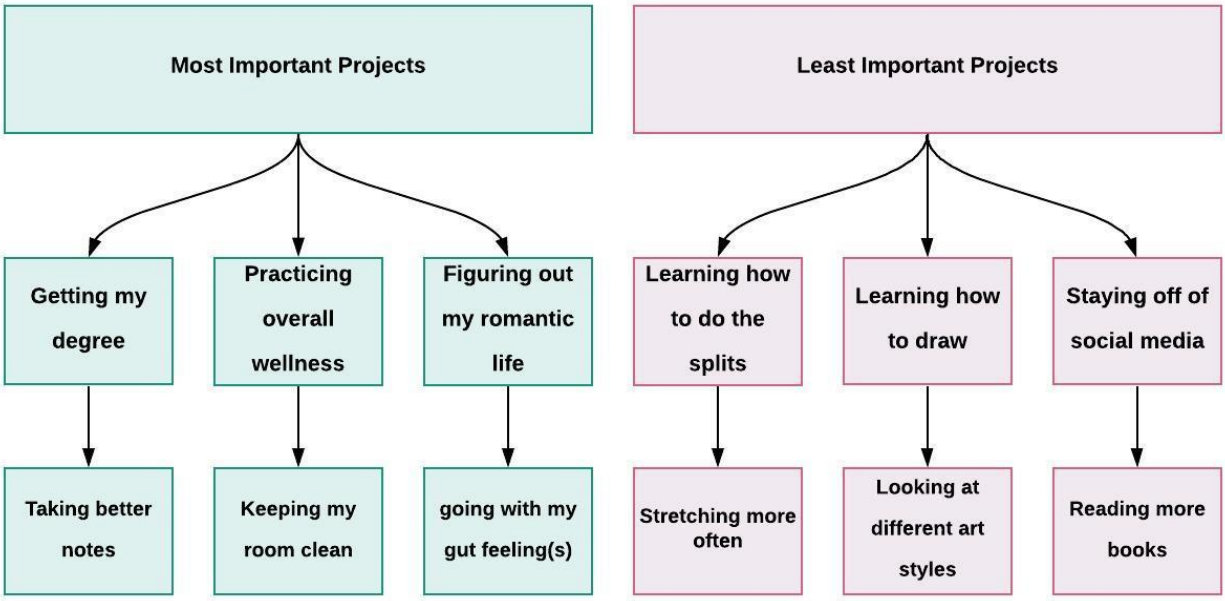

Figure 5. Participant 229's three Most Important and three Least Important Projects and the tasks associate with those projects. The projects are arranged from left-to-right, most-to-least important, with the Most Important projects in green and the Least Important projects in pink.

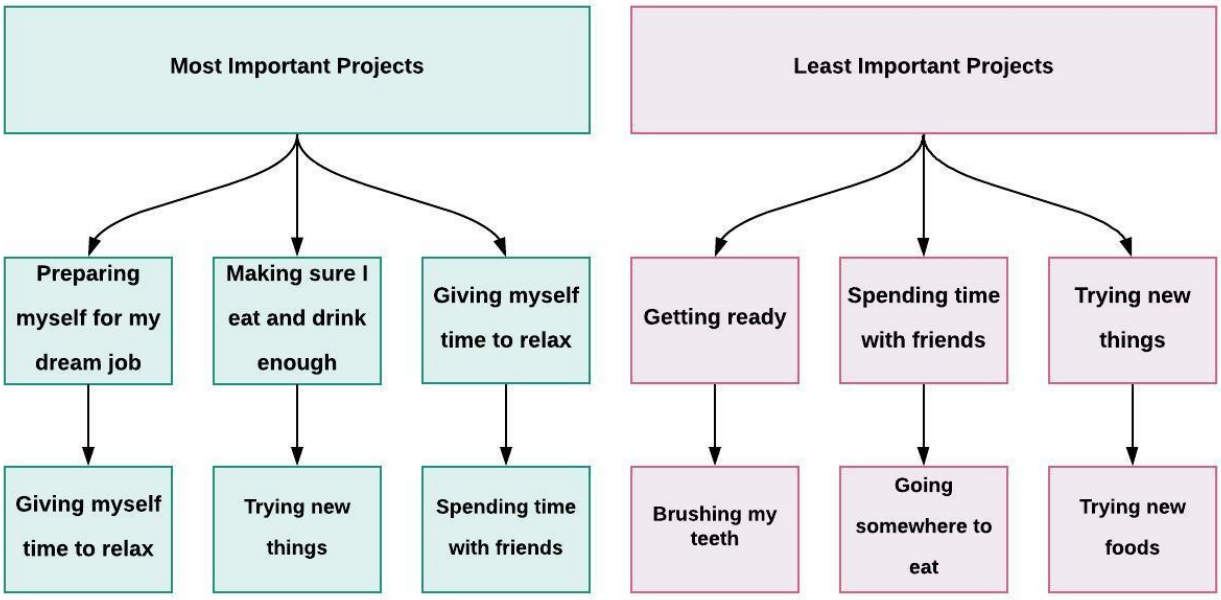

Figure 6. Participant 243's three Most Important and three Least Important Projects and the tasks associate with those projects. The projects are arranged from left-to-right, most-to-least important, with the Most Important projects in green and the Least Important projects in pink.

To examine whether personal projects were rated as being equally important regardless of category, I examined the continuous measure of project importance by project category in a multilevel model. To facilitate ease of interpretation, I report the main effect of project category on importance and the simple effects of each category relative to Academic projects.

Project categories were not rated as equally important (see Table III for a breakdown of project categories by project importance categories), $F(6, 2373.30) = 103.21$, $p < .001$. Specifically, Academic projects ($M = 7.60$, $SD = 1.79$) and Occupational projects ($M = 7.41$, $SD = 1.92$) were rated as equally important, $b = -0.20$, $t = -1.28$, $p = 0.20$. Interpersonal projects ($M = 6.37$, $SD = 2.21$), $b = -1.26$, $t = -8.50$, $p < 0.001$, Health projects ($M = 5.91$, $SD = 2.36$), $b = -1.74$, $t = -12.43$, $p < 0.001$, and Intrapersonal projects ($M = 5.73$, $SD = 2.34$), $b = -1.91$, $t = -11.23$, $p < 0.001$, were rated as next most important and significantly less important than Academic projects, followed by Maintenance projects ($M = 5.02$, $SD = 2.30$), $b = -2.64$, $t = -15.93$, $p < 0.001$, and Leisure projects ($M = 4.78$, $SD = 2.32$), $b = -2.86$, $t = -20.48$, $p < 0.001$.

Table III

Project Categories by Project Importance

Project Category	Least Important	Most Important	% of Total Projects
Academic	99 (17.6%)	464 (82.4%)	23.4%
Leisure	330 (82.5%)	70 (17.5%)	16.6%
Health	231 (58.9%)	161 (41.1%)	16.3%
Interpersonal	158 (48.5%)	168 (51.5%)	13.5%
Occupational	60 (22.3%)	209 (77.7%)	11.2%
Intrapersonal	136 (61.3%)	86 (38.7%)	9.2%
Maintenance	189 (80.8%)	45 (19.2%)	9.7%

Note. Counts are presented in each cell with the frequency of project category occurrence in each project importance category presented in parentheses.

I also tested whether trust varied by project category to examine the potential that project category and project importance were confounded relative to their effect on trust. However, trust did not significantly vary as a function of goal category, $F(6, 2230.50) = 1.59$, $p = .06$.

Next, I tested whether participants rated their most important projects as more important than their least important projects. This analysis tested whether the project importance manipulation check was successful. As expected, participants rated their most important projects[5] ($M = 7.94$, $SD = 3.01$) as more important than their least important projects ($M = 4.55$, $SD = 2.86$), $b = 3.40$, $t = 55.31$, $SE = 0.06$ (see Figure 5).

[5] I will use the terms goals and projects interchangeably throughout.

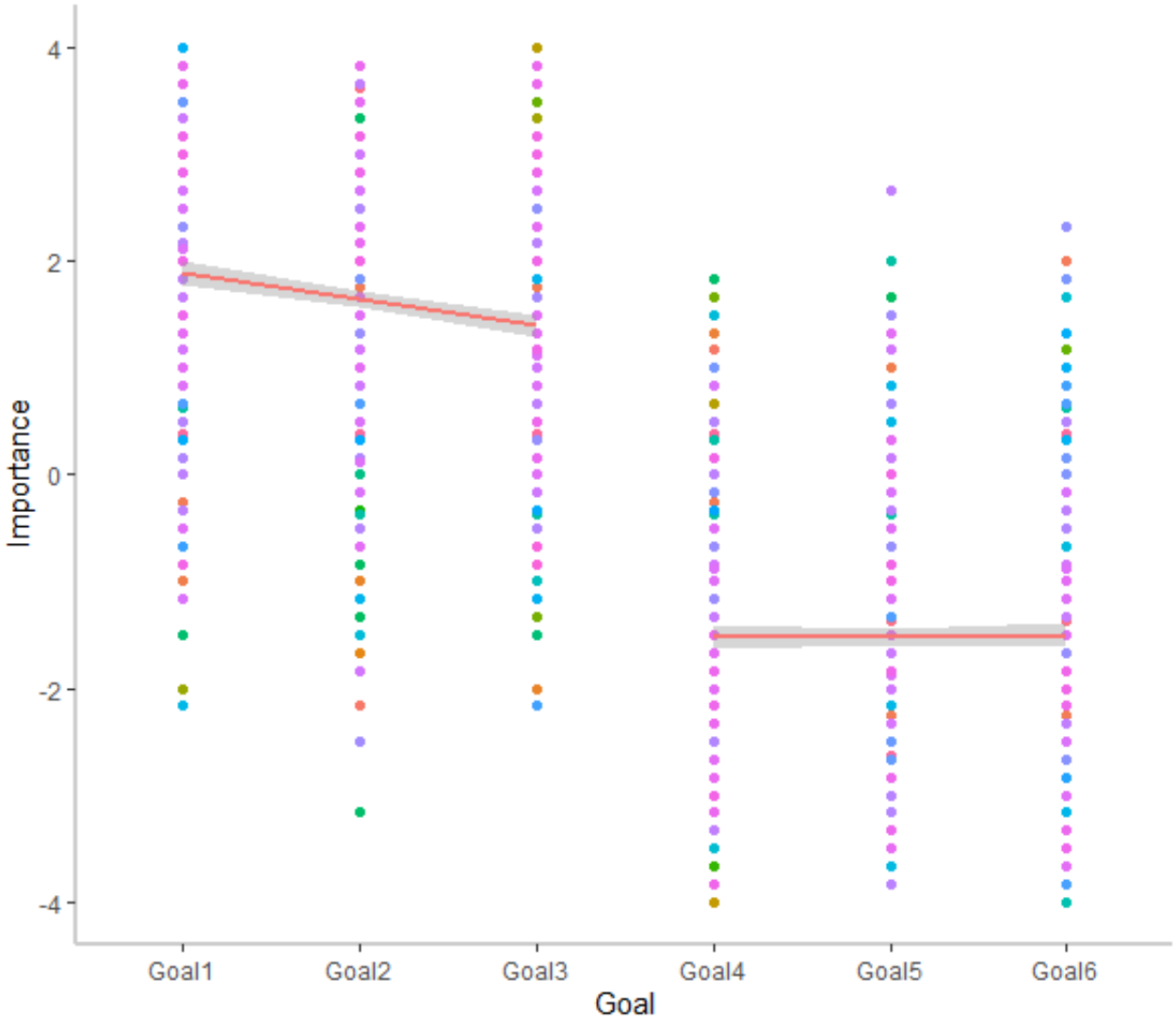

Figure 7. Continuous measure of importance by projects. Goals 1 through 3 plot participants' most important projects, and Goals 4 through 6 plot participants' least important projects. The standard error is represented by the ribbon, and participants are represented by different colors to improve readability and aesthetics.

3.4. Goal-Specific Trust

The primary prediction of the present theory is that people should vary in the degree to which they trust someone across various goals. On average, participants reported trusting their best friend "Slightly" to "Moderately" across all goals (N = 2391, M = 1.81). However, there was also variability in participants' reported trust in their best friend across goals. When the variability in trust is examined by participants (i.e., the standard deviation is computed across each participants'

reported trust in their best friend), the average standard deviation in interpersonal trust represents 21% of the range of the 8-point scale (N = 389[6], average SD = 1.69). This variability *within-participants* is rather large, given that the variability in trust across *all participants'* goals (i.e., the standard deviation is computed across the entire sample of goals) is only 28% higher (N = 2391, SD = 2.16).

In Figure 6 below, I randomly selected four participants and plotted the trust they placed in their best friend across projects. As is evident in the figure, people tended to report different levels of trust in their best friend across projects. An additional and interesting implication of Figure 6 is that the degree people might vary in their trust in their best friend is itself variable. Some participants exhibited a great deal of variability of trust in their best friends whereas others exhibited very little.

[6] The difference in sample size is the result of some participants failing to follow all directions, so they are missing one or more measurements of trust across the six goals. In other words, 10 participants failed to follow instructions and do not have complete data.

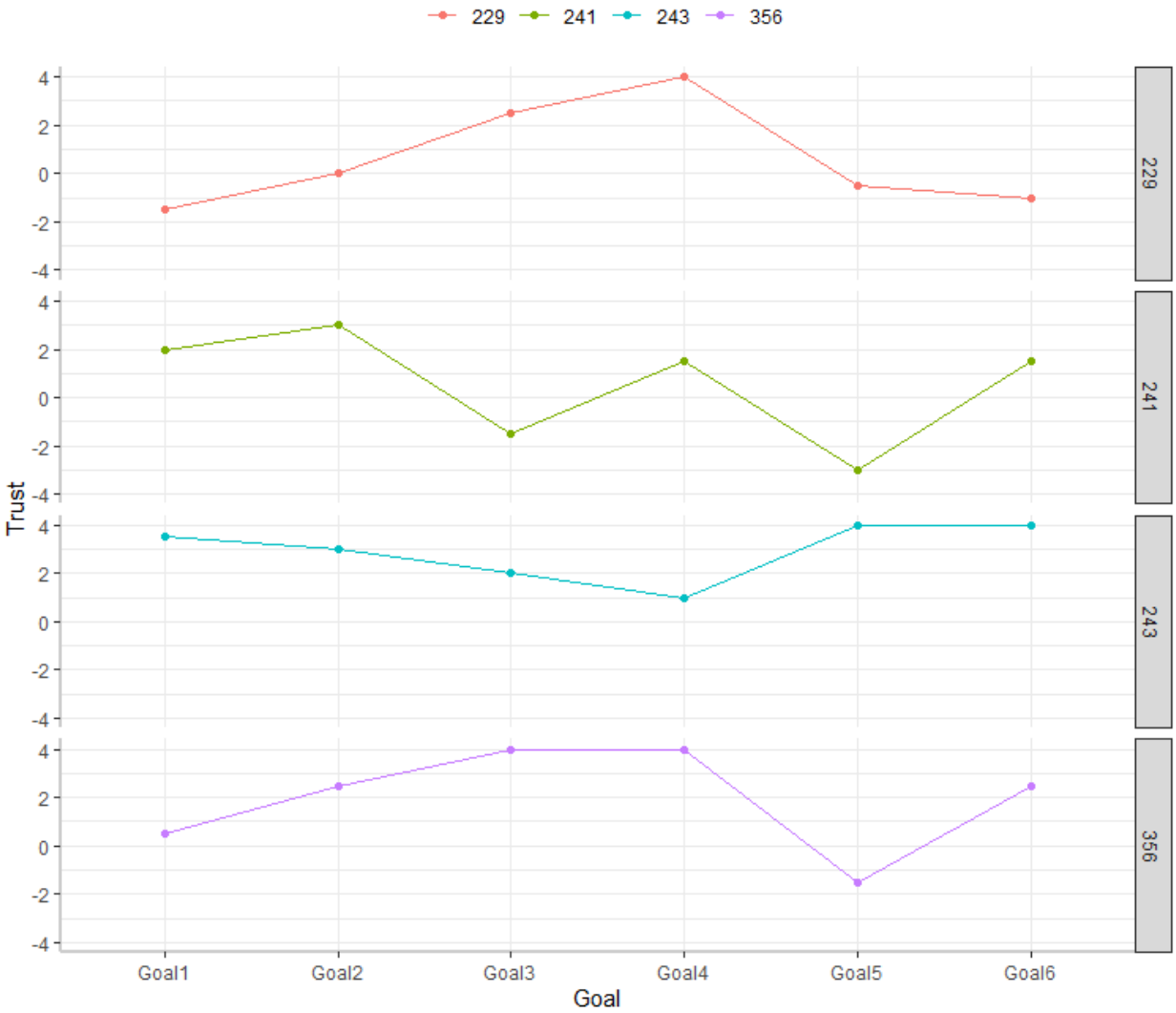

Figure 8. Goal-specific trust across all 6 goals from 4 randomly-selected participants.

3.4.1. Project Importance

I predicted that participants would place more trust in their best friend for less important projects than more important projects. In contrast to my hypothesis, participants' trusted their best friend more for *more* important projects than less important projects (see Figure 7). This effect was weak but consistent. Of note, the variability in intra-relational trust was similar between participants' most important (*SD* = 2.02) and least important (*SD* = 2.28) goals. See Table IV below for the results of all models.

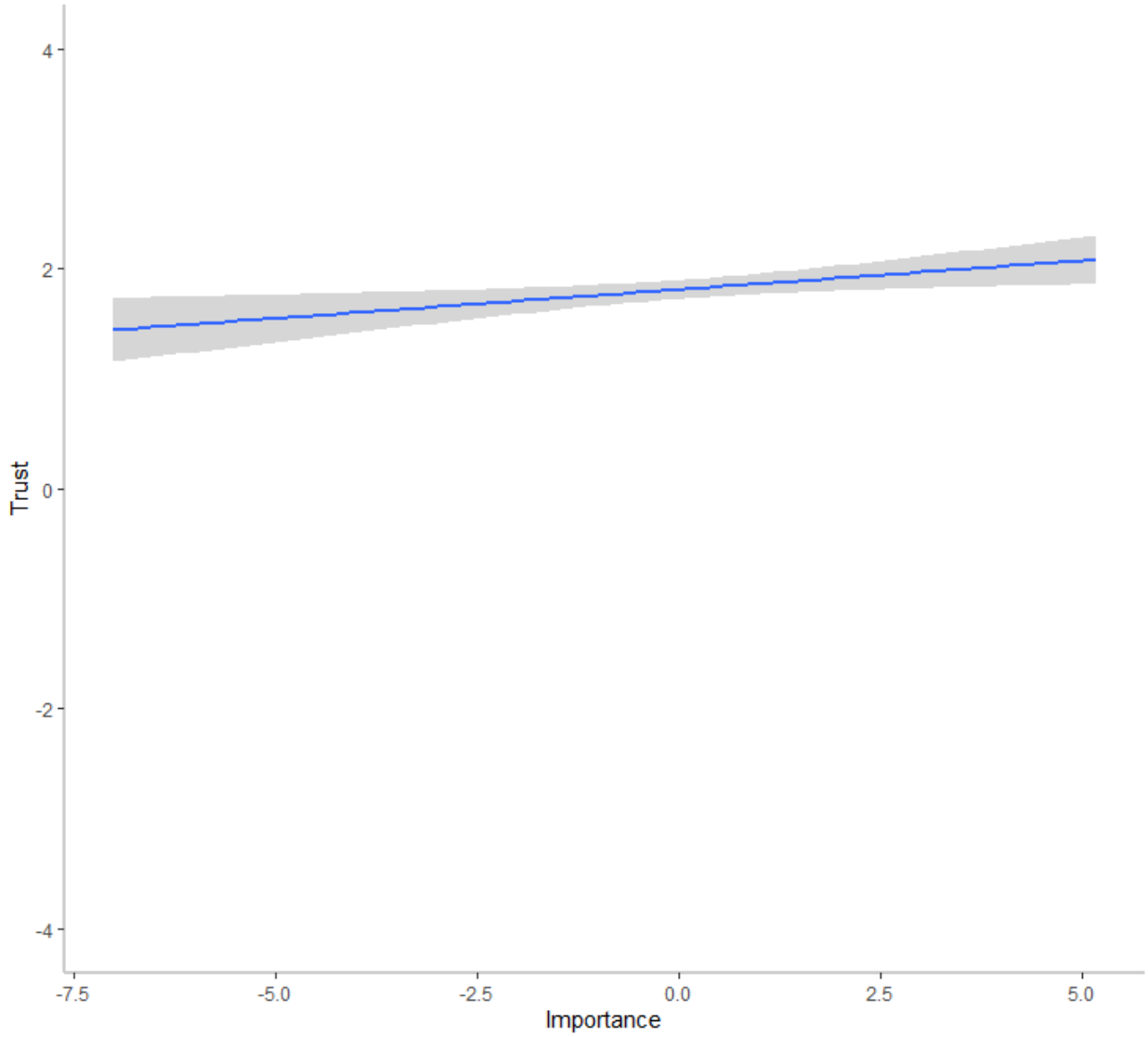

Figure 9. Trust in best friend by the continuous measure of project importance. Ribbon represents the standard error.

3.4.2. Friend Attributes

Participants generated a median of 4 strengths (M = 4.01) and 3 weaknesses (M = 2.56) for their best friend. The fact that participants on average generated more strengths than weaknesses for their best friends is interesting and suggests that participants took the task seriously because they were describing someone they ostensibly like.

Figure 8 below shows the relevance of Participant 229 best friend's most descriptive strength and weakness to each of their smallest projects, and Figure 9 shows that of Participant 243. As the figures demonstrate, the best friends' attributes were relevant to some but not all of the projects elicited by participants, and the strengths and weaknesses were relevant to partially overlapping sets of projects.

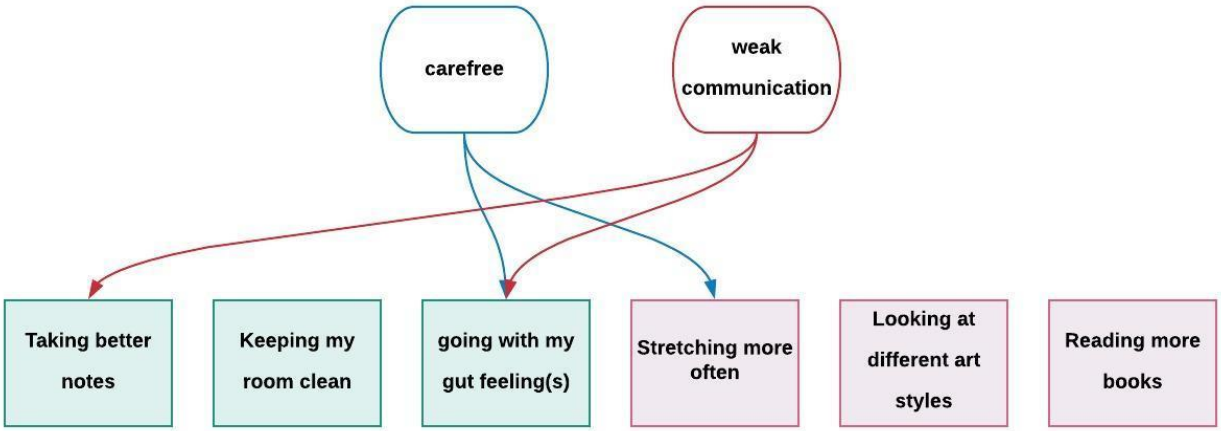

Figure 10. The relevance of Participant 229 best friend's most descriptive strength and weakness to each of their smallest projects. Boxes with rounded edges are the best friend's most descriptive strength and weakness, and the boxes with the square edges are the participant's smallest projects. Projects are arranged in order from left-to-right, most-to-least important, with the Most Important projects in green and the Least Important projects in pink. The red lines go from the best friend's weakness, and the blue lines go from the best friend's strength.

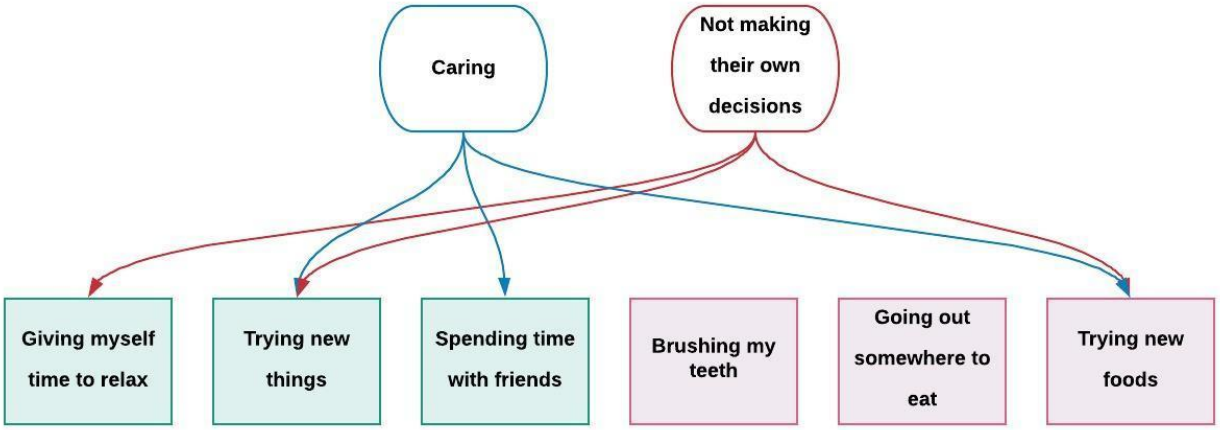

Figure 11. The relevance of Participant 243 best friend's most descriptive strength and weakness to each of their smallest projects. Boxes with rounded edges are the participant's best friend's most descriptive strength and weakness, and the boxes with the square edges are the participant's smallest projects. Projects are arranged in order from left-to-right, most-to-least important, with the Most Important projects in green and the Least Important projects in pink. The red lines go from the best friend's weakness, and the blue lines go from the best friend's strength.

Although the friends' strengths and weaknesses were relevant to partially overlapping sets of goals, the friends' strengths were on average more relevant to participants' goals than the friends' weaknesses. As can be seen in Figure 10 (below), 886 out of 2391 goals (37.06%) were rated as "not at all" relevant to participants' friends' strengths, leaving the remaining 1505 goals (62.94%) at least "slightly" relevant to the friends' strengths. By contrast, 1512 of 2391 goals (63.24%) were rated as "not at all" relevant to participants' friends' weaknesses (see Figure 11 below).

In all of the following analyses, I use the continuous measure of relevance to weakness. However, see Table XIV in Appendix B for analyses that include analyses with the relevance to weakness dichotomized. All results are the same as those reported here with one exception, which is described in detail in Appendix B.

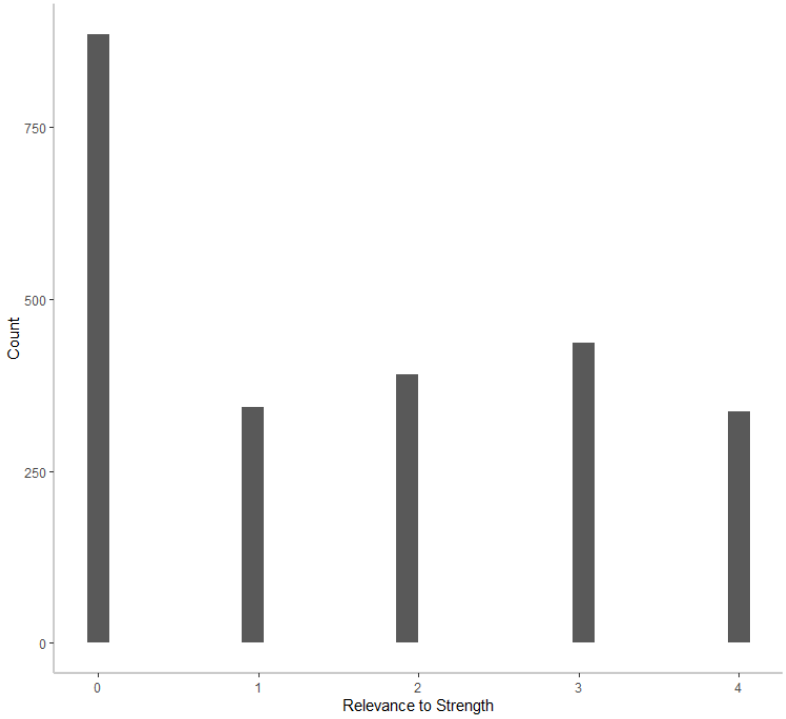

Figure 12. Histogram of the relevance of the best friends' strengths to the goals.

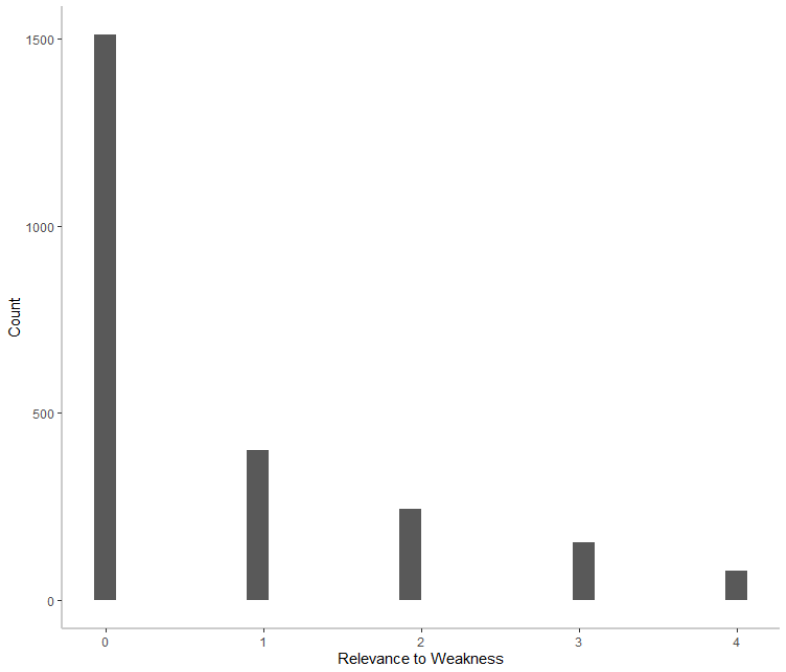

Figure 13. Histogram of the relevance of the best friends' weaknesses to the goals.

I predicted that participants would place more trust in their best friend as the relevance of their best friend's personal strength to the project increased and less trust in their best friend as the relevance of their best friend's personal strength to the project increased. As predicted, participants placed more trust in their best friend the more their best friend's personal strength was relevant to the project (see Figure 10). However, and in contrast to my hypotheses, the relevance of participants' best friend's personal weakness to the project was not related to participants' tendency to report that they would trust their best friend on that project (see Figure 11).

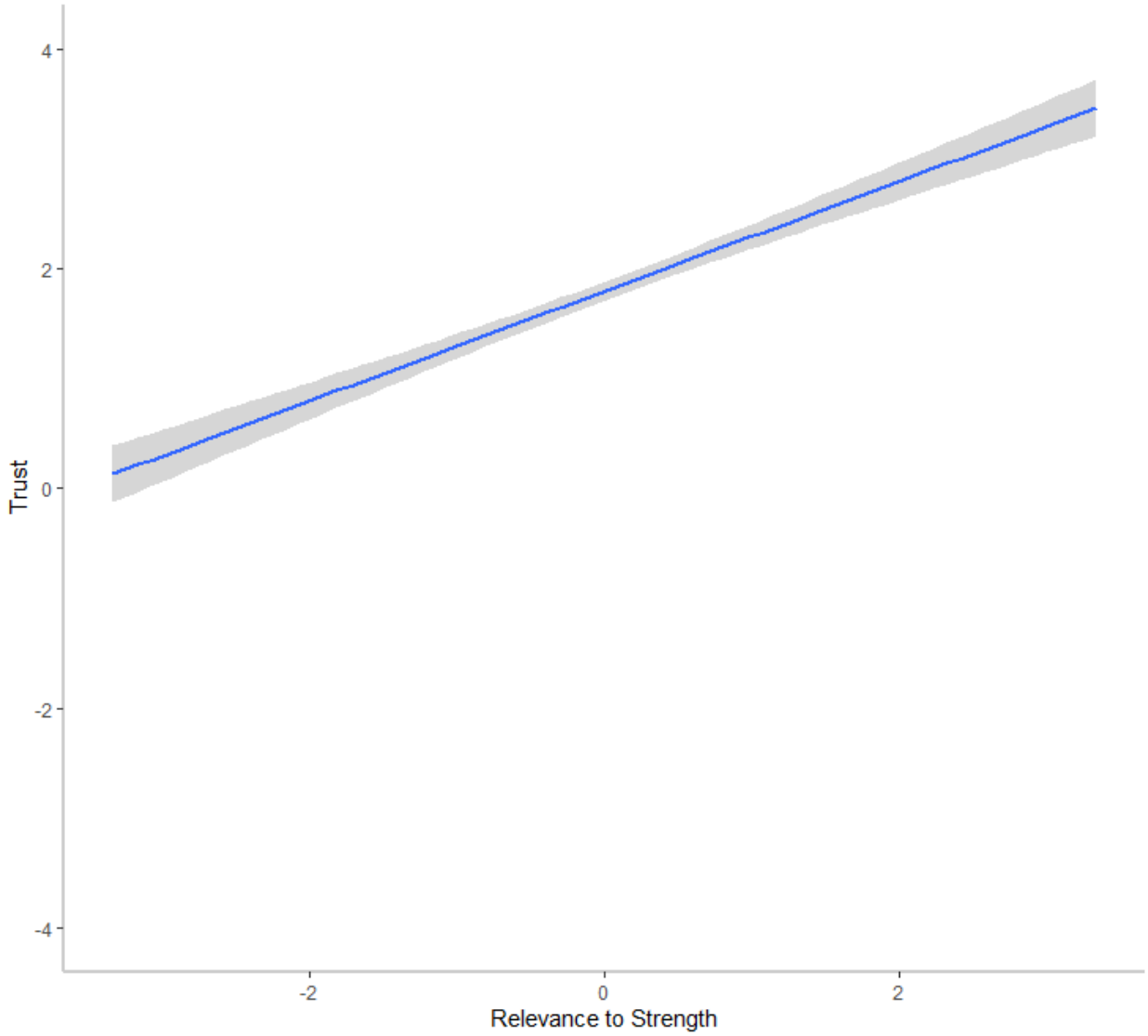

Figure 14. Trust in best friend by the relevance of the best friend's strength to the project and project importance. Ribbon represents standard error.

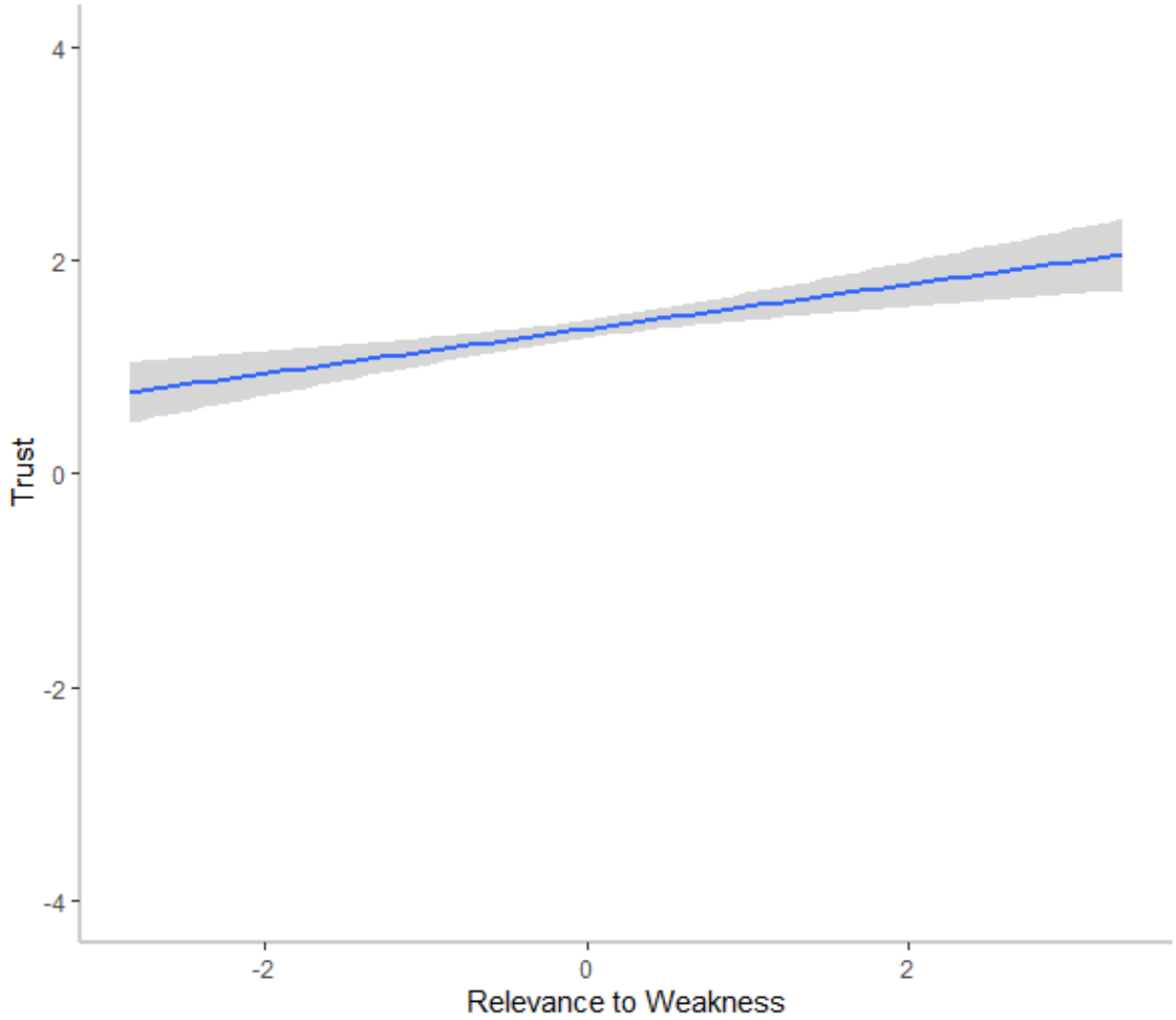

Figure 15. Trust in best friend by the relevance of the best friend's weakness to the project and project importance. Ribbon represents standard error.

3.4.3. Interaction Model

Finally, I predicted an interaction between goal importance and the relevance of participants' best friend's attributes to the project. Specifically, I predicted that for more important goals, people would be more likely to trust their best friend as the relevance of their best friend's strength to the project increased, and that participants would be less likely to trust their best friend as the relevance of their best friend's weakness to the project increased. For goals that are less important, I predicted that the relevance of participants' best friend's strengths and weaknesses to

the project would be less relevant. In contrast to my hypotheses, the interactions between goal importance and relevance to strength and goal importance and relevance to weakness were not significant predictors of goal-specific trust (see Figures 12 & 13, respectively).

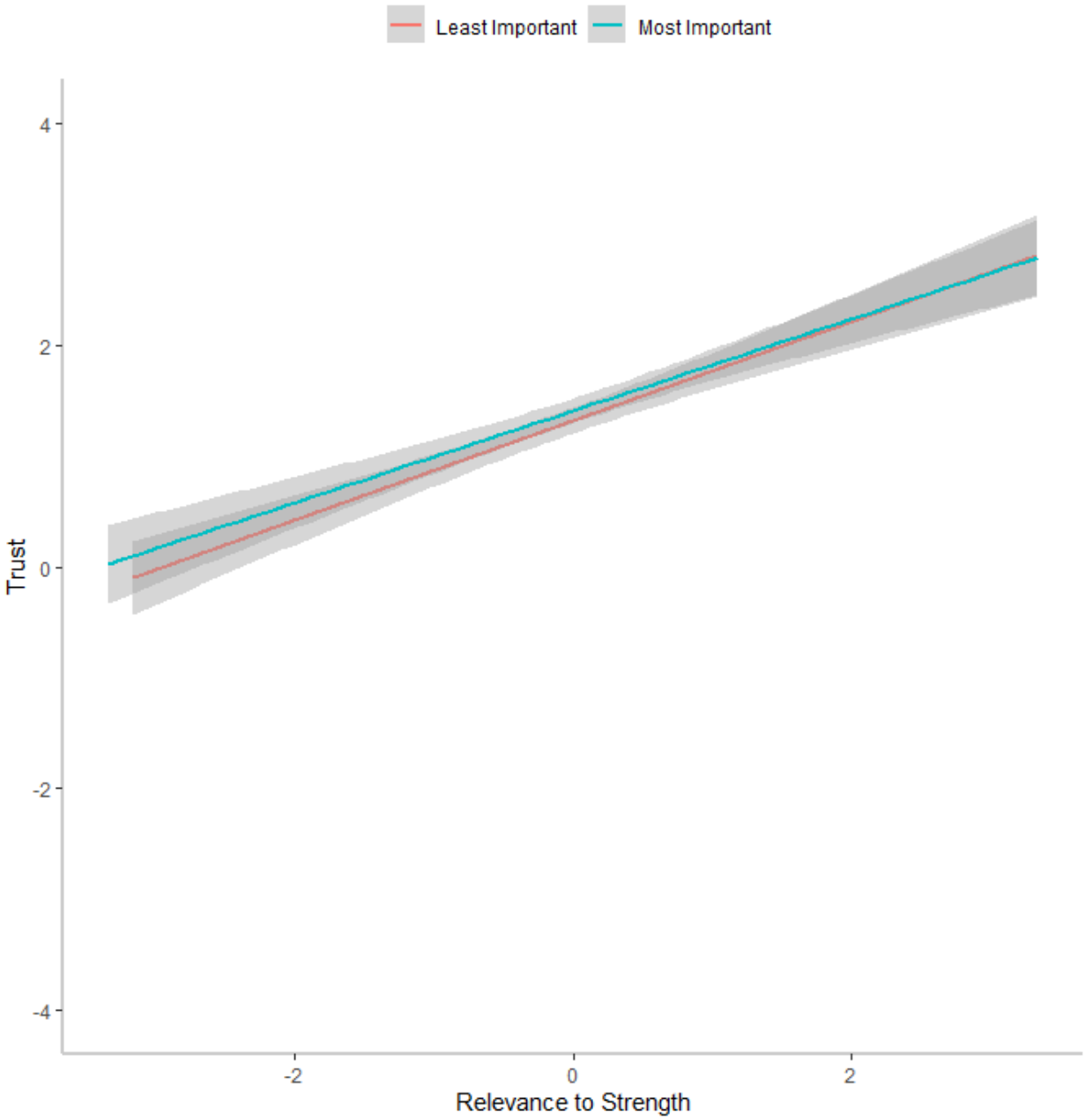

Figure 16. Interaction between the relevance to strength and project importance on trust. Ribbons are standard errors.

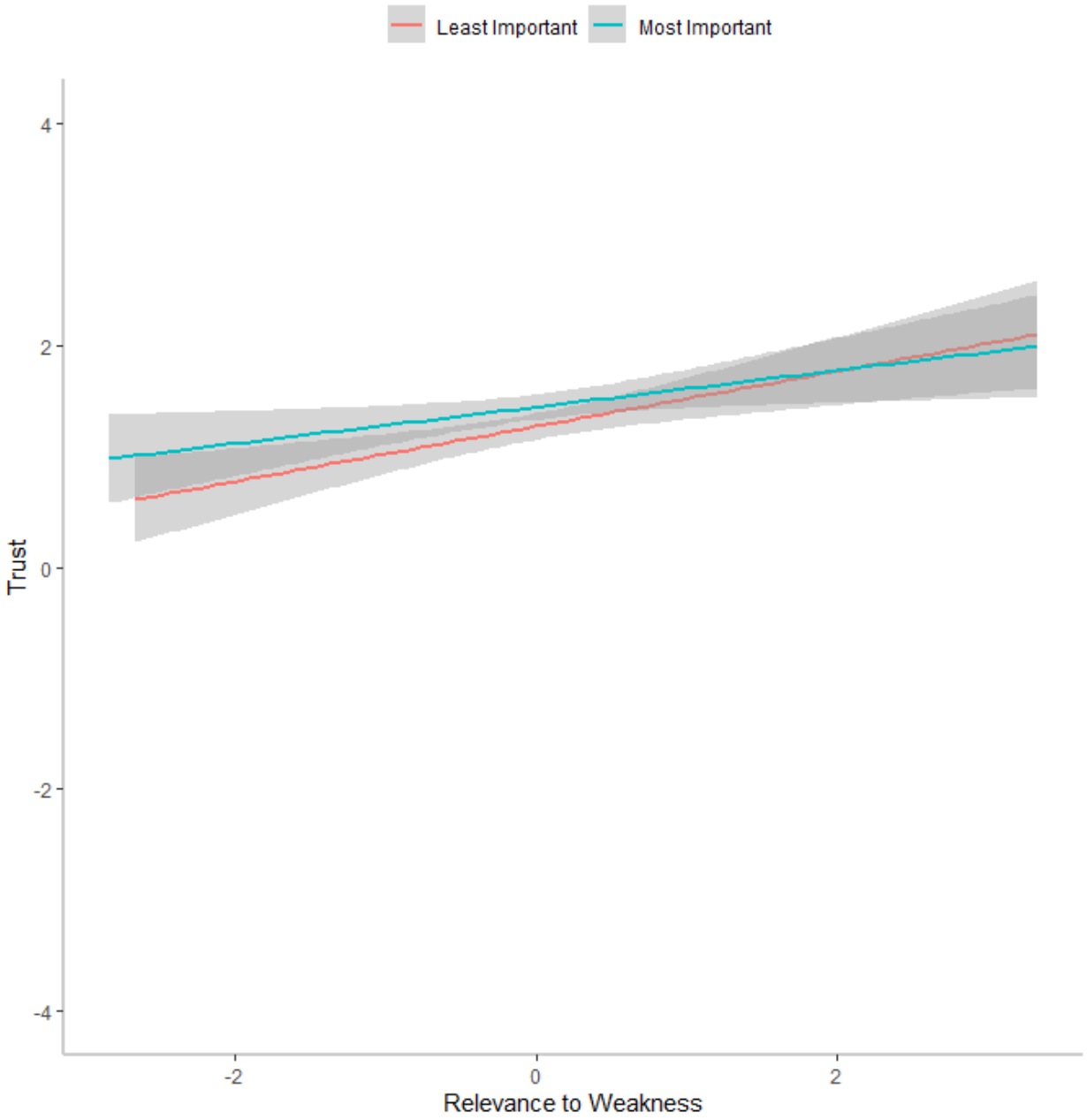

Figure 17. Interaction between the relevance to weakness and project importance on trust. Ribbons are standard errors.

Table IV

Summary of Comparisons Between Mixed Effect Models.

	Model 1	**Model 2**	**Model 3**	**Model 4**
(Intercept)	1.717***	1.719***	1.717***	1.719***
	(0.075)	(0.075)	(0.075)	(0.075)
WeakRelC	0.087.	0.086.	0.093	0.083
	(0.045)	(0.045)	(0.066)	(0.067)
StrRelC	0.475***	0.499***	0.475***	0.500***
	(0.034)	(0.049)	(0.034)	(0.050)
impCatMost Important	0.169*	0.169*	0.169*	0.169*
	(0.074)	(0.074)	(0.074)	(0.074)
StrRelC:impCatMost Important		-0.049		-0.050
		(0.071)		(0.074)
WeakRelC:impCatMost Important			-0.012	0.007
			(0.097)	(0.101)
AIC	9821.317	9822.841	9823.302	9824.836
BIC	9855.875	9863.158	9863.620	9870.913
Log Likelihood	-4904.659	-4904.421	-4904.651	-4904.418
Num. obs.	2344	2344	2344	2344
Num. groups: PIN	389	389	389	389
Var: PIN (Intercept)	1.110	1.110	1.109	1.110
Var: Residual	3.188	3.187	3.188	3.187

Note. WeakRelC and StrRelC represent the person-centered variables of the relevance to weakness and the relevance to strength measures, respectively. impCat represents the dichotomous measure of goal importance.
*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, . indicates $p < 0.1$

4. DISCUSSION

The trust that my participants placed in their best friend varied as a function of goal importance and the degree to which their best friend's most descriptive strength was relevant to the project. These findings indicate that there is potentially meaningful variability in intra-relational interpersonal trust. Consequently, theories and studies into interpersonal trust that do not address this variability are likely to be incomplete.

4.1. Evaluating the Interdependent Goal Model

As predicted by the Interdependent Goal Model of Interpersonal Trust, interpersonal trust is not constant across a given relationship, at least not for everybody. The relevance of a trustee's strength to the project strongly predicted trust for each participant and across the entire sample. This suggests that people evaluate task-relevance competence in their consideration of when to trust a best friend. In contrast to the relevance to strength, the relevance to weakness was not predictive. Consequently, although competence is a relevant concern when undergraduates consider whether or not to trust a best friend, *in*competence may be less of a concern.

People also trusted their best friend more for more versus less important goals. This finding may indicate a prioritization of intent relative to competence for more important goals. Specifically, people may place more weight on their belief that an important trustee will at least try to help them accomplish their goal relative to their beliefs regarding whether or not the trustee will be successful.

These findings support some of the major tenets of the IGM and illuminate a number of implications for interpersonal relationships. First, the finding that trust varies within even some of our strongest relationships suggests an avenue to explore in more detail the collection of interdependent goals between individuals, sometimes referred to as transactive density (Fitzsimons et al., 2015). Thus far, however, transactive density has only referenced the absolute number of

goals shared between individuals. My findings suggest that not only can we predict how often people will share a goal but also what kinds of goals people may be more likely to share.

Relationships that enable people to accomplish more goals are viewed as more close, supportive, and responsive than relationships that serve fewer goals (Orehek et al., 2018b). A natural question that emerges from the findings presented here is *which* goals? Examining the variability in intra-relational trust could provide the necessary nuance to better understand transactive density within interpersonal relationships.

The second implication of this study for understanding interpersonal relationships relates to the alignment of an individual's schemas of their best friend and the nature of their goals. The relevance of the best friends' most descriptive personal strength was strongly related to the degree to which participants reported trusting them. Untangling the degree to which the attributes of the people in an individual's social network afford and constrain the individual's goal pursuit, including the goals the individual chooses to engage in to begin with, holds promise vis-à-vis creating effective interventions to support people from historically disadvantaged communities.

For example, the evidence seems mixed regarding whether greater representation of women and minorities in positions of authority (e.g., high school and university faculty, graduate students) promotes greater retention of women and minority students in such fields on average (Bottia, Stearns, Mickelson, Moller, Valentino, 2015; Griffith, 2010). However, perhaps ideographically-tailored studies, like the one reported here, that investigate the potential interrelations between patterns of interdependent goals, interpersonal trust, and academic self-efficacy might be better able to clear up the current ambiguity in these findings. In other words, perhaps people have higher perceptions of self-efficacy within a specific domain (e.g., STEM fields) if they also have more (vs. less) friends like themselves in that same domain. If people are connected to friends with competencies that are relevant to personal goals, like pursuing a STEM

degree, then they may be more likely to continue to pursue those goals because they know they can rely on the individual with those competencies if and when they encounter a challenge. In support of this prediction, students in past research tended to identify the presence of another person in their life as a support for their educational progress, and the presence of those supports predicted greater self-efficacy (e.g., Cervone, Mercurio, & Lilley, 2020).

4.1.1. Measuring Trust

Although several authors have called for more sensitive measurements of interpersonal trust that can account for variation in trust within a relationship (e.g., Bauer & Freitag, 2018; Mayer et al., 1995), how such a measurement might be realized has remained elusive. The study presented here suggests a promising path forward with regard to measuring intra-relational interpersonal trust.

The Ability, Benevolence, and Integrity measure of trustworthiness (Mayer & Davis, 1999) and the Specific Interpersonal Trust Scale (Johnson-George & Swap, 1982) did not predict goal-specific trust. One possibility for why the ABI measure did not predict goal-specific trust is that the measure was explicitly created to measure trust in workplace relationships. Indeed, the measure had to be adapted for use with participants' best friends by piping their names into the question stems, but the questions themselves may not be optimal for asking about the trustworthiness of a close friend. Consequently, researchers can leverage the idiomeasures reported here to better tap into interpersonal trust within such relationships.

The inability of the SITS to predict goal-specific trust, which was explicitly designed for a broader range of interpersonal relationships, may be the result of similar methodological concerns. In the original study of the measurement items, participants were instructed to think "of a specific other person the same sex as themselves in whom they had a great deal of trust" (Johnson-George & Swap, 1982, p. 1308). Here, participants were explicitly directed to identify their best friend,

someone they presumably trust "a great deal." In this study, as in the original, the average endorsement of each item was quite high.[7] Consequently, the SITS is likely a better measure for relationships that are less close.

Nomothetic measures are insufficient to measure or predict intra-relational interpersonal trust. Moreover, the problems with a nomothetic measurement approach are likely to be exacerbated once researchers examine the intra-relational trust across a number of an individual's relationships. What may be an important facet of trust for one relationship (e.g., punctuality) may not be an important consideration in another relationship. Because nomothetic measures assume an equivalence among the various situations included in the items by the very fact that the items are averaged together to form subscales, they are inappropriate for use at investigating the varying facets of different relationships. Instead, idiomeasures are better able to capture the important facets of participants' lives from the perspective of the participant.

4.1.2. Discrepant Results

Not all of the predictions of the IGM were supported, however, and in fact some observations were in the opposite direction. I predicted that participants would trust their best friend less for more important than lesser important projects. However, participants in fact trusted their best friend *more* for more than lesser important projects.

That my participants trusted their best friend more for more important goals than less important goals align with predictions from the people-as-means approach to interpersonal relationships (Orehek et al., 2018a). Specifically, they predicted that people would trust close others more for more important (vs. less important) goals to ease the interdependent burden on those close relationships. My results support their predictions.

[7] The average on the overall trust subscale was 7.62 out of 9 in the original study and 7.20 in this study. The average reported here has been altered from 2.20 on a -4 to +4 scale to 7.20 on a 1 to 9 scale for ease of comparison.

A potential explanation for this discrepancy is that people may weight their perceptions of intent more than competence as goal importance increases. In other words, because people by definition want to accomplish their more important goals more than their less important goals, they may value the fact that their best friend will probably at least try to help them. Or perhaps participants valued their most important goals so highly that they would trust anyone to help them.

An alternative explanation is that the specific trustee, or the type of relationship between the trustor and trustee, will matter when it comes to whether people place more weight on intent or competence. Perhaps in a work context, where failure to attempt to complete an interdependent goal may have implications for the trustee's occupational status and intent is more or less held relatively constant, people may place more weight on competence than intent. More work is needed to adjudicate these potential explanations.

I also predicted that participants would trust their best friend less the more their best friend's weakness was relevant to the project, and that this relationship would be stronger than the relationship between trust and the relevance of participants' best friend's strength to the project. Instead, I found no relationship between weakness relevance and trust.

The lack of a relationship between the relevance to weakness measure and goal-specific trust may have been the result of a statistical artifact. The relevance to weakness measure demonstrated severe restriction of range. As noted, 63.24% of participants' goals were rated as "not at all" relevant to participants' friends' weaknesses (see Figure 11 below). It is possible that participants felt compelled to report that their best friends' weaknesses were not at all relevant to the goals of their life. If this is in fact the reason for the restriction of range, then perhaps measures that do not tap into participants' social desirability motives (e.g., implicit measures) may be more effective here.

When there *was* a relationship between the measure and goal-specific trust (see Tables XIV and XV in Appendix B), the relationship was positive. In other words, the more the weakness was relevant to the goal, the more participants reported trusting their best friend. On the surface, this effect is counter to expectations. Indeed, why would people trust their best friend to help them with a goal *more* the more they are viewed as being weak at the task at hand? However, when the relationship between the relevance of strength and the relevance of weakness is considered, then this discrepancy appears to be more the result of a statistical artifact than an indication of the alternative.

Specifically, the relevance of strength was *positively* correlated with the relevance of weakness at $r = 0.28$. As mentioned above, this indicates that participants' best friends' strengths and weaknesses were slightly related to the same kinds of goals. In addition, the relevance of the strength to the goal was very strongly related to goal-specific trust. Consequently, the occasionally-observed positive relationship between the relevance to weakness and trust (see Appendix B) may simply be an artifact of those two relationships. This explanation appears especially more likely when it's considered that this main effect disappeared when the interaction between the relevance of the best friends' weakness and project importance was included in the model.

If the absence of a consistent relationship between trust and the relevance to trustees' weaknesses is not simply a statistical artifact, then perhaps the trustee's strengths may have compensated for their weakness in some way. To return to the hypothetical story about Tim and Andy, perhaps Tim believes Andy's most descriptive strength is that he is intelligent and that his most descriptive weakness is that he is unreliable. Once Tim is finally able to convince Andy to actually sit down and help him on his project to finish his dissertation, Andy's weakness is no longer relevant and his strength of intelligence is the only deciding factor. Therefore, perhaps

competence matters more in close relationships because people are better able to identify and work around the trustee's areas of incompetence. More research is needed to investigate this possibility.

4.2. Future Directions

The finding that trust varies within a relationship implies many new and exciting questions for trust researchers. For example, what are the developmental trajectories of interpersonal trust variability? There are reasons to believe people will develop a greater tendency to exhibit intra-relational variability in trust as they age.

Older children demonstrate greater self-concept differentiation than younger children (Marsh, Craven, Debus, 1991). Similarly, people exhibit a developmental trajectory in their ability to differentiate between different emotions such that young adults are better able to differentiate emotions than adolescents (Nook, Sasse, Lambert, McLaughlin, & Somerville, 2018), and people tend to display greater complexity in their moral and relational reasoning as they age (Juujärvi, Myyry, & Pesso, 2012; Kjellström, Sjölander, Almers, & McCall, 2017). Consequently, it seems likely that people would develop greater variability in trust as they progress from childhood through adolescence to adulthood.

This progression of increased variability in intra-relational interpersonal trust is likely not linear, however. As people progress from middle to late adulthood, they experience a decline in their cognitive abilities and in the number and diversity of their goals (Heckhausen, Wrosch, & Schulz, 2010). Contemporaneously, people actively cull their social networks in late adulthood, which results in fewer total relationships among those in late adulthood (Lang & Carstensen, 1994). Consequently, we might expect to see a decline in the variability of intra-relational trust from middle to late adulthood.

Related to the question of the potential development of intra-relational variability in trust are "what predicts whether intra-relational trust will be more versus less variable?" and "what

predicts whether an individual is more or less granular in their trust with a specific other person?" Because more variability in trust requires a greater ability to distinguish among interdependent goals on, for example, the necessary and sufficient means toward goal attainment, it is likely that higher cognitive ability, specifically with regard to categorization ability, will predict greater variability in interpersonal trust. This prediction is further supported by the fact that differences in categorization ability predict children's ability to understand expertise (Danovitch & Noles, 2014). Because my results indicated that greater relevance of a best friend's strengths to a goal predicted greater trust, people with higher categorization capabilities may be better able to identify the expertise of their best friend vis-à-vis a particular goal.

Are different kinds of relationships characterized by more versus less variability in interpersonal trust? Although my results indicate that more versus less important goals are not differently variable *within* a relationship, they do not preclude the possibility that different kinds of relationships might be characterized by higher or lower variability. Indeed, part of the decision to sample the trust between my participants' best friends was to provide a strong test about the variability in intra-relational interpersonal trust. It seems plausible that the variability in interpersonal trust for a coworker, or babysitter, or acquaintance might be higher than for a best friend. Such considerations imply new avenues of investigating other inter-relational phenomena, like the varying emotion regulation strategies between an individual's relationships with others (i.e., emotionships; Cheung, Gardner, & Anderson, 2015).

Another interesting future direction would be to explore any potential cross-cultural differences in intra-relational trust. One possibility is that there would be less variability in intra-relational trust in more collectivistic cultures because of the more frequent influence of competence on evaluations of trust in individualistic cultures (Chen, Chen, & Meindl, 1998). An alternative possibility is that there would be more variability in intra-relational trust in more

collectivistic cultures because there is consistently more general trust in individualistic than collectivistic cultures (Ferrin & Gillespie, 2010).

Finally, it would be interesting to know whether and how variability in interpersonal trust is experienced. And if people *do* experience variability in intra-relational trust, how does this phenomenological experience of variability correspond to actual variability?

This research domain is wide open with possibilities, but a first step might be to refine the survey methodology. Specifically, the current survey was constructed by piecing together other idiomeasures. However, some of the components might be improved upon. For example, instead of the project elicitation procedure adapted from the personal projects assessment, perhaps the survey should begin by asking participants what they did for each day during the past week. Then, participants might be asked "Why did you do this" for each of the activities and have them group the activities together to form their projects (e.g., "Please select all of the activities that share a final goal"). This process should *start* participants on more concrete tasks while reminding them implicitly about the different contexts of their lives. Participants would then rate the overall importance of the larger projects and rate how important the activities are to accomplish the larger projects. This would separate the importance of the project for the individual from the importance of the task for the completion of the project.

An alternative possibility is that explicit self-reports might not be the most appropriate methodology for some parts of the study. For example, instead of asking participants to what extent their friends' attributes are relevant to the project, perhaps reaction time measures (e.g., implicit association tasks) might be better at capturing participants' knowledge structures about their best friend and the project. Similarly, an implicit measure of approach and avoidance might be more sensitive to fluctuations in interpersonal trust as the criterion of a study.

After solidifying the measurement strategy, a second step toward investigating goal-specific trust would be to recruit participants from an undergraduate psychology subject pool, like my sample, and collect a second sample of individuals in middle age. As noted above, there are reasons to believe individuals in middle age might exhibit greater variability in interpersonal trust than college-aged individuals. Such a finding could suggest the cognitive underpinnings of interpersonal trust.

4.3. Limitations

The preceding discussion suggests a number of limitations to the potential generalizability of the findings from this study. Specifically, for reasons I articulated above, the variability in relational trust might be greater for people in middle adulthood than for my participants or participants in late adulthood. Additionally, I suspect that higher cognitive ability, specifically categorization abilities and social and emotional intelligence, may also lead to greater variability in interpersonal trust. And finally, as noted above, it remains unclear to what extent these findings will replicate across various relationships or cultures. Consequently, more work is needed to identify the degree to which the findings presented here replicate and any potential boundary conditions.

4.4. Conclusion

Interpersonal trust varies across goals within a given relationship. That is, people trust the same person differently depending on the goal at hand. Consequently, people do not only trust Person X differently than Person Y, but they also trust Person X differently for Goal N than for Goal M. These findings suggest many exciting implications for researchers and practitioners alike.

In my study, project importance and trustee's strengths, but not their weaknesses, were predictive of the trust placed in them. However, it is unclear whether these effects are robust across

different relationships or age groups. More research is needed to investigate the contours of intra-relational interpersonal trust.

5. REFERENCES

Abele, A. E., Cuddy, A. J., Judd, C. M., & Yzerbyt, V. Y. (2008). Fundamental dimensions of social judgment. *European Journal of Social Psychology, 38*(7), 1063-1065.

Ainsworth, M. S. (1979). Infant–mother attachment. *American Psychologist, 34*(10), 932-937.

Alleyne, R. (2010, September 23). Oxytocin – the love hormone – could cure shyness. Retrieved from http://www.telegraph.co.uk/health/healthnews/8020464/Oxytocin-the-love-hormone-could-cure-shyness.html

Auter, Z. (2016, July 22). About half of Americans play state lotteries. Retrieved from https://news.gallup.com/poll/193874/half-americans-play-state-lotteries.aspx

Bagozzi, R. P., Baumgartner, H., & Pieters, R. (1998). Goal-directed emotions. *Cognition & Emotion, 12*(1), 1-26.

Baldwin, M. W. (1992). Relational schemas and the processing of social information. *Psychological Bulletin, 112*(3), 461-484.

Baldwin, M. W., Keelan, J. P. R., Fehr, B., Enns, V., & Koh-Rangarajoo, E. (1996). Social-cognitive conceptualization of attachment working models: Availability and accessibility effects. *Journal of Personality and Social Psychology, 71*(1), 94-109.

Bartz, J. A. (2016). Oxytocin and the pharmacological dissection of affiliation. *Current Directions in Psychological Science, 25*(2), 104-110.

Bartz, J. A., Zaki, J., Bolger, N., & Ochsner, K. N. (2011). Social effects of oxytocin in humans: Context and person matter. *Trends in Cognitive Sciences, 15*(7), 301-309.

Bates, D., Kliegl, R., Vasishth, S., & Baayen, H. (2015). Parsimonious mixed models. arXiv preprint arXiv:1506.04967.

Bauer, P. C. (January 7, 2020). *Conceptualizing trust and trustworthiness*. (Political Concepts Working Paper Series No. 61). https://dx.doi.org/10.2139/ssrn.2325989

Bauer, P. C., & Freitag, M. (2018). Measuring trust. *The Oxford handbook of social and political trust*, *15*.

Baumeister, R. F., Bratslavsky, E., Finkenauer, C., & Vohs, K. D. (2001). Bad is stronger than good. *Review of General Psychology*, *5*(4), 323-370.

Baumeister, R. F., Vohs, K. D., DeWall, N. C., & Zhang, L. (2007). How emotion shapes behavior: Feedback, anticipation, and reflection, rather than direct causation. *Personality and Social Psychology Review*, *11*(2), 167-203.

Bechara, A., Damasio, H., Tranel, D., & Damasio, A. R. (1997). Deciding advantageously before knowing the advantageous strategy. *Science*, *275*(5304), 1293-1295.

Benoit, D. (2004). Infant-parent attachment: Definition, types, antecedents, measurement and outcome. *Paediatrics & Child Health*, *9*(8), 541-545.

Bergman, L. R., & Magnusson, D. (1997). A person-oriented approach in research on developmental psychopathology. *Development and Psychopathology*, *9*(2), 291-319.

Bottia, M. C., Stearns, E., Mickelson, R. A., Moller, S., & Valentino, L. (2015). Growing the roots of STEM majors: Female math and science high school faculty and the participation of students in STEM. *Economics of Education Review*, *45*, 14-27.

Bowlby, J. (1969). Attachment and loss: Vol. 1. *Attachment*. New York, NY: Basic Books.

Bretherton, I. (1985). Attachment theory: Retrospect and prospect. *Monographs of the Society for Research in Child Development*, *50*(1-2), 3-35.

Brewer, M. B. (1979). In-group bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin*, *86*(2), 307-324.

Cervone, D. (1997). Social-cognitive mechanisms and personality coherence: Self-knowledge, situational beliefs, and cross-situational coherence in perceived self-efficacy. *Psychological Science*, *8*(1), 43-50.

Cervone, D. (2004). The architecture of personality. Psychological Review, *111*(1), 183-204.

Cervone, D. (2005). Personality architecture: Within-person structures and processes. *Annual Review of Psychology, 56*, 423-452.

Cervone, D., Mercurio, L., & Lilley, C. (2020). The individual stem student in context: Idiographic methods for understanding self-knowledge and intraindividual patterns of self-efficacy appraisal. *Journal of Educational Psychology,* doi:http://dx.doi.org.proxy.cc.uic.edu/10.1037/edu0000454

Cervone, D., Mor, N., Orom, H., Shadel, W. G., & Scott, W. D. (2004). Self-efficacy beliefs and the architecture of personality. *Handbook of self-regulation: Research, theory, and applications*, 188-210.

Cervone, D., Shadel, W. G., Smith, RE, & Fiori, M. (2006). Self-regulation: Reminders and suggestions from personality science. *Applied Psychology, 55*(3), 333-385.

Chen, C. C., Chen, X. P., & Meindl, J. R. (1998). How can cooperation be fostered? The cultural effects of individualism-collectivism. *Academy of Management Review*, *23*(2), 285-304.

Chen, C. C., Saparito, P., & Belkin, L. (2011). Responding to trust breaches: The domain specificity of trust and the role of affect. *Journal of Trust Research*, *1*(1), 85-106.

Cheung, E. O., Gardner, W. L., & Anderson, J. F. (2015). Emotionships: Examining people's emotion-regulation relationships and their consequences for well-being. *Social Psychological and Personality Science*, *6*(4), 407-414.

Clore, G. L., Gasper, K., & Garvin, E. (2001). Affect as information. *Handbook of affect and social cognition*, 121-144.

Collins, N. L., & Read, S. J. (1990). Adult attachment, working models, and relationship quality in dating couples. *Journal of Personality and Social Psychology, 58*(4), 644-663.

Conway, M. A., Singer, J. A., & Tagini, A. (2004). The self and autobiographical memory: Correspondence and coherence. *Social cognition, 22*(5), 491-529.

Cook, J., & Wall, T. (1980). New work attitude measures of trust, organizational commitment and personal need non-fulfilment. *Journal of Occupational and Organizational Psychology*, *53*(1), 39-52.

Cuddy, A. J., Fiske, S. T., & Glick, P. (2008). Warmth and competence as universal dimensions of social perception: The stereotype content model and the BIAS map. *Advances in Experimental Social Psychology*, *40*, 61-149.

Cumming, G. (2014). The new statistics: Why and how. *Psychological Science*, *25*(1), 7-29.

Danovitch, J., & Noles, N. (2014). Categorization ability, but not theory of mind, contributes to children's developing understanding of expertise. In *Proceedings of the Annual Meeting of the Cognitive Science Society* (Vol. 36, No. 36).

Das, T. K., & Teng, B. S. (2001). Trust, control, and risk in strategic alliances: An integrated framework. *Organization Studies, 22*(2), 251-283.

Das, T. K., & Teng, B. S. (2004). The risk-based view of trust: A conceptual framework. *Journal of Business and Psychology*, *19*(1), 85-116.

De Cremer, D., & Ruiter, R. A. (2003). Emotional reactions toward procedural fairness as a function of negative information. *The Journal of Social Psychology, 143*(6), 793-795.

De Dreu, C. K. (2012a). Oxytocin modulates the link between adult attachment and cooperation through reduced betrayal aversion. *Psychoneuroendocrinology*, *37*(7), 871-880.

De Dreu, C. K. (2012b). Oxytocin modulates cooperation within and competition between groups: an integrative review and research agenda. *Hormones and Behavior, 61*(3), 419-428.

De Dreu, C. K., Greer, L. L., Handgraaf, M. J., Shalvi, S., Van Kleef, G. A., Baas, M., ... & Feith, S. W. (2010). The neuropeptide oxytocin regulates parochial altruism in intergroup conflict among humans. *Science, 328*(5984), 1408-1411.

Deutsch, M. (1960). Trust, trustworthiness, and the F Scale. *The Journal of Abnormal and Social Psychology, 61*(1), 138-140.

Deutsch, M. (1983). Current social psychological perspectives on justice. *European Journal of Social Psychology,* (13) 305–319.

Dirks, K. T., & Ferrin, D. L. (2001). The role of trust in organizational settings. *Organization Science, 12*(4), 450-467.

Drigotas, S. M., Rusbult, C. E., & Verette, J. (1999). Level of commitment, mutuality of commitment, and couple well-being. *Personal Relationships, 6*(3), 389-409.

Dulac, T., Coyle-Shapiro, J. A., Henderson, D. J., & Wayne, S. J. (2008). Not all responses to breach are the same: The interconnection of social exchange and psychological contract processes in organizations. *Academy of Management Journal, 51*(6), 1079-1098.

Dunn, J. R., & Schweitzer, M. E. (2005). Feeling and believing: the influence of emotion on trust. *Journal of Personality and Social Psychology, 88*(5), 736-748.

Ellsworth, P. C., & Scherer, K. R. (2003). Appraisal processes in emotion. In R. J. Davidson, K. R. Scherer, & H. H. Goldsmith (Eds.), Series in affective science. *Handbook of affective sciences* (pp. 572-595). New York, NY, US: Oxford University Press.

Emerson, R. M. (1962). Power-dependence relationships. *American Sociological Review, 27*(1), 31-41.

Epley, N., Keysar, B., Van Boven, L., & Gilovich, T. (2004). Perspective taking as egocentric anchoring and adjustment. *Journal of Personality and Social Psychology, 87*(3), 327-339.

Evans, A. M., & Krueger, J. I. (2011). Elements of trust: Risk and perspective-taking. *Journal of Experimental Social Psychology, 47*(1), 171-177.

Evans, A. M., & Krueger, J. I. (2016). Bounded prospection in dilemmas of trust and reciprocity. *Review of General Psychology, 20*(1), 17-28.

Fehr, E., & Gintis, H. (2007). Human motivation and social cooperation: Experimental and analytical foundations. *Annual Review of Sociology, 33*, 43-64.

Ferrin, D. L., Bligh, M. C., & Kohles, J. C. (2008). It takes two to tango: An interdependence analysis of the spiraling of perceived trustworthiness and cooperation in interpersonal and intergroup relationships. *Organizational Behavior and Human Decision Processes, 107*(2), 161-178.

Ferrin, D. L., Dirks, K. T., & Shah, P. P. (2006). Direct and indirect effects of third-party relationships on interpersonal trust. *Journal of Applied Psychology, 91*(4), 870-883.

Ferrin, D. L., & Gillespie, N. (2010). Trust differences across national-societal cultures: Much to do, or much ado about nothing. *Organizational trust: A cultural perspective*, 42-86.

Fiske, A. P. (1992). The four elementary forms of sociality: framework for a unified theory of social relations. *Psychological Review, 99*(4), 689-723.

Fitzsimons, G. M., Finkel, E. J., & Vandellen, M. R. (2015). Transactive goal dynamics. *Psychological Review, 122*(4), 648-673.

Galinsky, A. D., Magee, J. C., Inesi, M. E., & Gruenfeld, D. H. (2006). Power and perspectives not taken. *Psychological Science, 17*(12), 1068-1074.

Galinsky, A. D., Rucker, D. D., & Magee, J. C. (2016). Power and perspective-taking: A critical examination. *Journal of Experimental Social Psychology, 67*, 91-92.

Green, J. D., & Campbell, W. K. (2000). Attachment and exploration in adults: Chronic and contextual accessibility. *Personality and Social Psychology Bulletin, 26*(4), 452-461.

Griffith, A. L. (2010). Persistence of women and minorities in STEM field majors: Is it the school that matters?. *Economics of Education Review, 29*(6), 911-922.

Heckhausen, J., Wrosch, C., & Schulz, R. (2010). A motivational theory of life-span development. *Psychological Review, 117*(1), 32-84.

Holmes, J. G. (2000). Social relationships: The nature and function of relational schemas. *European Journal of Social Psychology, 30*(4), 447-495.

Holmes, J. G., & Rempel, J. K. (1989). Trust in close relationships. In C. Hendrick (Ed.), *Review of personality and social psychology*, Vol. 10. (pp. 187-220). Thousand Oaks, CA, US: Sage Publications, Inc.

Inagaki, T. K., & Orehek, E. (2017). On the benefits of giving social support: When, why, and how support providers gain by caring for others. *Current Directions in Psychological Science, 26*(2), 109-113.

Johnson, D., & Grayson, K. (2005). Cognitive and affective trust in service relationships. *Journal of Business Research, 58*(4), 500-507.

Johnson-George, C., & Swap, W. C. (1982). Measurement of specific interpersonal trust: Construction and validation of a scale to assess trust in a specific other. *Journal of Personality and Social Psychology, 43*(6), 1306-1317.

Jones, A. P., James, L. R., & Bruni, J. R. (1975). Perceived leadership behavior and employee confidence in the leader as moderated by job involvement. *Journal of Applied Psychology, 60*(1), 146-149.

Jones, S. L., & Shah, P. P. (2016). Diagnosing the locus of trust: A temporal perspective for trustor, trustee, and dyadic influences on perceived trustworthiness. *Journal of Applied Psychology, 101*(3), 392-438.

Juujärvi, S., Myyry, L., & Pesso, K. (2012). Empathy and values as predictors of care development. *Scandinavian Journal of Psychology, 53*(5), 413-420.

Kahneman, D., & Tversky, A. (2013). Prospect theory: An analysis of decision under risk. In *Handbook of the Fundamentals of Financial Decision Making: Part I* (pp. 99-127).

Kenworthy, J. B., & Jones, J. (2009). The roles of group importance and anxiety in predicting depersonalized ingroup trust. *Group Processes & Intergroup Relations, 12*(2), 227-239.

Kjellström, S., Sjölander, P., Almers, E., & Mccall, M. E. (2017). Value systems among adolescents: Novel method for assessing level of ego-development. *Scandinavian Journal of Psychology, 58*(2), 150-157.

Klohnen, E. C., Weller, J. A., Luo, S., & Choe, M. (2005). Organization and predictive power of general and relationship-specific attachment models: One for all, and all for one? *Personality and Social Psychology Bulletin, 31*(12), 1665-1682.

Krosnick, J. A. a., & Presser, S. (2010). Question and Questionnaire Design. *Handbook of Survey Research*, *94305*(886), 1432-1033.

Kruglanski, A. W., & Kopetz, C. (2009). The role of goal systems in self-regulation. *Oxford Handbook of Human Action*, 350-367.

Kruglanski, A. W., Shah, J. Y., Fishbach, A., Friedman, R., Chun, W. Y., & Sleeth-Keppler, D. (2002). A theory of goal systems. *Advances in Experimental Social Psychology* (34), 331-378.

Lang, F. R., & Carstensen, L. L. (1994). Close emotional relationships in late life: further support for proactive aging in the social domain. *Psychology and Aging, 9*(2), 315-324.

Lazarus, R. S., & Smith, C. A. (1988). Knowledge and appraisal in the cognition—emotion relationship. *Cognition & Emotion, 2*(4), 281-300.

Lewicki, R. J., & Bunker, B. B. (1995). Trust in relationships. *Administrative Science Quarterly, 5*(1), 583-601.

Lewicki, R. J., McAllister, D. J., & Bies, R. J. (1998). Trust and distrust: New relationships and realities. *Academy of Management Review, 23*(3), 438-458.

Lewicki, R. J., Tomlinson, E. C., & Gillespie, N. (2006). Models of interpersonal trust development: Theoretical approaches, empirical evidence, and future directions. *Journal of Management, 32*(6), 991-1022.

Lewis, J. D., & Weigert, A. (1985). Trust as a social reality. *Social Forces, 63*(4), 967-985.

Little, B. R. (1983). Personal projects: A rationale and method for investigation. *Environment and Behavior, 15*(3), 273-309.

Little, B. R. (2008). Personal projects and free traits: Personality and motivation reconsidered. *Social and Personality Psychology Compass, 2*(3), 1235-1254.

Little, B. R., & Coulombe, S. (2015). Personal projects analysis. *International Encyclopedia of Social and Behavioral Sciences, 2*, 757-765.

Loersch, C., & Payne, B. K. (2011). The situated inference model: An integrative account of the effects of primes on perception, behavior, and motivation. *Perspectives on Psychological Science, 6*(3), 234-252.

Lount Jr, R. B. (2010). The impact of positive mood on trust in interpersonal and intergroup interactions. *Journal of Personality and Social Psychology, 98*(3), 420-433.

Markus, H. R., & Kitayama, S. (1991). Culture and the self: Implications for cognition, emotion, and motivation. *Psychological Review, 98*(2), 224-253.

Marsh, H. W., Craven, R. G., & Debus, R. (1991). Self-concepts of young children 5 to 8 years of age: Measurement and multidimensional structure. *Journal of Educational Psychology, 83*(3), 377-392.

Mayer, R. C., & Davis, J. H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology, 84*(1), 123-136.

Mayer, R. C., Davis, J. H., & Schoorman, F. D. (1995). An integrative model of organizational trust. *Academy of Management Review, 20*(3), 709-734.

McEvily, B., Perrone, V., & Zaheer, A. (2003). Trust as an organizing principle. *Organization Science, 14*(1), 91-103.

Mikolajczak, M., Gross, J. J., Lane, A., Corneille, O., de Timary, P., & Luminet, O. (2010). Oxytocin makes people trusting, not gullible. *Psychological Science, 21*(8), 1072-1074.

Mikulincer, M. (1998). Attachment working models and the sense of trust: An exploration of interaction goals and affect regulation. *Journal of Personality and Social Psychology, 74*(5), 1209-1224.

Mischel, W., & Shoda, Y. (1995). A cognitive-affective system theory of personality: Reconceptualizing situations, dispositions, dynamics, and invariance in personality structure. *Psychological Review, 102*(2), 246-268.

Moore, D. R., Cheng, M. I., & Dainty, A. R. (2002). Competence, competency and competencies: performance assessment in organisations. *Work study, 51*(6), 314-319.

Murray, S. L., & Holmes, J. G. (2009). The architecture of interdependent minds: A motivation-management theory of mutual responsiveness. *Psychological Review, 116*(4), 908-928.

Murray, S. L., Holmes, J. G., MacDonald, G., & Ellsworth, P. C. (1998). Through the looking glass darkly? When self-doubts turn into relationship insecurities. *Journal of Personality and Social Psychology, 75*(6), 1459-1480.

Nook, E. C., Sasse, S. F., Lambert, H. K., McLaughlin, K. A., & Somerville, L. H. (2018). The nonlinear development of emotion differentiation: Granular emotional experience is low in adolescence. *Psychological Science, 29*(8), 1346-1357.

Nooteboom, B. (1996). Trust, opportunism and governance: A process and control model. *Organization Studies, 17*(6), 985-1010.

Orehek, E., Forest, A. L., & Barbaro, N. (2018). A people-as-means approach to interpersonal relationships. *Perspectives on Psychological Science, 13*(3), 373-389.

Orehek, E., Forest, A. L., & Wingrove, S. (2018). People as means to multiple goals: Implications for interpersonal relationships. *Personality and Social Psychology Bulletin, 44*(10), 1487-1501.

Parks, C. D., Henager, R. F., & Scamahorn, S. D. (1996). Trust and reactions to messages of intent in social dilemmas. *Journal of Conflict Resolution, 40*(1), 134-151.

Presseau, J., Sniehotta, F. F., Francis, J. J., & Gebhardt, W. A. (2010). With a little help from my goals: Integrating intergoal facilitation with the theory of planned behaviour to predict physical activity. *British Journal of Health Psychology*, *15*(4), 905-919.

Read, S. J., & Miller, L. C. (2013). On the coherence of mental models of persons and relationships: A knowledge structure approach. In *Cognition in Close Relationships* (pp. 79-110). Psychology Press.

Rotter, J. B. (1971). Generalized expectancies for interpersonal trust. *American Psychologist, 26*(5), 443-452.

Rotter, J. B. (1980). Interpersonal trust, trustworthiness, and gullibility. *American Psychologist, 35*(1), 1-7.

Rousseau, D. M., Sitkin, S. B., Burt, R. S., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*(3), 393-404.

Rusbult, C. E., & Van Lange, P. A. (2003). Interdependence, interaction, and relationships. *Annual Review of Psychology, 54*(1), 351-375.

Rusbult, C. E., & Van Lange, P. A. M. (2008). Why we need interdependence theory. *Social and Personality Psychology Compass, 2*(5), 2049-2070.

Sachs, J. L., Mueller, U. G., Wilcox, T. P., & Bull, J. J. (2004). The evolution of cooperation. *The Quarterly Review of Biology, 79*(2), 135-160.

Sandberg, J. (2000). Understanding human competence at work: an interpretative approach. *Academy of Management Journal, 43*(1), 9-25.

Sanderson, C. A., & Cantor, N. (1997). Creating satisfaction in steady dating relationships: The role of personal goals and situational affordances. *Journal of Personality and Social Psychology, 73*(6), 1424-1433.

Schoorman, F. D., Mayer, R. C., & Davis, J. H. (2007). An integrative model of organizational trust: Past, present, and future. *The Academy of Management Review, 32*(2), 344-354.

Scott III, C. L. (1980). Interpersonal trust: A comparison of attitudinal and situational factors. *Human Relations, 33*(11), 805-812.

Serva, M. A., Fuller, M. A., & Mayer, R. C. (2005). The reciprocal nature of trust: A longitudinal study of interacting teams. *Journal of Organizational Behavior, 26*(6), 625-648.

Sitkin, S. B., & Roth, N. L. (1993). Explaining the limited effectiveness of legalistic "remedies" for trust/distrust. *Organization Science, 4*(3), 367-392.

Skitka, L. J., & Wisneski, D. C. (2012). Justice theory and research: A social functionalist perspective. In J. Suls & H. Tennen (Eds.), *The Handbook of Psychology* 2nd Ed. (pp. 407 - 428). Hoboken, NJ: Wiley.

Smith, C. A., & Lazarus, R. S. (1990). Emotion and adaptation. *Handbook of personality: Theory and research*, 609-637.

Smith, C. A., & Lazarus, R. S. (1993). Appraisal components, core relational themes, and the emotions. *Cognition & Emotion, 7*(4), 233-269.

Smith, E. R., & Semin, G. R. (2004). Socially situated cognition: Cognition in its social context. *Advances in Experimental Social Psychology, 36*, 57-121.

Szpunar, K. K., Spreng, R. N., & Schacter, D. L. (2014). A taxonomy of prospection: Introducing an organizational framework for future-oriented cognition. *Proceedings of the National Academy of Sciences, 111*(52), 18414-18421.

Tomlinson, E. C., & Mryer, R. C. (2009). The role of causal attribution dimensions in trust repair. *Academy of Management Review, 34*(1), 85-104.

Van den Bos, K. (2001). Uncertainty management: the influence of uncertainty salience on reactions to perceived procedural fairness. *Journal of Personality and Social Psychology, 80*(6), 931-941.

Van den Bos, K., & Lind, E. A. (2002). Uncertainty management by means of fairness judgments. *In Advances in Experimental Social Psychology* (Vol. 34, pp. 1-60). Academic Press.

Van den Bos, K., Vermunt, R., & Wilke, H. A. (1996). The consistency rule and the voice effect: The influence of expectations on procedural fairness judgements and performance. *European Journal of Social Psychology, 26*(3), 411-428.

Williams, M. (2001). In whom we trust: Group membership as an affective context for trust development. *Academy of Management Review, 26*(3), 377-396.

Wyatt, J., & Rabinowitz, M. (2010). The impact of domain and subject specialization on knowledge organization. *American Journal of Psychology, 123*(3), 295-305.

Yakovleva, M., Reilly, R. R., & Werko, R. (2010). Why do we trust? Moving beyond individual to dyadic perceptions. *Journal of Applied Psychology, 95*(1), 79-91.

6. APPENDIX A

6.1. Simulations

The goal of these simulations was to identify the minimum number of participants needed to achieve .8 power under different assumptions of the possible covariation between predictors and size of the residual variance. In each subsequent model I changed one and only one parameter in a hierarchical manner to allow for comparability between the previous model. Specifically, the simulations were conducted on the analysis that would require the most participants for its detection (i.e., the interaction model). All simulations were conducted in R, and the code is available on the Open Science Framework (https://osf.io/ckr3v/?view_only=c941164c66c4460c926a6283e4dbfd07).

6.1.1. Model Parameters

All simulations were conducted under the assumption of a small observed effect size for the predictors of interest. Specifically, the fixed effect beta values for the categorical measure of goal importance is set to 0 (i.e., no effect). Although I expected to find a small and negative relationship between trust and goal importance I expected that relationship to be weaker than the following relationships. Therefore, I set the beta for goal importance to be 0 to reduce the total amount of variance explained to identify the minimum number of participants needed with a conservative estimate of total variance explained.

I set the beta for the continuous measure of the relevance of the trustee's strength to the task was set to +0.05 and the beta for the continuous measure of the relevance of the trustee's weakness to the task to -0.05. I expected there to be a weak relationship between trust and the relevance of the trustee's strengths and weaknesses when not factoring in goal importance because people tend to use means for goal striving that will increase the likelihood of goal attainment (Kruglanski et al., 2002). Because the methods ask participants to identify goals first and then their

best friend, there is a greater likelihood of them identifying goals for which they may not rely on their best friend.

I set the beta for the interaction between goal importance and the relevance of the trustee's strength to the task to +0.10, and I set the beta for the interaction between goal importance and the relevance of the trustee's weakness to the task to -0.15. The interaction with the trustee's weakness was given a stronger relationship because of the consistent finding that negative information plays a stronger role in behavior than positive information (e.g., Baumeister, Bratslavsky, Finkenauer, & Vohs, 2001). Therefore, I expect that trustees' weaknesses will play a larger role in trust decisions than trustees' strengths for the most important goals.

6.1.1.1. Varying the Correlation Between Friend Attributes

The first three models (Model 1, Model 2, Model 3) examined the effect of altering the correlation between the two measures of task relevance (i.e., strength, weakness). If people view others at least implicitly as a potential means to goal pursuit (Orehek et al., 2018a), then they may differentiate their best friend's strengths and weaknesses across goals. In other words, it is possible that people will view their friend's attributes as relevant to different goal contexts. Therefore, in line with this reasoning, the correlation between the predictors in the first simulation was set to be weak and negative (-0.10).

In contrast to the potential situation just characterized, whereby participants are expected to view their friend's attributes as weakly and negative related, the next simulations estimate the effect of friend attributes' task relevance being positive correlated. In the study's design, participants are first asked to identify and describe their personal projects and then to identify and describe their best friend. Therefore, the methods press for participants to imagine their personal projects, free from whom they may choose to rely upon. Consequently, it seems possible that the same constellation of friend attributes may be perceived as both a strength and a weakness and

relevant to similar situations. For example, perhaps Tim believes that Andy is a "free spirit." Consequently, he may believe that Andy's biggest strength is that he is good at generating novel solutions to problems, but Tim may believe Andy's greatest weakness is that he is unreliable. To model this potential outcome, I set a moderate (0.40) and a strong (0.80) correlation between the relevance of the best friends' strengths and weaknesses to the task in simulations Model 2 and Model 3. For the next two models (Model 4, Model 5), I use the moderate positive (0.40) correlation between the predictors because it is a moderately conservative and plausible value.

6.1.1.2. Varying the Residual Variance

The second two simulations (Model 4, Model 5) modeled the effect of increasing the residual variance in the models on a priori power. Specifically, the total random variance was set to 1 and was allocated between the variance attributed to the random intercept, the random slope, the correlation between the random intercept and the slope, and the residual. In the first three models a large proportion of the variance was attributed to the random intercept (0.60), followed by the random slope (0.20), the residual (0.15), and the correlation between the random intercept and the slope (0.05). This specification assumes that much of the variability in trust is attributable to the individual's general level of trust for their best friend. In other words, these models account for the different average levels of trust between people (e.g., Rotter, 1980).

In Model 4, the amount of variance attributed to the random intercept was decreased to 0.40. Because the random intercept was allocated most of the random variance, it was the easiest term to reduce while ensuring interpretability between previous models. Moreover, it's initial setting represented the more unrealistic parameter setting because it assumed 60% of the random variance was attributable to difference in average levels of trust between individuals. The result of this change was that the residual variance was increased from 0.15 to 0.35 for Model 4.

In Model 5, I further reduced the amount of variance attributable to the random intercept to 0.20. This model assumes that the majority of the random variance is attributable to the residual and is therefore left unpredicted (0.55). However, the random intercept is kept as one of the most predictive specified term in the random structure, but in Model 5 it is assumed to be equivalent to the random slope between goal importance and trust.

6.1.1.3. Worst Fitting Model

In my final model (Model 6), I use all of the parameter settings that decrease a priori power. Specifically, I set the correlation between my predictors to be 0.80, and I set my residual variance to be 0.55 by setting my random intercept term at 0.20, my random slope term at 0.20, and the variance attributed to the correlation between my random slope and intercept at 0.05. The parameters of Model 6 are unlikely because they assume that the fixed effects in my study are not predictive of trust, that participants will view their best friend's strength and weakness as equivalently relevant across goals, and that the residual variance will account for 55% of the random variance (as opposed to the average level of trust between participants, the slope between goal importance and trust between participants, and the correlation between these two random terms). Therefore, this model's estimate represents a lower bound on my expected power.

6.2. Results

The following power analyses were conducted across sample sizes of 100, 150, 200, 250, 300, 400, and 500 separately for each two-way interaction. I present the a priori power across each sample size for each interaction in tables, and I note the minimum sample size needed to have at least .80 power for the interaction between task relevance of strength and goal importance in text because it is the weakest of the two interactions.

6.2.1. Model 1

The results for Model 1 are presented in Table V. The minimum sample size identified by the simulations for the interaction between task relevance of strength and goal importance for parameters of Model 1 is 150 subjects, to achieve power at .92.

Table V

A Priori Power for Model 1

Relevance to Strength		
Sample Size	Power	95% CI
100	78.00%	[74.11%, 81.56%]
150	92.20%	[89.49%, 94.39%]
200	97.80%	[96.10%, 98.90%]
250	99.40%	[98.26%, 99.88%]
300	99.80%	[98.89%, 99.99%]
400	100.00%	[99.26%, 100.00%]
500	100.00%	[99.26%, 100.00%]
Relevance to Weakness		
Sample Size	Power	95% CI
100	97.80%	[96.10%, 98.90%]
150	100.00%	[99.26%, 100.00%]
200	100.00%	[99.26%, 100.00%]
250	100.00%	[99.26%, 100.00%]
300	100.00%	[99.26%, 100.00%]
400	100.00%	[99.26%, 100.00%]
500	100.00%	[99.26%, 100.00%]

6.2.2. Model 2

The results for Model 2 are presented in Table VI. The minimum sample size identified by the simulations for the interaction between task relevance of strength and goal importance for the parameters of Model 2 is 150 subjects, to achieve power at .89.

Table VI

A Priori Power for Model 2

Relevance to Strength		
Sample Size	Power	95% CI
100	71.40%	[67.22%, 75.32%]
150	89.00%	[85. 29%, 91.61%]
200	95.40%	[93.18%, 97.06%]
250	98.60%	[97.14%, 99.44%]
300	99.00%	[97.68%, 99.67%]
400	100.00%	[99.26%, 100.00%]
500	100.00%	[99.26%, 100.00%]
Relevance to Weakness		
Sample Size	Power	95% CI
100	95.40%	[93.18%, 97.06%]
150	99.40%	[98.26%, 99.88%]
200	100.0%	[99.26%, 100.0%]
250	100.0%	[99.26%, 100.0%]
300	100.0%	[99.26%, 100.0%]
400	100.0%	[99.26%, 100.0%]
500	100.0%	[99.26%, 100.0%]

6.2.3. Model 3

The results for Model 3 are presented in Table VII. The minimum sample size identified by the simulations for the interaction between task relevance of strength and goal importance for the parameters of Model 3 is 300 subjects, to achieve power at .80.

Table VII

A Priori Power for Model 3

Relevance to Strength		
Sample Size	Power	95% CI
100	37.40%	[33.14%, 41.81%]
150	49.40%	[44.93%, 53.87%]
200	61.20%	[56.77%, 65.49%]
250	74.00%	[69.92%, 77.79%]
300	80.20%	[76.43%, 83.61%]
400	88.80%	[85.70%, 91.43%]
500	95.20%	[92.94%, 96.90%]
Relevance to Weakness		
Sample Size	Power	95% CI
100	64.40%	[60.03%, 68.60%]
150	84.00%	[80.49%, 87.10%]
200	92.20%	[89.49%, 94.39%]
250	96.60%	[94.61%, 98.01%]
300	98.60%	[97.14%, 99.44%]
400	99.80%	[98.89%, 99.99%]
500	100.0%	[99.26%, 100.0%]

6.2.4. Model 4

The results for Model 4 are presented in Table VIII. The minimum sample size identified by the simulations for the interaction between task relevance of strength and goal importance for the parameters of Model 4 is 300 subjects, to achieve power at .85.

Table VIII

A Priori Power for Model 4

Relevance to Strength		
Sample Size	Power	95% CI
100	34.60%	[30.43%, 38.95%]
150	50.80%	[46.32%, 55.27%]
200	64.60%	[60.23%, 68.79%]
250	77.00%	[73.06%, 80.62%]
300	84.60%	[81.13%, 87.65%]
400	92.40%	[89.72%, 94.57%]
500	96.60%	[94.61%, 98.01%]
Relevance to Weakness		
Sample Size	Power	95% CI
100	68.00%	[63.71%, 72.07%]
150	87.80%	[84.61%, 90.54%]
200	96.60%	[94.61%, 98.01%]
250	98.40%	[96.87%, 99.31%]
300	99.60%	[98.56%, 99.95%]
400	100.0%	[99.26%, 100.0%]
500	100.0%	[99.26%, 100.0%]

6.2.5. Model 5

The results for Model 5 are presented in Table IX. The minimum sample size identified by the simulations for the interaction between task relevance of strength and goal importance for the parameters of Model 5 is 400 subjects, to achieve power at .80.

Table IX

A Priori Power for Model 5

Relevance to Strength		
Sample Size	Power	95% CI
100	22.60%	[19.01, 26.52]
150	38.60%	[34.31, 43.02]
200	46.20%	[41.76, 50.68]
250	57.80%	[53.34, 62.17]
300	67.80%	[63.51, 71.88]
400	80.20%	[76.43, 83.61]
500	88.20%	[85.04, 90.89]
Relevance to Weakness		
Sample Size	Power	95% CI
100	49.60%	[45.13, 54.07]
150	74.20%	[70.13, 77.98]
200	86.40%	[83.08, 89.28]
250	92.60%	[89.94, 94.74]
300	96.00%	[93.89, 97.54]
400	98.40%	[96.87, 99.31]
500	99.60%	[98.56, 99.95]

6.2.6. Model 6

The results for Model 6 are presented in Table X. At 500 participants, my power for the interaction between task relevance of strength and goal importance for the parameters of Model 6 is .52.

Table X

A Priori Power for Model 6

Relevance to Strength		
Sample Size	Power	95% CI
100	14.00%	[11.08, 17.35]
150	20.40%	[16.95, 24.20]
200	26.20%	[22.40, 30.29]
250	30.40%	[26.39, 34.64]
300	35.40%	[31.21, 39.77]
400	45.00%	[40.58, 49.48]
500	52.00%	[47.52, 56.46]
Relevance to Weakness		
Sample Size	Power	95% CI
100	27.40%	[23.53, 31.54]
150	36.40%	[32.17, 40.79]
200	46.80%	[42.36, 51.28]
250	55.40%	[50.92, 59.81]
300	66.00%	[61.66, 70.15]
400	78.00%	[74.11, 81.56]
500	86.00%	[82.65, 88.92]

6.3. Selected Sample Size

Based on the above simulations, I collected 400 participants. I chose 400 because it provided me with adequate power for all but one of the proposed interactions across all of the simulations. My expected power with a sample size of 400 ranged from 45% to 100% (M = 90.22%) across both interactions from all of the above simulations. See Figure 18 for the expected power of a sample size of 400 across all simulations.

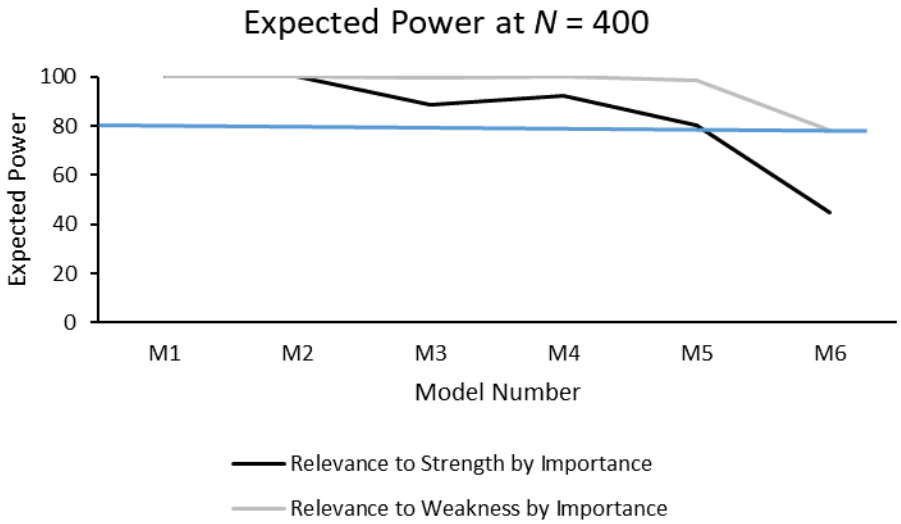

Figure 18. Simulated power for each interaction between friend attribute relevance and goal importance by simulation model number at a sample size of 400.

7. APPENDIX B

7.1. Nomothetic Measures of Trust (SITS) and Trust Antecedents (ABI) and Full Random Structure

Below are the full model results with the nomothetic measures of trust (SITS) and trustworthiness (ABI) included as controls and using the full random structure (see Table XI).

Table XI

Primary Analyses with Nomothetic Measures of Trust (SITS) and Trust Antecedents (ABI) and Full Random Structure

	Model 1	**Model 2**	**Model 3**	**Model 4**
(Intercept)	1.700***	1.702***	1.701***	1.702***
	(0.231)	(0.231)	(0.231)	(0.231)
SITStrust	-0.159	-0.159	-0.160	-0.158
	(0.112)	(0.112)	(0.112)	(0.112)
SITSemo	-0.036	-0.036	-0.036	-0.036
	(0.075)	(0.075)	(0.075)	(0.075)
SITSrely	0.041	0.040	0.040	0.040
	(0.093)	(0.093)	(0.093)	(0.093)
ABIable	0.274	0.275	0.275	0.275
	(0.169)	(0.170)	(0.170)	(0.170)
ABIbenev	0.010	0.012	0.010	0.012
	(0.159)	(0.159)	(0.159)	(0.159)
ABItegridy	-0.012	-0.013	-0.013	-0.013
	(0.169)	(0.169)	(0.169)	(0.169)
WeakRelC	0.075	0.074	0.081	0.071
	(0.046)	(0.046)	(0.066)	(0.067)
impCatMost Important	0.168*	0.168*	0.168*	0.168*
	(0.079)	(0.079)	(0.079)	(0.079)
StrRelC	0.478***	0.503***	0.478***	0.504***
	(0.034)	(0.049)	(0.034)	(0.050)
impCatMost Important:StrRelC		-0.051		-0.053
		(0.070)		(0.072)
WeakRelC:impCatMost Important			-0.012	0.008
			(0.095)	(0.099)
AIC	9823.247	9824.708	9825.231	9826.702
BIC	9903.882	9911.103	9911.625	9918.856
Log Likelihood	-4897.624	-4897.354	-4897.615	-4897.351
Num. obs.	2344	2344	2344	2344
Num. groups: PIN	389	389	389	389
Var: PIN (Intercept)	1.434	1.435	1.433	1.436
Var: PIN dummy(impCat)	0.356	0.357	0.356	0.357
Cov: PIN (Intercept) dummy(impCat)	-0.415	-0.416	-0.414	-0.416
Var: Residual	3.082	3.080	3.082	3.080

Note. SITStrust, SITSemotional, and SITSreliability represent the Specific Interpersonal Trust Scale subscales of overall trust, emotional trust, and reliability, respectively. ABIability, ABIbenevolence, and ABIintegridy represent the Ability, Benevolence, and Integrity measure subscales of ability, benevolence, and integrity, respectively.

*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, · indicates $p < 0.1$

7.2. Nomothetic Measures Included as Controls

Below are the models with the nomothetic measures of trust (SITS) and trustworthiness (ABI) included as controls (see Table XII). Model 1 in the table only includes the nomothetic measures for ease of interpretability with respect to their relationship with goal-specific trust. As can be seen, the patterns of the effects of interest remain constant and the nomothetic measures are not predictive of goal-specific trust.

Table XII

Primary Analyses with Nomothetic Measures of Trust (SITS) and Trust Antecedents (ABI) Included

	Model 1	**Model 2**	**Model 3**	**Model 4**	**Model 5**
(Intercept)	1.817***	1.686***	1.689***	1.688***	1.688***
	(0.227)	(0.231)	(0.231)	(0.231)	(0.231)
SITStrust	-0.180	-0.142	-0.141	-0.142	-0.141
	(0.112)	(0.112)	(0.112)	(0.112)	(0.112)
SITSemo	-0.049	-0.040	-0.040	-0.040	-0.040
	(0.076)	(0.076)	(0.076)	(0.076)	(0.076)
SITSrely	0.063	0.046	0.045	0.046	0.045
	(0.094)	(0.094)	(0.094)	(0.094)	(0.094)
ABIable	0.191	0.259	0.260	0.260	0.260
	(0.169)	(0.171)	(0.171)	(0.171)	(0.171)
ABIbenev	0.048	0.007	0.010	0.007	0.010
	(0.160)	(0.160)	(0.160)	(0.160)	(0.160)
ABItegridy	0.040	-0.020	-0.022	-0.021	-0.022
	(0.170)	(0.171)	(0.171)	(0.171)	(0.171)
WeakRelC		0.087.	0.086.	0.096	0.086
		(0.045)	(0.045)	(0.066)	(0.067)
StrRelC		0.475***	0.499***	0.475***	0.499***
		(0.034)	(0.049)	(0.034)	(0.050)
impCatMost Important		0.169*	0.169*	0.169*	0.169*
		(0.074)	(0.074)	(0.074)	(0.074)
StrRelC:impCatMost Important			-0.050		-0.050
			(0.071)		(0.074)
WeakRelC:impCatMost Important				-0.018	0.001
				(0.097)	(0.101)
AIC	10250.902	9829.051	9830.558	9831.016	9832.557
BIC	10302.917	9898.166	9905.433	9905.891	9913.192
Log Likelihood	-5116.451	-4902.525	-4902.279	-4902.508	-4902.279
Num. obs.	2391	2344	2344	2344	2344
Num. groups: PIN	399	389	389	389	389
Var: PIN (Intercept)	1.051	1.092	1.092	1.090	1.092
Var: Residual	3.569	3.188	3.187	3.189	3.187

Note. WeakRelC and StrRelC represent the person-centered variables of the relevance to weakness and the relevance to strength measures, respectively. impCat represents the dichotomous measure of goal importance. SITStrust, SITSemotional, and SITSreliability represent the Specific Interpersonal Trust Scale subscales of overall trust, emotional trust, and reliability, respectively. ABIability, ABIbenevolence, and ABIintegridy represent the Ability, Benevolence, and Integrity measure subscales of ability, benevolence, and integrity, respectively.
*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, . indicates $p < 0.1$

7.3. Full Random Structure

Below are the models with the full random structure included (see Table XIII). Specifically, I included a random intercepts and a random slope for each participant by the categorical measure of project importance. As can be seen, the pattern of effects remains constant.

Table XIII

Primary Analyses with Full Random Structure

	Model 1	**Model 2**	**Model 3**	**Model 4**
(Intercept)	1.717***	1.720***	1.717***	1.720***
	(0.080)	(0.080)	(0.080)	(0.080)
WeakRelC	0.076.	0.075.	0.079	0.068
	(0.046)	(0.046)	(0.066)	(0.067)
StrRelC	0.478***	0.503***	0.478***	0.504***
	(0.034)	(0.049)	(0.034)	(0.050)
impCatMost Important	0.168*	0.168*	0.168*	0.168*
	(0.079)	(0.079)	(0.079)	(0.079)
StrRelC:impCatMost Important		-0.050		-0.053
		(0.070)		(0.072)
WeakRelC:impCatMost Important			-0.005	0.015
			(0.095)	(0.099)
AIC	9816.202	9817.685	9818.199	9819.663
BIC	9862.279	9869.522	9870.035	9877.259
Log Likelihood	-4900.101	-4899.843	-4900.099	-4899.831
Num. obs.	2344	2344	2344	2344
Num. groups: PIN	389	389	389	389
Var: PIN (Intercept)	1.438	1.438	1.437	1.440
Var: PIN dummy(impCat)	0.356	0.357	0.356	0.357
Cov: PIN (Intercept) dummy(impCat)	-0.400	-0.401	-0.400	-0.401
Var: Residual	3.081	3.080	3.082	3.080

Note. WeakRelC and StrRelC represent the person-centered variables of the relevance to weakness and the relevance to strength measures, respectively. impCat represents the dichotomous measure of goal importance.
*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, . indicates $p < 0.1$

7.4. Dichotomized Relevance to Weakness

As noted above, I observed a floor effect in the relevance to weakness measure. Specifically, of the 2391 goals participants rated on the degree to which they were relevant to their friends' weaknesses, only 879 (36.76%) were rated as at least "slightly" relevant. Therefore, in the models reported in this section (Table XIV below), I dichotomize the relevance to weakness measure. If the participant indicated that their best friend's weakness was at least "slightly" relevant to the task, then the measure was coded as "1," and the variable was coded as "0" if the weakness was "not at all" relevant to the task.

When dichotomized, the relevance to weakness positively predicts goal-specific trust. In other words, the more the weakness was relevant to the goal, the more participants reported trusting their best friend. See the Discussion section above for a more thorough exploration of this effect.

Table XIV

Analyses Using Dichotomized Relevance to Weakness

	Model 1	**Model 2**	**Model 3**	**Model 4**
(Intercept)	1.628***	1.630***	1.641***	1.649***
	(0.082)	(0.082)	(0.087)	(0.087)
rWeak_di	0.244**	0.243**	0.206.	0.192
	(0.091)	(0.091)	(0.123)	(0.124)
StrRelC	0.472***	0.496***	0.472***	0.501***
	(0.033)	(0.048)	(0.033)	(0.049)
impCatMost Important	0.166*	0.166*	0.139	0.129
	(0.074)	(0.074)	(0.095)	(0.096)
StrRelC:impCatMost Important		-0.050		-0.059
		(0.071)		(0.072)
rWeak_di:impCatMost Important			0.074	0.101
			(0.162)	(0.165)
AIC	9817.875	9819.379	9819.667	9821.008
BIC	9852.432	9859.696	9859.984	9867.085
Log Likelihood	-4902.937	-4902.689	-4902.833	-4902.504
Num. obs.	2344	2344	2344	2344
Num. groups: PIN	389	389	389	389
Var: PIN (Intercept)	1.101	1.101	1.102	1.103
Var: Residual	3.186	3.185	3.185	3.184

Note. rWeak_di indicates the dichotomous measure of relevance to weakness and StrRelC represent the person-centered variables of the relevance to strength measures. impCat represents the dichotomous measure of goal importance.
*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, . indicates $p < 0.1$

7.5. Globally-Centered Predictors

In the following models, I globally-centered my predictors instead of centering them by participant. In other words, the zero or center of the distribution is now the average of that variable across the entire sample. For example, the average relevance of all participants' best friends' strength to the goal is set at zero (see Table XV below).

The pattern of results remained the same as when I centered the predictors for each participant, with one exception. The relevance of participants' best friends' weakness to the goal is again a significant and positive predictor of goal-specific trust. Using the globally-centered

predictors, which had more variance because the sample used the entirety of the scale, likely pushed the relationship passed the threshold of significance in the model. Here again however, when the interaction between the relevance of the best friends' weakness and project importance was included in the model, the main effect disappeared.

Table XV

Analyses Using Globally-Centered Variables

	Model 1	**Model 2**	**Model 3**	**Model 4**
(Intercept)	1.724***	1.727***	1.724***	1.727***
	(0.072)	(0.072)	(0.072)	(0.072)
WeakRel_GlobC	0.084*	0.083*	0.047	0.036
	(0.040)	(0.040)	(0.053)	(0.054)
impCatMost Important	0.189**	0.189**	0.189**	0.189**
	(0.073)	(0.073)	(0.073)	(0.073)
StrRel_GlobC	0.455***	0.482***	0.456***	0.490***
	(0.030)	(0.040)	(0.030)	(0.040)
impCatMost Important:StrRel_GlobC		-0.052		-0.067
		(0.052)		(0.053)
WeakRel_GlobC:impCatMost Important			0.074	0.094
			(0.070)	(0.072)
AIC	9976.710	9977.720	9977.595	9978.010
BIC	10011.387	10018.176	10018.051	10024.246
Log Likelihood	-4982.355	-4981.860	-4981.797	-4981.005
Num. obs.	2391	2391	2391	2391
Num. groups: PIN	399	399	399	399
Var: PIN (Intercept)	1.006	1.006	1.011	1.011
Var: Residual	3.164	3.163	3.161	3.158

Note. WeakRelC and StrRelC represent the person-centered variables of the relevance to weakness and the relevance to strength measures, respectively. impCat represents the dichotomous measure of goal importance. The suffix GlobC indicates that the measure is centered across the entire sample.

*** indicates $p < 0.001$, ** indicates $p < 0.01$, * indicates $p < 0.05$, · indicates $p < 0.1$

8. APPENDIX C

Below are the histograms for each subscale of the SITS (Johnson-George & Swap, 1982) and ABI (Mayer & Davis, 1999).[8] As seen in the graphs, each subscale demonstrated severe restriction of range. Indeed, only a small handful of observations are on the left half of the scale.

8.1. Specific Interpersonal Trust Scale

The SITS was designed to be used as a measure of interpersonal trust between two people, across a variety of relationship types (e.g., friend, colleague, acquaintance). However, the items on the measure do not appear to adequately capture nuance in trust for very close relationships (e.g., best friends).

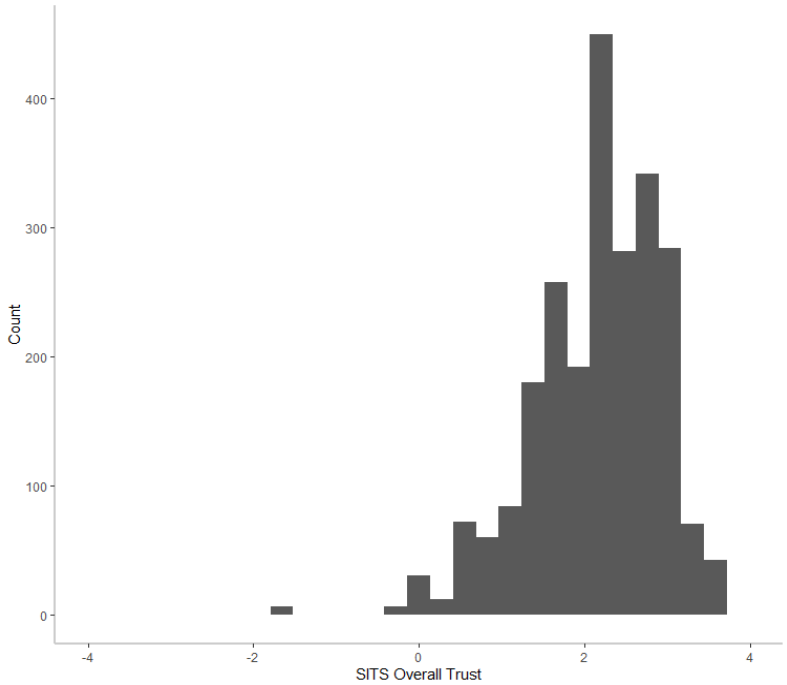

Figure 3. Histogram of the Specific Interpersonal Trust Scale subscale of overall trust.

[8] The data were structured in "long format" for analyses, so the counts in each histogram are inflated by a factor of six. In other words, each person's score appears six times (the number of goals for which goal-specific trust was evaluated).

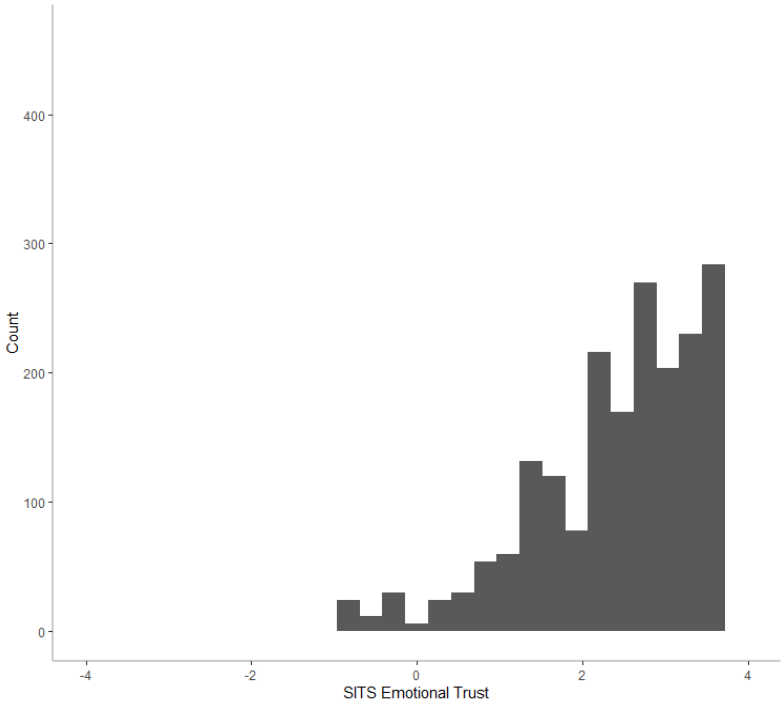

Figure 3. Histogram of the Specific Interpersonal Trust Scale subscale of emotional trust.

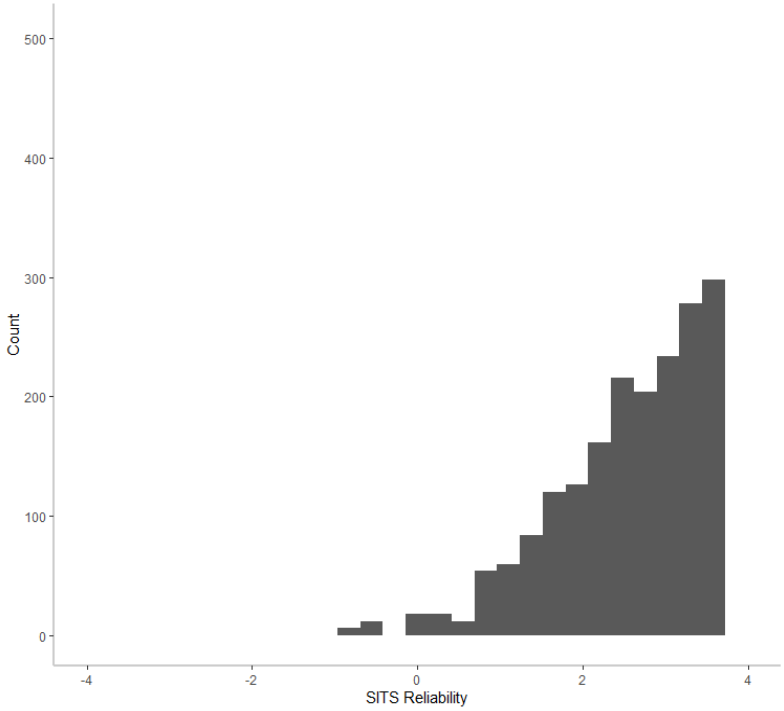

Figure 3. Histogram of the Specific Interpersonal Trust Scale subscale of reliability.

8.2. Ability, Benevolence, and Integrity Measure

The ABI was designed to capture trust in work colleagues. Indeed, the original article that published the items (Mayer & Davis, 1999) referenced "top management" as the trustee in the original scale. Consequently, the items do not appear to be well-suited for investigating other kinds of interpersonal relationships (e.g., best friends).

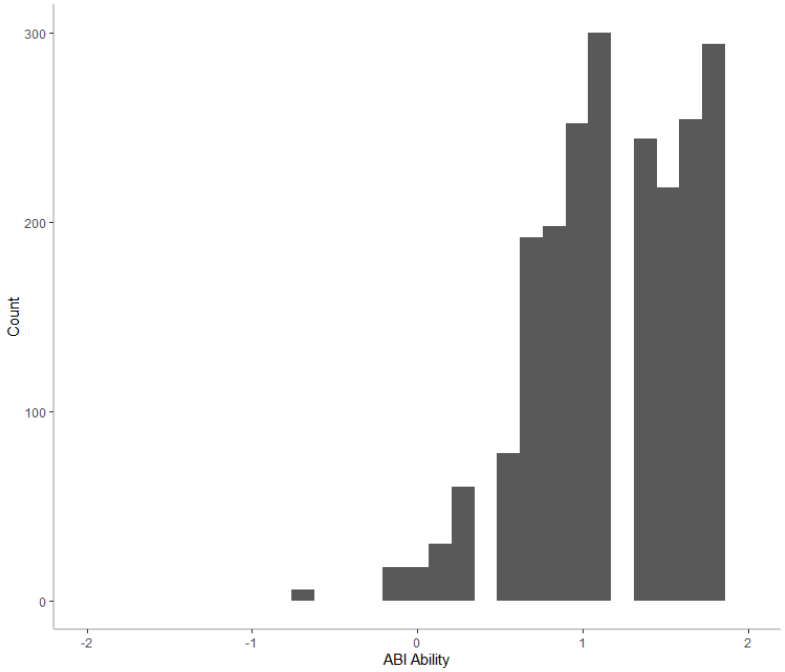

Figure 3. Histogram of the Ability Benevolence Integrity Measure subscale of ability.

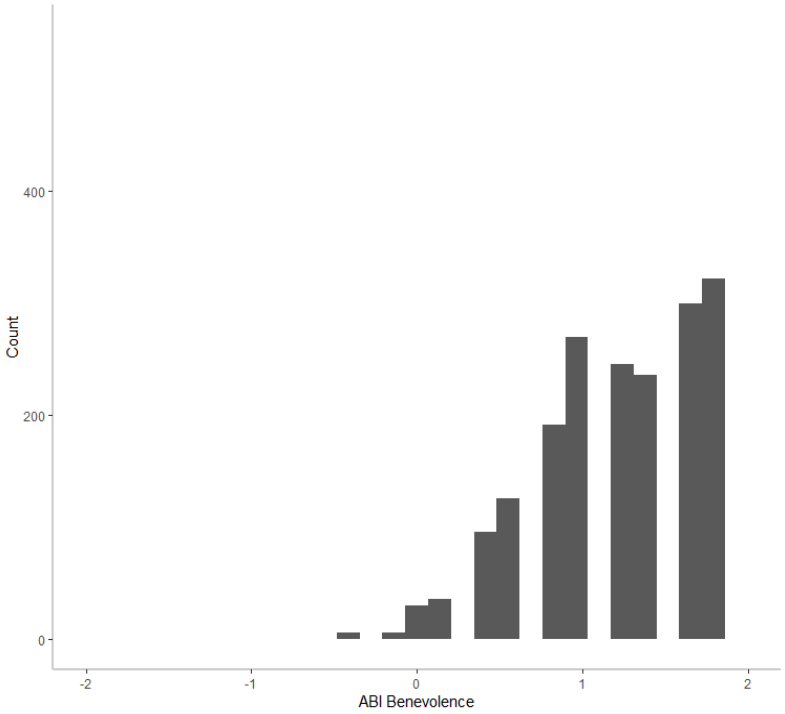

Figure 3. Histogram of the Ability Benevolence Integrity Measure subscale of benevolence.

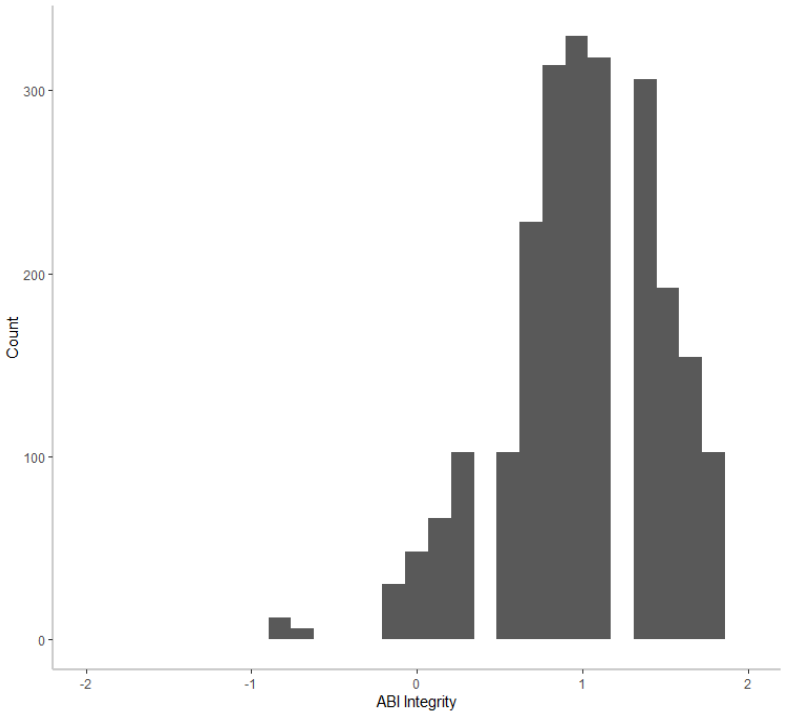

Figure 3. Histogram of the Ability Benevolence Integrity Measure subscale of integrity.