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Molly Breyse Cox

*Antioch University - PhD Program in Leadership and Change*

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The Trust Decoder™: An Examination of an Individual's  
Developmental Readiness to Trust in the Workplace

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A Dissertation

Submitted to the PhD in Leadership and Change Program of Antioch University

in partial fulfillment for the degree of

Doctor of Philosophy

July 2019

This dissertation has been approved in partial fulfillment of the requirements for the degree of PhD in Leadership in Change, Graduate School of Leadership and Change, Antioch University.

#### Dissertation Committee

- Laura Morgan Roberts, PhD, Committee Chair
- Carol Baron, PhD, Committee Member
- Bruce Avolio, PhD, Committee Member

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## **Acknowledgments**

I began this journey with four things in mind, first was to think deeply about a topic I was passionate about, second was to write something meaningful, third was to learn more about my own trustworthiness. The fourth, and most significant for me, was to build on the legacy left by my parents, Peter and Winifred Breyse, both of whom shared, expressed, and demonstrated their values of family, integrity, education, and most above all, safety. This is in honor of Dad and Mom. To Dad and his work in occupational health and safety and to Mom and her ability to create a loving, inclusive home, safe for all. They showed us that changing the world starts at the dinner table where being and feeling safe is a basic human right. Spurred on by single parenthood and growing safety concerns in the workplace, theirs is the legacy I hope to pass on for Jack and Nathan Dwyer to live and carry forward.

To my husband, Kevin Cox, his sacrifices and love made it possible for me to pursue my dream of a PhD. I owe a debt of gratitude to my committee, Dr. Laura Morgan Roberts, Dr. Carol Baron, and Dr. Bruce Avolio. This research led me to the U.W. Center for Leadership and Strategic Thinking where Bruce and his work provided me with insight and the opportunity to work alongside those at the Center who contributed their expertise to my dissertation for which I am thankful. It is my hope that this work on trust contributes to an increase of psychological safety in the workplace and to the well-being of others.

This work is in memory of the women who have crossed my path who did not have the luxury of safety. To my classmate and friend Diana Peterson, murdered in 1975, to Lynda Ann Healy, victim of Ted Bundy in 1975, and to Colleen and daughter Katie Gill, members of our community, murdered in their home in 1984.

**Dedicated to the *Live Like Liz* Movement**

Elizabeth Ann Breysse, (1995 – 2015)

## **Abstract**

This research explores an individual's self-perception of their own ability, motivation, and propensity to trust others for the purpose of validating a new construct: developmental readiness to trust others in the workplace. This construct expands research on developmental readiness to change and to lead by building a scale to measure an individual's motivation and ability to trust others in the workplace. A previously validated scale developed by Frazier, Johnson, and Fainshmidt 2013 measuring propensity to trust was included the scale building process. All items measuring motivation to trust were newly developed for this study, items measuring trust ability were adapted and based on previous trust research by Mayer and Davis 1999. This was a mixed-methods study (qual) QUAN with 6 individual interviews and 417 surveys collected via an online survey using an item response scale of 1 to 7. Respondents were solicited through professional networks and Mechanical Turk. Construct validation resulted in a two-factor model measuring ability and motivation to trust, with propensity to trust as a subcategory under the motivation factor. Exploratory and confirmatory factor analyses were conducted and evidence supported the construct's convergent and discriminant validity and reliability. This research contributes to the existing research on trust by examining an individual's capability to trust others and their motivation. Motivation included both propensity and outcome orientation to trust others prior to entering a relationship. This dissertation is available in open access at AURA: Antioch University Repository and Archive, <http://aura.antioch.edu/> and OhioLINK ETD Center, <https://etd.ohiolink.edu> and is accompanied by an Excel file of survey data.

*Keywords:* Trust, Developmental Readiness, Motivation to Trust, Ability to Trust, Propensity to Trust, Change, Trust Beliefs, and Trust Intentions.

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### **List of Supplemental Files**

Final Survey Trust Decoder Correlations Minus Reverse Scored Item XLS.

## **Chapter I: Introduction**

Research shows that trust plays a significant role in positive team, organizational, and leadership dynamics. Trust has a positive effect on job satisfaction (Guinot, Chiva, & Roca-Puig, 2014), on learning in the workplace (Selnes & Sallis, 2003), and on team performance (De Jong, Dirks, & Gillespie, 2016). In addition, lack of trust in the workplace results in many hidden costs, such as an impact on the bottom line and a lack of employee cooperation (McAllister, 1995; McEvily, Radzevick, & Weber, 2012). Trust is viewed as a foundation for interpersonal relationships (Rotter, 1967) and for collaboration (Costa & Anderson, 2011; McEvily, Perrone, & Zaheer, 2003). More importantly trust is a prerequisite for psychological safety in the workplace, a distinguishing feature in high performing teams (Duhigg, 2016). Trust impacts all employees in a workplace. Given its significance, how should we strategically approach building trust in the workplace? Where does trust begin?

### **Statement of the Problem**

What does it mean to be developmentally ready to trust? Developmental readiness to trust in the workplace considers the extent to which employees hold positive views of the need for trust, and the belief that trusting others will have positive implications. Development is concerned with how people make meaning of the world around them, evolving through more complex stages over a lifespan (Loevinger et al., 1985). This definition of developmental readiness to trust is adapted from two sources. First, Armenakis et al. (1993) defined readiness as change acceptance and the extent to which employees believe that such changes are likely to have positive implications for themselves. Second, Avolio and Hannah (2009) argued that before followers' mental models can change, they need to be developmentally ready to do so, posing the question, "How can we get leaders and their organizations better ready to develop?" (2010 p.1181). Avolio

and Hannah (2008) define developmental readiness to lead “as both the ability and motivation to attend to, make meaning of, and appropriate new knowledge into one's long-term memory structures” (p. 336). Their research identifies two general parameters which contribute to a leader's readiness to develop; these are leaders' motivation and ability to develop.

This dissertation introduces a new construct called developmental readiness to trust. This construct is focused on theorizing trust development as an individual process, before a person engages in a trustor relationship with a trustee. Specifically, developmental readiness to trust examines two distinct dimensions, an individual's capacity to think about their ability to trust, which is comprised of their trusting beliefs, and an individual's motivation to trust, comprised of trusting intentions and propensity to trust, or tendencies towards trusting. The proposed construct and constituted scale for this study incorporated research on five specific areas for identifying categories comprising this construct, as well as for identifying items for measurement. First examined is the research on trust and trust antecedents, second is research on trust formation and early trust, third is on change, fourth is research on motivation, and fifth is research on developmental readiness. This study started with a model with three factors, modified based on findings, which influence an individual's process for trusting others before entering a relationship for the purpose of enhancing trust development.

### **Introduction to Developmental Readiness to Trust Construct**

Research on developmental readiness indicates that readiness must be addressed prior to the introduction of change in order for change to occur in the desired direction (Holt, Daniel, Armenakis, Feild, & Harris, 2007). Holt et al. discuss the results of a scale for measuring readiness for organizational change with participants from the public and private sector, with results suggesting readiness for change is a multidimensional construct influenced by employee

beliefs. The assessment of Holt et al. enables leaders to identify gaps that may exist between their own expectations about the change initiative and those of other members. “If significant gaps are observed and no action is taken to close those gaps, resistance would be expected, and therefore, change implementation would be threatened” (p. 233). Self-efficacy, appropriateness, management support, and personal valence can reduce resistance for employees. Scholars (Armenakis et al., 1993) argue that readiness requires understanding and assessing one’s current state as foundational for personal development, and is an important early step in the process of bringing about change. Two areas are identified which influence an individual’s readiness; these are capacity to think about one’s ability and motivation to put forth effort.

Further research on individual level of readiness shows that it influences individual gains in development efforts (Norcross, Krebs, & Prochaska, 2011), and requires addressing both cognitive and affective readiness for development (Bouckennooghe, Devos, & van den Broeck, 2009). In sum, “Readiness for change is comprised of both individual differences and organizational structural factors, reflecting the extent to which the organization and its members are inclined to accept, embrace and adopt a particular plan to purposefully alter the status quo” (Holt, D. T. & Vardaman, 2013 p.10), and involves the degree to which those involved are primed, motivated, and capable of change.

### **Conceptualizing Trust**

Trust is future-oriented, focused on expectation and involving uncertainty, vulnerability, and risk (Flores & Solomon, 1998). The different conceptualizations of trust examined in the literature review, Chapter II, are a strong indication that trust is seen in a variety of forms, categories, and processes. Trust has been conceptualized as a trait (Rotter, 1967), referring to individual characteristics which are generally unaffected by the environment and relatively stable.

Rotter (1967) identified propensity to trust as a stable trait within every individual reflecting a baseline level, or general tendency, to trust. As a trait, in research on trust within teams (Costa, Roe, and Taillieu, (2001), trust is viewed as having three distinct dimensions including dispositional, cognitive, and behavioral.

Gill, Boies, Finegan, and McNally (2005) describe trust as an intention to take a risk in a relationship where intention is determined by perceived characteristics of a trustee, as well as the personal disposition of the trustor. This dispositional component of trust is based on past social experience gradually developing over time (Rotter, 1971). These components are propensity to trust, perceived trustworthiness, cooperative and monitoring actions.

Trust has also been conceptualized as a process. Early research by Flores and Solomon (1998) describes trust as a dynamic process, stating:

Trust is a dynamic aspect of human relationships. It is an ongoing process that must be initiated, maintained, sometimes restored and continuously authenticated. Trust is not a social substance or a mysterious entity; trust is a social practice, defined by choices (p.205).

In research on interpersonal trust development and affective influences in groups, Williams (2001) describes trust development as a learning process, “portrayed most often as an individual’s experiential process of learning about the trustworthiness of others by interacting with them over time” (p. 379).

Trust has also been theorized as an emergent state. “Emergent states describe cognitive, motivational, and affective states of teams as opposed to the nature of their member interaction” (Marks, Mathieu, & Zaccaro, 2001p. 357). As an emergent state trust can be considered both an input as well as an outcome, which suggests that trust can be developed (Burke, Sims, Lazzara, &

Salas, 2007). If trust can be developed, where does one focus development efforts for increasing an individual's readiness to trust others in the workplace?

### **Interpersonal Trust**

Rotter's (1967) definition of interpersonal trust, "an expectancy held by an individual or a group that can be relied upon" (p. 651), is used to describe the level of individual analysis for this study. McAllister (1995) makes the distinction between cognitive and affective foundations within interpersonal trust. "Trust is cognition-based in that we choose whom we will trust in which respects and under what circumstances, and we base the choice on what we take to be 'good reasons,' constituting evidence of trustworthiness" (p. 25). Affect-based trust consists of an emotional bond and concern for another's needs (Mayer, Davis, & Schoorman, 1995), and is social and relational in nature. "The essence of affective trust is reliance on a partner based on emotions. As emotional connections deepen, trust in a partner may venture beyond that which is justified by available knowledge" (Johnson & Grayson, 2005, p. 501).

Uslaner (2002) makes two distinctions within interpersonal trust, which he refers to as generalized trust. One is strategic trust, which is when an individual trusts someone they know personally and second is moralistic trust, which happens when an individual trusts a stranger. The moralistic nature of generalized trust relies on an individual's perception of the inherent integrity of others.

### **The Individual and Trust**

Most trust research has focused on the relationship the trustor has with a trustee, answering the question, "Who am I trusting?" The *who* in the case of this research is the individual, and is focused at the interpersonal level of analysis, that of the trustor. Instead of assessing another's trustworthiness, this construct specifies individual beliefs, intentions and

cognitive ability to trust others, which provide a means for self-assessment. This represents an examination of an individual's trusting beliefs and trusting intentions. Fishbein and Ajzen's (1975) research on planned behavior distinguishes between beliefs and intentions. According to Fishbein and Ajzen (1972) planned behavior comprises three variables stated as follows:

according to the theory, human action is guided by three kinds of considerations: beliefs about the likely outcomes of the behavior and the evaluations of these outcomes (behavioral beliefs), beliefs about the normative expectations and actions of important referents and motivation to comply with these referents (normative beliefs), and beliefs about the presence of factors that may facilitate or impede performance of the behavior and the perceived power of these factors (p. 18).

Researchers de Visser and Krueger (2013) introduced the Motivation-Affect-Cognitive (MAC) model of interpersonal trust where trust emerges from three systems, in which trust refers to a relationship between a trustor and trustee. In this model trust refers to the trustor's beliefs about the trustee's cooperation. "The trustor's motivational system calculates a reward value and compares this value with its anticipated reward value; likewise the trustor's affective system calculates an emotional value and compares it to the anticipated emotional value" (p.97). Depending on the gap between beliefs and anticipated value, discrepancy positive or negative, feedback is provided to the individual's cognitive system updating for future predictions.

Both the planned behavior and MAC models could be restated in accordance with expectancy theory, where intentions are determined by beliefs, beliefs regarding outcomes, and beliefs concerning the value of associated responses. This dissertation research distinguished between attitudinal and normative influences on trusting behavioral intentions and beliefs. This allowed for evaluating the degree to which one acts in accordance with intentions to trust without a referent in mind.

## Trusting Beliefs

Trust belief is a social and relational construct that stems from interpersonal relationships, formed by trust attributes (Kim & Han, 2009; Mayer & Davis, 1999). Prior research suggests that there are four characteristics foundational to cognitive trust beliefs (McKnight, Choudhury, & Kacmar, 2002); these are competency, benevolence, integrity, and predictability, all referring to a trustor's perception of a trustee. Trusting beliefs reflect our perceptions of the competence, benevolence, and integrity of a specific person. Gill et al. (2005) assert that, "trust based on competence focuses on the objective credibility, expertise and reliability of the exchange partner" (p. 794). These are the same dimensions underlying faith in humanity, which are beliefs about others in general. Benevolence refers to a trustee's altruistic motives and reflects ethical traits. Integrity, which also reflects ethics, refers to utilitarian traits, such as keeping commitments and not lying (Mayer et al., 1995).

One contribution from this dissertation and this new proposed construct of developmental readiness to trust was in evaluating an individual's self-perception of their cognitive and affective beliefs and intentions towards trusting. These trusting beliefs reflect an individual's self-perception of the same of antecedents of trust, which also comprise our evaluation of another person's trustworthiness (Choi, Moon, & Nae, 2014), and is distinct from trusting intentions. Trusting beliefs reflect an individual's self-perception of their own trusting beliefs, indicating an individual's ability to trust others.

**Initial trust beliefs.** "Initial trusting beliefs derive from faith in humanity. However trusting beliefs in a specific person are expected to diverge from faith in humanity after repeated experience" (Yu, Saleem, & Gonzalez, 2014, p. 18). The psychological barrier that has to be overcome to trust is lowered based on the extent an individual is inherently trusting (Poon, Salleh,



& Senik, 2007). In a model on initial trust formation, McKnight, Cummings, and Chervany (1998) detail processes which impact trusting beliefs, which then lead to trusting intentions, which is where disposition to trust plays an important role. This supports Fishbein and Ajzen's (1972) planned behavior research where beliefs influence intentions and where the stronger the intentions the higher the likelihood, in this case, an individual will make a decision to act in a trusting manner.

However, before a relationship begins, people do not have the information necessary to gauge the trustworthiness of others, or the peace of mind that the other will not defect for risk of undermining an ongoing exchange. The process must begin with at least one side beginning that process, where one side will act, risking opportunism for the potential gains of cooperation. Uslaner (2002) argued that moralistic trust is a general outlook on human nature and mostly does not depend on experience and assumptions as with strategic trust. Rather it is the belief that others share our values, based on goodwill, and is not a prediction of how others will trust. Moralistic trust is necessary for explaining the initiation of cooperation, the central idea being the belief that most people share our own moral values. "Once initiated moralistic trust is about the ongoing relationships of mutual benefit and exchange and it might be self-reinforcing if there is constant and or enough reciprocity" (Uslaner, 2002, p. 14-15). In other words, someone must take the initial gamble to trust.

Interpersonal trust can apply to a specific person or it can form as a standard of belief in human nature (Glanville & Paxton, 2007), researchers have distinguished between these as personalized trust and generalized trust. Personalized trust refers to trust involving people personally known, while generalized trust goes beyond the boundaries of kinship and friendship and even beyond boundaries of acquaintance (Stolle, 1998). This distinction within interpersonal

trust, between trusting those we know personally versus trust expressed in general, is important for this dissertation when considering developmental readiness. Developmental readiness refers to preparedness to learn and benefit from a developmental experience; it is different from readiness to perform (Reichard & Beck, 2017) as it is concerned with an individual's ability and motivation to develop. This dissertation is interested in the developmental capacity of an individual to trust others before entering into a relationship. My research was focused on the development of generalized interpersonal trust, including an examination of strategic trust and moralistic trust.

### **Trusting Intentions**

Trusting intentions reflect one's willingness to depend on another person in a given situation (McKnight et al., 1998). Trusting intentions mean that the trustor is willing to or intends to depend on another individual, on the trustee (Yu et al., 2014). This suggests that if an individual were developmentally ready to trust another person, then they would plan to increase their trusting intentions generally, and thereby increase their intentions to act in trusting a specific person.

Intention to trust is determined and formed by an individual's perception of another's trustworthiness along with an individual's propensity to trust (Gill et al., 2005). This contrasts with trust based on competency, "...trust in intentions entails motives... endorses these distinctions between competence and goodwill trust, which commonly demarcate capability from morality" (p. 794). Prior research validating trust measures in e-commerce (McKnight et al., 2002) created two subconstructs to describe intention to engage in trust-related behaviors: willingness to depend, meaning volitional preparedness to make oneself vulnerable to the trustee; and subjective probability of depending, suggesting the perceived likelihood that one will depend

on the other. The potential scale items for this study represented both the willingness (volition) point of view and the likelihood (probability) perspective.

McKnight et al. (1998) posited that trust beliefs lead to trusting intentions, which then lead to trust behaviors. In this model dispositional trust plays an important role as an antecedent to trusting beliefs and intentions. McKnight et al. argued that disposition to trust comprised two subconstructs, one is trusting stance and the other is faith in humanity. Trusting stance:

means that one believes that, regardless of whether people are reliable or not, one will obtain better interpersonal outcomes by dealing with people as though they are well-meaning and reliable. Because it reflects a conscious choice, trusting stance derives from the calculative-based trust research stream (McKnight et al., p. 477).

Trusting stance involves a choice and contributes to both an individual's trusting beliefs and intentions. "Faith in humanity is about attributes of general others; trusting stance is a personal approach to dealing with others" (McKnight et al., 2002, p. 340) where faith in humanity is benevolence, competence and integrity.

Research on propensity to trust has argued that it is a trait, stable across situations (Mayer et al., 1995; Rotter, 1967) and is expected to wane once an employee interacts with a coworker. However, more recent research (Baer, Matta, Kim, Welsh, & Garud, 2018) made the distinction between an individual's propensity to trust in general, a personality trait, versus the temporary variations that occur on a daily basis at a specific moment, a personality state. Baer et al. used accessibility theory (Higgins, E. T., 1996) for providing a framework for understanding how social context affects attitudes via activating, or accessibility, of trait disposition. According to Baer et al. trust propensity can vary on a day-to-day basis due to social context, which can influence if an individual is inclined to trust others right now. While the construct developmental readiness to trust does not consider context, it is important to consider that an individual's

propensity to trust as a state can potentially influence an individual's general tendency, trait, to trust others. This study was specifically interested in trait-based disposition to trust and refers to this as propensity to trust for the purpose of this research.

The developmental readiness to trust construct proposed in this dissertation, operates within the boundaries of examining an individual's sense of their own trusting stance and faith in humanity, to assess what originates within the individual with little to do with specific circumstances. Both of these areas of propensity to trust impact an individual's motivation to trust. Furthermore, this new construct, developmental readiness to trust, makes a contribution to existing research by making a distinction between an individual's propensity to trust and an individual's motivation to trust. This study evaluated motivation from both the trait-based propensity to trust, as well as from the application of motivation theory applied to trusting others. Motivation to trust is distinguishable from propensity to trust in that motivation is about an individual's beliefs about trusting versus propensity, which is an individual's tendency towards trusting.

In this dissertation, to understand how motivation to trust is distinct from disposition towards trust, I examined the motivation to trust from an intrinsic and extrinsic view, an expectancy point of view, and from a predictive point of view. Theoretical support exists for distinguishing propensity to trust as a stable trait, which is consistent across situations (McEvily et al., 2003). While motivation to trust can be impacted by situational circumstances (Gill et al., 2005), in the case of this dissertation study, it is based on one's previous experience with trusting others. Propensity to trust represents an individual's trusting stance, considered to be a cognitive choice, along with an individual's general faith in humanity approach, trust tendency, and level of trust when entering into new situations. In this dissertation, I examined motivation from a

likelihood perspective to understand if trust can be predicted, and if there is a distinction between predicting likelihood to trust from an individual's tendency, or propensity to trust.

As a component of the developmental readiness to trust construct, a new concept called motivation to trust was created for this study. This concept is new to the trust literature, and it involves using items to measure the belief that trust is good, one's expectations of others, and an individual's level of self-efficacy related to trust. The motivation to trust items were newly developed for this study and relied on theoretical underpinnings based on research on motivation. The propensity to trust items are drawn from a study validating a scale for propensity to trust (Frazier, Johnson, & Fainshmidt, 2013). This study assessed if propensity to trust was a unique dimension, or if it was simply part of an individual's overall motivation to trust, by demonstrating discriminate validity.

### **Study Purpose**

The aim of this dissertation was to demonstrate the construct validity of a newly created developmental readiness to trust scale as a measure of an individual's developmental readiness to trust others in the workplace. The focus was on extending current research on trust, change, and developmental readiness to provide the conceptual basis for scale development and analysis. This research identified a preconceived construct/factor structure for investigating three conceptual areas that constitute an individual's self-assessment of their developmental readiness to trust: an individual's propensity to trust, their motivation to trust, and their ability to trust, and to provide initial evidence for its construct validity and reliability.

My dissertation study preparation included an initial qualitative study, conducted with six structured interviews, and expert code reviews focused on developing a deeper understanding of an individual's readiness trust by focusing on the three components noted above. This preparation

led to a second, large quantitative study that included a pilot survey of 23 full responses and a broader sample of 417 full responses from participants, used as a means for construct validation. This dissertation examined and incorporated research on trust antecedents, trust formation, trust development, change readiness, developmental readiness, and developmental readiness to lead, as part of conducting a construct validation study of developmental readiness to trust. Exploratory factor analysis, specifically principal component analysis, confirmatory factor analysis, and discriminant validity testing was conducted with results outlined in Chapter IV to explain the research results.

This study used Mayer, Davis, and Schoorman's (1995) definition of trust as, "the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform particular action important to the trustor, irrespective of the ability to monitor or control that other party" (p. 712). Much of research on trust today measures the trustor's view of the trustee based on the four antecedents of trust (Mayer et al., 1995). These four antecedents are: (a) the perception a trustor has of a trustee's ability to trust (b) the benevolence the trustee exhibits towards the trustor, (c) the trustor's perception of trustee's integrity, and (d) the trustor's propensity to trust. Early trust theorist Rotter (1967), suggests that expected outcomes impact the behavior of an individual and that people want to avoid negative consequences.

### **Why Trust is Important in the Workplace**

Over the last fifty years, researchers have examined the conditions that affect the following: trust in general (Mayer & Davis, 1999; Schoorman, Mayer, & Davis, 2007), interpersonal trust (Bulloch, 2013), trust as a multi-level phenomenon (Fulmer & Gelfand, 2012; Krot & Lewicka, 2012), trust between coworkers and organizations (Lusher, Robins, Pattison, &

Lomi, 2012), trust between managers and employees (Tzafrir & Dolan, 2004), as well as the relations between trust and leadership theory, team performance, and job satisfaction (Braun, Peus, Weisweiler, & Frey, 2013). Studies of trust in teams shows us that building trust can positively impact task interdependence and job performance (Colquitt, Scott, & LePine, 2007), business unit performance (Crossley, Cooper, & Wernsing, 2013), teamwork (Lee & Chang, 2013), stakeholder relations (Greenwood & Van Buren, Harry J., I., II, 2010; Pirson, Martin, & Parmar, 2017) and customer relationships in the service industry (Kantsperger & Kunz, 2010).

Trust also significantly impacts the development of knowledge and learning in teams. For example, building mutual trust among team members will accelerate the development of organizational knowledge, facilitating the collaborative conversion of tacit information into explicit knowledge (Nonaka, 1994). Conversely, the lack of trust will hamper the development of group knowledge, as it influences group learning and learning transfer (Lewis, Lange, & Gillis, 2005). Perceptions of incongruence in values in the workplace can lead to distrust (Sitkin & Roth 1993).

In a study on self-actualization as an indicator of individual effectiveness in the workplace (Kegan & Rubenstein, 1973), researchers confirmed that the more an individual has trust in his/her workgroup, and the more he/she generally trusts others with whom he/she interacts during work, the greater his/her self-actualization. In this research Kegan and Rubenstein differentiated between two aspects of trust, trust of oneself and trust of the other, where trust of others facilitates adaptation, learning, and effectiveness.

Jones and George examine trust evolution (1998) in organizations and influence on teamwork and cooperation. They make the distinction between experiencing trust prior to an initial exchange in the workplace, called conditional trust, and trust after initial exchange, referred

to as unconditional trust. In conditional trust, an individual's attitude towards trust and personal values influence early trusting relationships. Their model views values as general intrinsic standards of principles, guiding behavior and interpretation of behavior. Jones and George argue that trust requires a trustor to suspend belief that another person is not trustworthy and to behave as if this person can be trusted. Krueger et al. (2007) stipulate that:

Unconditional trust assumes that one's partner is trustworthy and updates the value of one's partner with respect to their characteristics and past performance; balanced goodwill occurs more quickly, allowing the partners to attain high levels of synchronicity in their decisions and, therefore, is cognitively less costly to maintain (p. 20084).

Furthermore, these researchers argue that conditional trust is most likely the most common form of trust in organizations. Unconditional trust characterizes the trust relationship based on social situations and based on experience. When unconditional trust is present, relationships often involve a sense of mutual identification (Lewicki & Bunker, 1996). My research was focused on examining the readiness to conditionally trust, an individual's general perceptions of trust before trust occurs. This view of conditional trust is about reserving judgment in order to get experience in how another will behave relative to meeting expectations regarding trust. Conceptually the new trust (conditional) construct includes three factors representing cognitive and affective elements. These constructs are ability to trust, motivation to trust, and propensity to trust.

### **Ability to Trust**

An examination of an individual's ability to trust requires investigating an individual's perception of ability, as well as an individual's perception of their ability to trust others.

Researchers (Dweck & Leggett, 1988) have proposed two theories that explain how people generally operate with respect to their ability to trust. In the first, entity theory, individuals see ability as relatively fixed and in the second, incremental theory, individuals believe ability can be



increased with effort and learning. Understanding if there are individuals in workgroups who do not believe they can increase their own ability to trust others, can have an impact on the person's readiness to develop trust. This study posits that understanding if an individual sees their ability to trust others as fixed or an entity perspective, labeled as *view of ability* for this study, should be distinguishable from an individual's propensity to trust. This study examined an individual's perception of their own ability to trust, assessing if they view it as an ability that is fixed and stable or as an ability they can develop.

In addition to assessing an individual's perception of ability as fixed or incremental, this study evaluated the three antecedents of ability to trust: competency, benevolence, and integrity. For the purposes of validating a measure of developmental readiness to trust, the domain of ability competency is specifically the expertise and mastery an individual has in fostering and building trust. In shifting the referent from a trustor evaluating a trustee's competency, such as a coworker's capability to do their job, this facet of developmental readiness to trust represents an individual's self-perception of their ability to trust others in the workplace. In addition Avolio and Hannah's (2009; 1995) discussions of developmental readiness were used as a basis for measuring an individual's perception of their competency to trust others.

A key distinction in this dissertation is that my definition of the ability to trust includes assessing the individual's self-perception of their capability to trust others, while propensity is measuring an individual's perception of their own disposition towards an inclination to trust others. Thus, ability is related to the knowledge that is involved with mastering trusting others as contrasted with one's inclination to trust.

## Motivation to Trust

Motivation to trust is viewed from the theoretical lens of trust as a moral and public good. There are two lenses used for examining motivation to trust. The first is an individual's propensity to trust, specifically, an individual's beliefs and intentions towards trusting, and the second is an examination of an individual's motivation to change towards trusting, specifically increase trusting others, which is an emergent state. Most research on motivation to trust centers around an individual's propensity, which I have argued above is distinct from an individual's motivation and the state of trust. Individual propensity to trust is trait-based and comprises of four sub-categories, which involves an individual's faith in humanity, their stance towards trust, their tendencies towards trust, and their trust of newcomers. In contrast one's motivation to trust as an emergent process.

In an attempt to further explain and examine motivation to trust as an emergent state, recent research on the neural basis of interpersonal trust, de Visser and Krueger (2013) introduced the Motivation-Affect-Cognitive (MAC) model of interpersonal trust. The MAC model describes how trust emerges from three systems, where trust refers to a relationship between a trustor and trustee, and trust refers to the trustor's beliefs about the trustee's expected level of cooperation. In the MAC model trust emerges through the transformational interplay of:

- (i) a *cognitive system* acting as an evaluation system that enables inferences about the psychological perspective of others (e.g., desires, feelings, or intentions); (ii) a *motivational system* action as a reinforcement learning system helping to produce states associated with rewards and to avoid states associated with punishments; and (iii) an *affective system* as a social approach and withdrawal system encompassing both basic (e.g., contempt, guilt, compassion, and gratitude) emotions. (p. 97)

My dissertation focused on the earliest of stages of trust development, prior to engaging with another individual. The MAC model reinforces the need to evaluate intentions, motivations, and emotions involved in the emergence of a state of trust.

The second type, motivation to change, is addressed using social constructionist theory (Luckmann, 2008; Senge, 1990), and was derived from the work of Alfred Schutz and earlier Edmund Husserl (Embree, 2009). The core idea here includes “the concept of social order as being a human byproduct, emerging as a consequence of continuous social interaction among individuals, which is constructed by individuals in relation to others” (p. 1174). Constructive development theory describes the process by which we construct a subjective understanding of our world, progressing through levels of development, the sense of construing over one’s life-span (Henderson & Kegan, 1989). In terms of social learning theory, to be an agent is to view oneself as a contributor to life circumstances versus simply being a product of them (Bandura, Albert, 1989; Burr, 1995; Cunliffe, 2008). Researchers (Hannah, Avolio, Luthans, & Harms, 2008) argue that agency and efficacy are central to increasing developmental readiness. Viewing oneself as an agent of change is central to the social theories of change and motivation including Self-Determination Theory (Deci, Koestner, & Ryan, 2001), Social Cognitive Theory (Bandura, Albert, 1989; Bandura, Albert, 2005; Bandura, Albert, 2011), and Individual Change Theory (Boyatzis, Richard & McKee, 2006).

In research on Social Cognitive Theory (SCT) Bandura (1989) views ability as a generative capability with cognitive, social, motivational, and behavioral skills that need to be organized and orchestrated to serve numerous purposes. In SCT, self-efficacy is considered the core of motivation to produce desired actions, whereby an individual’s efficacy beliefs shape an individual’s expectations regarding a particular task or change, working through four processes of

which motivational processes are one of these four. SCT identifies and distinguishes between three different modes of agency, including individual, proxy, and collective, each founded on the belief in one's capability to effect change. Bandura (1993) argued that most human motivation is generated cognitively, whereby he distinguishes three different types of agency of motivation, these are attribution theory, expectancy theory, and goal theory. He argued that beliefs operate in each form of motivation and all are outcome oriented.

Individual Change Theory (ICT) developed by Boyatzis and McKee (2006), which is an incremental and agentic theory focused on motivational development, offers support for explaining the concept of motivation to trust. At the individual level ICT Boyatzis (2009) describes learning as a means of changing a person's actions, habits, or competencies, and that such learning can be nonlinear and discontinuous in nature. My dissertation supports the belief that individuals have control over one's own motivation and agency over efforts and situations. ICT involves an aspirational personal vision of an ideal self, versus one's real self as it's comparison, for motivating change based on an individual's core identity, producing sustainable, iterative change. Extending ICT to understand an individual's motivation to trust requires an individual to be aware of their desire to be considered trustworthy and their self-awareness of any gap. "Because we define trust as an expectation, the distinction between trustworthiness and trust is based on the *actual* versus *perceived* intentions, motives, and competencies of a trustee—the former being trustworthiness and the latter being trust" (McEvily et al., 2003, p. 93).

Cook and Artino (2002, p. 1000) state that, "all contemporary theories of motivation are 'cognitive' in the sense that ... they presume the involvement of mental processes that are not directly observable". Given the socially constructed nature of trust operating at the invisible levels of beliefs and intentions, while also operating at the conscious level of making judgments to trust

others, understanding how developmental readiness to trust unfolds, and seeing our self as an agent of our own change is important for clarifying the ‘developmental’ part of readiness to trust. This focus on development is relevant for explaining why an individual would be motivated to increase their developmental readiness to trust, their self-efficacy, towards trusting others. This implies that increasing developmental readiness requires engaging in cognitive processes, which serve to increase desires and intentions to trust.

Developmental readiness to trust involves evaluating an individual’s readiness to engage in trusting others with the intention to increase this readiness. It is important to note that an intentional change process begins with an individual wanting to change, a change that may not be within their scope of awareness, making a case for examining developmental readiness to trust. In research on goal orientation theory, Dweck (2002) asserts that those holding an entity theory perspective are less likely to adopt learning goals, as they do not believe learning will increase their ability. This contrasts with individuals who hold an incremental view of ability and who have a tendency to view learning as an opportunity to develop, and to increase their capability. Increasing an individual’s readiness to develop trust may involve increasing an individual’s learning goal orientation towards increasing conditional trust.

The readiness to trust construct is intended to provide insight into an individual’s self-perception of the beliefs and intentions they hold towards conditional trust. ICT was used in this dissertation to describe the motivation resulting from identifying the gap between an individual’s ideal self and actual self-related to trust. Developmental readiness to change research highlights the role of the discrepancy for motivating an individual to change. For this dissertation study, motivation to trust comprised an individual’s understanding of the discrepancy of trust, trust beliefs, and trust motives.

## **Developmental Readiness to Trust Framework**

It is not enough to understand the dynamics of trust in the workplace if the goal is to change the level of trust between individuals working in teams. The core of the change theory used as a basis for my dissertation research is that behavioral change is an incremental process and unfolds over time through stages of change (Norcross et al., 2011; Prochaska, J., & Levesque, D., 2001; Prochaska, JM, Prochaska, & Levesque, 2001). To draw a parallel to the organizational change literature, concerns about high failure rates of change as discussed by Kotter (2007) shifted the focus in change management research from resistance to readiness for change. Armenakis et al. (1993) likewise argued for reframing organizational change in terms of readiness, rather than actively monitoring for resistance, explaining that focusing on readiness for change may act to prevent the likelihood of resistance to change, increasing the potential for change efforts to be more effective. Rafferty and Simons (2006) concluded that most research on change focuses on strategies for dealing with resistance within organizations.

The Transtheoretical Model of change (TTM) developed by Prochaska & DiClemente, (1983), proposes that change occurs in five cognitive stages; precontemplation, contemplation, preparation, action, and maintenance. Using this model, readiness for change equates to the preparation stage, where individuals have positive attitudes toward a change and indicate a readiness to take action. Scholars (Norcross et al., 2011) conclude that, “Although the time an individual spends in each stage may vary, the tasks to be accomplished are assumed to be invariant. For each stage of change, different change processes and relational stances produce optimal progress” (p.143). Readiness to change involves assessing individual readiness, system readiness and contextual factors in play (Bouckennooghe et al., 2009; Holt, Daniel et al., 2007).

Research by Dietz and Hartog (2006) on trust formation compliments the TTM, providing details on what contributes to trust formation utilizing an input-process-output (I-P-O) model. The I-P-O model illustrates where trust propensity and trust ability are inputs to the trust formation process, and how the process of beliefs turning to intentions results in an outcome where the individual increases their intention to act in a trusting manner. The pre-contemplative stage is associated with the inputs that constitute an individual's readiness to develop trust based on TTM. This involves an individual increasing their awareness of their ability, motivation, and propensity to trust. This results in moving to the contemplative stage where an individual increases their understanding of their positive beliefs and intentions towards trusting others. The TTM preparation stage is when an individual progresses from intention to trust to trusting, increasing positive trust informed decisions, or in a conditional trust manner.

The TTM model of trust formation is supported by research on planned behavior where beliefs are influenced by attitudes, feelings and include both personal and social aspects, while intentions are the determinant of behavior (Wilson, 2008). The formation of an intention is influenced by beliefs about personal outcomes and social acceptance and intentions are the determinant of behavior. "The stronger the intent that a person will behave in a specified way, the stronger the likelihood that the person will engage in the behavior. Behavior is the action taken by the person. Once a person makes a decision for action, then the intent transfers to actual behavior" (p.188).

### **Construct Conceptual Framework**

Following the steps in the construct validation process (Bagozzi & Edwards, 1998; Cronbach & Meehl, 1955), the first step is to formulate a general conceptual definition based on an examination of existing literature to develop measurements. Developmental readiness to trust

draws on earlier research on developmental readiness, trust development and trust formation processes (DiClemente & Prochaska, 1998; Dietz & Den Hartog, 2006). In this dissertation, I focused on the role cognitive and affective trust dynamics play in readiness. This dissertation research adds to research on trust formation in dyads, teams, organizations, and leaders (Ben-Gal, Tzafrir, & Dolan, 2015; Fulmer & Gelfand, 2012) by focusing on the first level of trust formation, that of readiness of the individual to develop trust in others.

My proposed model makes a distinction in trust beliefs, trust as an intention to make a decision to trust, and to act with positive trust behaviors. This study drew upon Dietz and Den Hartog's (2006) core premises of trust formation and adapted them to explore the role of developmental readiness using the TTM, by incorporating individual cognitive, affective, and behavioral intentions.

Developmental readiness to trust is different from other trust research constructs in that I focus on examining the readiness to trust before entering into a relationship with another person. This dissertation does not examine the level of trust that exists, or the existence and or level of trust antecedents in a relationship and or organization. Whereas other research involves a trustor's perception of a trustee, this research is focused solely on self-perception and the trustor point of view.

## **Research Questions**

My focus is on the individual level of analysis and testing whether the items designed to measure the three trust-related concepts constituted a construct valid scale. The overarching research question for my dissertation can be stated as follows: Is there evidence that the three trust-related concepts of motivation, propensity, and ability theoretically constitute an individual's developmental readiness to trust others in the workplace?



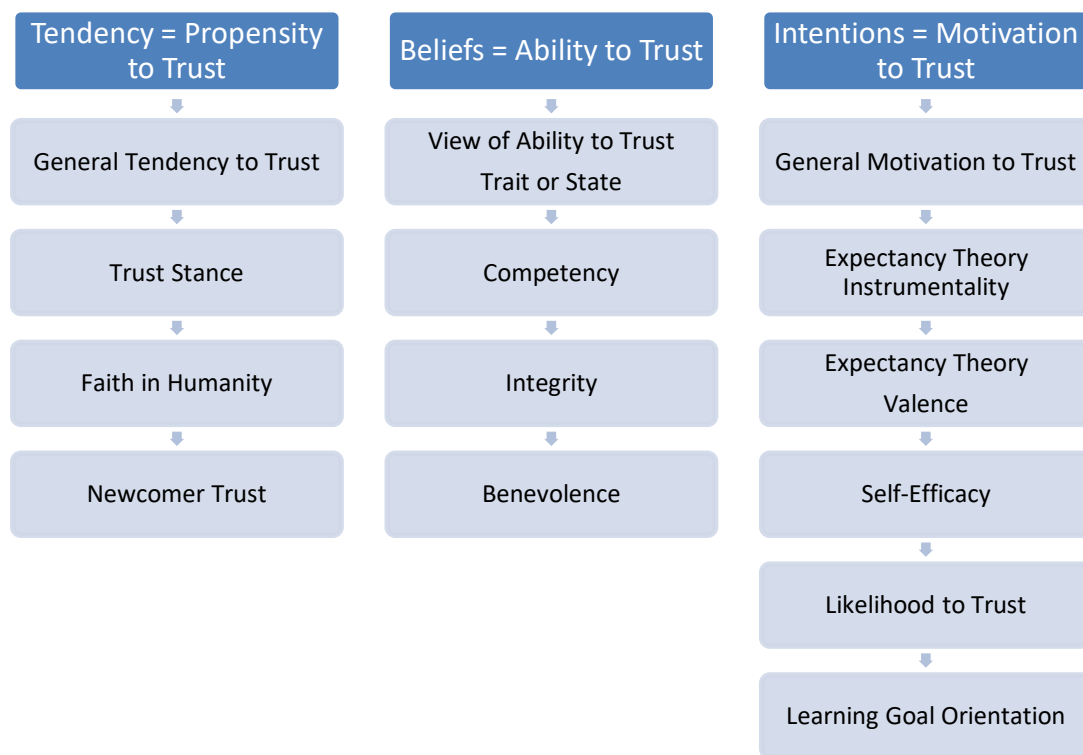
- RQ1. What themes emerge from analysis of narrative interview data related to the developmental readiness to trust construct?
- RQ2. What factors emerge from exploratory and confirmatory factor analysis of the items designed to measure propensity, motivation, and ability to trust?
- RQ3. What is the relationship between the subscales that emerge from factor analysis of the items designed to measure propensity, motivation, and ability to trust? This does not include other constructs not covered in this research.
- RQ4. How does the factor model identified via component principal analysis compare to a unidimensional factor of developmental readiness to trust?
- RQ5. In what way are the subscales that emerge from the exploratory factor analyses of the items designed to measure propensity, motivation, and ability to trust related to these theoretical concepts?

## **Methodology**

Chapter III describes the qualitative and quantitative research approach used for this dissertation. This chapter provides a justification for the methods used for evaluating the construct validity of developmental readiness to trust, motivation to trust, propensity to trust, and ability to trust, which were thought to be unique yet related constructs (Frazier et al., 2013). Chapter IV describes the analysis and results for this research. This dissertation research identified the areas which impact an individual's intent to act to trust others to enhance and increase conditional trust of others including specific areas for development focus. I developed some initial conceptualizations of the facets comprising one's developmental readiness to trust from my review of existing research on trust, change, developmental readiness, and motivation. I also

examined existing instruments that assessed trust and derived from them items to measure an individual's beliefs and intentions towards trusting.

I used an existing scale to assess one's propensity to trust (Frazier et al., 2013). Theoretical definitions for five characteristics for Motivation to Trust were created, with 30 items developed based on the review of the literature. Theoretical definitions for four areas for measuring ability were identified using research on trust described in Chapter II (Mayer et al., 1995; Schoorman et al., 2007), with 25 items adapted to measure the construct of Ability to Trust, along with 10 reserve scored items developed for a final of 74 items used in the first pilot study, and then 73 items in the second study.



*Figure 1.1.* Developmental readiness to trust framework

The item pool was administered to participants in the United States in the form of a survey via Survey Monkey®, with a goal of 300 full responses; participant demographic data was

requested in the survey: employment type, how long or how many years in the workforce, current role, highest level of school, ethnicity, gender, and industry. Refining items for the final scales involved using SPSS to conduct descriptive statistics, run Cronbach's alpha, and bivariate correlation analysis. A final set of 56 items was used to run SPSS Principal Component Analysis for identifying underlying factor structures. Confirmatory factor analysis was conducted using AMOS for determining final item inclusion and the best model fits across three models, a unidimensional model, a three-factor model, and the final model, a two-factor model based on model fit benchmarks and reliability and validity testing. I used goodness-of-fit, modification indices, and covariance procedures to identify the best items for this scale followed by convergent and divergent validity testing. Study findings are presented in Chapter IV along with process descriptions and analysis results. Results include an examination model fit and discriminant validity testing across all three models of analysis. In addition, analysis was conducted examining the preconceived areas for this construct for ability to trust and motivation to trust.

### **Significance to Theory, Research and Practice**

A majority of the research on trust has focused on how a trustor views a trustee's trustworthiness, the conditions of trust, and the impact of trust on relationships, organizations, and leaders. This dissertation research proposed a theoretical framework and my exploratory factor analysis resulted in a two- versus three-factor construct and measures for constituting Developmental Readiness to Trust, making a contribution in several areas. First is the incorporation of research on trust (Mayer et al., 1995; Rotter, 1967) with the concept and models of developmental readiness (Avolio & Hannah, 2009; Prochaska, J. O. & DiClemente, 1983; Rafferty & Simons, 2006), in determining which factors may be components of developmental readiness to trust others. This dissertation examined trust at the individual level of analysis before

entering a trust relationship. Specifically this study focused on early stages of trust development and utilized research on trust formation for identifying the inputs and processes involved in trusting others (Dietz & Den Hartog, 2006). While Dietz and Den Hartog identify early inputs in trust formation, this dissertation research is the first to address the variables influencing trust before entering into a relationship, in addition to an individual's propensity to trust.

Second is in the examination of ability to trust as the domain of mastery expanding ability to include viewing ability to trust as a learned skill or competency. This addresses the following questions: can an individual increase their ability to trust? Do participants see mastering trust as a competency? A third contribution involved investigating the relationship between benevolence, integrity, and propensity to trust. Specifically, I focused on whether benevolence is dependent on a relationship, if it is different than propensity to trust, or if it is a consideration in forming trusting intentions.

My fourth area of contribution involved investigating an individual's motivation to trust, as well as motivators for trusting others. I extend prior research on motivation to trust as being propensity to trust to a broader perspective of motivation to trust. This included understanding the distinction between propensity to trust as a disposition and motivation to trust as generating outcomes. This involved assessing general motivation, motivation due to learning goal orientation, motivation due to expectancy theory, motivation likelihood, and motivation due to self-efficacy in addition to propensity to trust. Along with propensity to trust, what acts to motivate us to trust others in the workplace?

### **Study Limitations**

There are several limitations to this study. Developmental readiness to trust in the workplace provides a framework for determining if individuals in the workplace are ready to

engage in trust development. Developmental readiness to trust is not measuring constructs which are mediated or moderated by trust such as psychological safety, trustworthiness, or distrust, and future research may consider including other constructs for further analysis. In addition, given the exploratory nature of this study, I did not examine and compare Developmental Readiness to Trust to other similar constructs such as optimism and cooperation,

While this dissertation did not investigate distrust my research takes the perspective that trust and distrust are separate and distinct processes (Komiak & Benbasat, 2008; Lewicki, McAllister, & Bies, 1998) versus polar ends of the same spectrum. The definition of distrust from Lewicki et al. is the “confident negative expectations regarding another’s conduct” ( p.439) and is important to consider what transpires when individuals take a posture of distrust as a common course of engagement. Research has shown that presumptive distrust reduces the likelihood of experiencing the benefits of reciprocal exchange in groups (Kramer, Brewer, & Hanna, 1996), substantiating a reason to focus on positive trust development in the workplace for this research.

Given the exploratory nature of this study, the research does not include an analysis or review of individual cultural values, biases, or assumptions in forming trust tendencies and trust intentions. Demographic data collected will allow for future exploratory factor analysis to be conducted establishing if there are differences in readiness to trust across broadly defined groups such as gender and or across age groups and work experience. Another limitation of this study is that it is focused on measuring an individual’s self-perception of their ability and motivation to trust. This does not provide evaluation or assessment of how others perceive an individual’s ability and motivation to trust.

## Definition of Key Terms

*Ability to trust* is defined as an individual's general competency to engage in trust decisions and actions, self-perception of personal integrity, and self-efficacy and awareness of trusting beliefs and actions (Colquitt et al., 2007).

*Benevolence* is the degree the trustor is willing to be good to the trustee (Mayer et al., 1995), referring to earlier research on trust characteristics, which included benevolence as a basis for trust. In previous research benevolence refers to the trustee's intention to act well towards others without having any personal profit motives (Schoorman et al., 2007).

*Competency to trust* is defined as an individual's level of expertise in engaging in trust decisions, the domain of mastery in this case is trusting.

*Coworker* is defined as members of an organization who hold relatively equal power or level of authority and with whom an employee interacts during the workday (Tan & Lim, 2009).

*Development* is concerned with how people make meaning of the world around them, evolving through more complex stages over a lifespan (Loevinger et al., 1985).

*Developmental efficacy* represents the level of confidence an individual has that they can develop a specific ability or skill for employment in a specific context or role. Such confidence would then result in greater effort on the individual's part to develop those skills, as well as enhancing the level of effort applied to those experiences (Lord & Hall, 2005). Perceptions of self-efficacy to trust reflect an individuals' belief regarding the extent their actions can influence the outcome of trust. Kramer, Brewer, and Hanna (1996) describe two types of efficacy and trust, which are casual efficacy and the belief that one can influence trust in groups.

*Developmental readiness* comprises both individual differences and organizational structural factors, reflecting the extent to which organizations and members are inclined to accept,

embrace and adopt a particular plan and involves the degree to which those involved are primed, motivated, and capable of change (Holt, D. T. & Vardaman, 2013).

*Developmental readiness to trust* is defined as an individual's ability, orientation and openness to learn to increase trusting behaviors. This includes an individual's propensity to trust, along with their ability and motivation to attend to and make meaning of new knowledge of trust and trusting behaviors.

*Expectancy Theory* is the expectancy-value theory of motivation considers the degree or expectancy of success, and the value of or intrinsic interest in the outcome of trusting others (Atkinson, 1964; Vroom, 1964; Wigfield, Tonks, & Klauda, 2009).

*Faith , trust in humanity* reflects a person's general belief about another person's competence, ability to achieve goals, benevolence, the degree to which they care about others, and integrity, adherence to prescriptive norms (Yu et al., 2014). In this study, the trustor's faith in humanity is being evaluated.

*Integrity* is defined as the trustor's perception of their own honesty and how well they adhere to being honest and fair. Adapted from Mayer et al. (1995)

*Intentions to trust* reflect one's willingness to depend on another person in a given situation (McKnight et al., 1998).

*Interpersonal trust* is the expectancy held by an individual or group that the word, promise statement of another can be relied upon (1967).

*Likelihood to trust* reflects the prediction of future trusting behaviors based on past experience of trust reciprocation (Nguyen et al., 2010).

*Moralistic trust* is the belief in the moral rightness of trust, rather than the risk in trusting others (Kramer et al., 1996).

*Motivation to learn* is a dispositional goal orientation, which may be a learning goal orientation or a performance goal orientation (Dweck & Leggett, 1988).

*Motivation to trust* is defined as an individual's trust beliefs and motives, which impact an individual's willingness to engage in trusting decisions and actions (Dietz & Den Hartog, 2006).

*Motivation to trust valence* is the belief that the change in increasing one's trust in others is beneficial to the individual (Holt, D. T. & Vardaman, 2013).

*Motivation to trust instrumentality* is the belief that a person will receive a reward if the trust performance expectation is met.

*Normative beliefs* is the person's belief that the reference group or individual thinks he / she should or should not perform the behavior (Miniard & Cohen, 1981).

*Propensity to trust* is a general willingness to trust others, regardless of social and relationship-specific information (Mayer et al., 1995). There are additional character traits which impacts trust developmental readiness, such an individual's tendencies of benevolence towards others and a tolerance for differences in trust.

*Readiness* is defined as change acceptance, as well as the extent to which employees believe that such changes are likely to have positive implications for themselves (Armenakis et al., 1993).

*Self-Efficacy* is defined as an individual's level of confidence that they can develop a specific ability or skill for employment in a specific context or role; in this case, ability to trust others (Bandura, A., 1977; 1986) .



*Trust* is defined as the willingness of a party to be vulnerable to the actions of another party based on the expectations that the other will perform particular action important to the trustor, irrespective of the ability to monitor or control that other party, (Mayer et al., 1995 p.712).

*Trusting beliefs* are defined as an individual's perception of a person's competency towards trusting, honesty, and benevolence (McKnight et al., 1998).

*Trusting stance* is the degree to which an individual consistently deals with people regardless of whether people are reliable or not, by dealing with people as though they are well-meaning and reliable. It is a conscious choice to trust people until they prove untrustworthy (McKnight et al., 1998).

*Trustworthiness* "concerns the perceived characteristics of the trustee that serve as the primary basis on which individuals are willing to accept vulnerability" (Dirks & Skarlicki, 2009 p. 137).

## **Chapter II: Review of The Literature**

For the purposes of this dissertation research, developmental readiness to trust is defined as an individual's ability, orientation, and openness to learn to increase trusting behaviors. Trust is complex in any form. It originates within the individual (Rousseau, Sitkin, Burt, & Camerer, 1998), and it is a reciprocal action in the workplace, meaning that one is required to trust and to also be trusted (Korsgaard, Brower, & Lester, 2015). Trust is a psychological condition that is not easily observable. The earliest research on trust theory was Rotter's Interpersonal Trust Scale, based partly on the Marlowe Crowne social desirability scale (Crowne & Marlowe, 1960), which assessed honesty, self-deception, and social desirability. This dissertation study relied on the Mayer et al. (1995) definition of trust, which involves the willingness of a party to be vulnerable to the actions of another party, based on expectations of others irrespective of monitoring or controlling.

Trust has deep impact and influence in the workplace. According to a New York Times article describing research performed in 2012 (Duhigg, 2016), Google researchers were surprised by the results of a study on high performing teams that emphasized the importance of psychological safety for team effectiveness. In fact, psychological safety was identified as the one differentiator of team performance. The term psychological safety was introduced by Edmondson (1999), who described psychological safety as "a sense of confidence that the team will not embarrass, reject, or punish someone for speaking up" (p.354); this included the sense that it was safe for a team to take risks and make mistakes. According to Koopmann, Lanaj, Wang, Zhou, and Shi (2016), psychological safety is an indicator of the quality of team interpersonal relationships. Importantly, Edmondson (2004) argued that trust is a prerequisite and necessary condition to increase team psychological safety.

Edmondson (1999) described trust as an individual's decision to give others the benefit of the doubt, whereas psychological safety is another's decision to provide you with the benefit of the doubt. Based on evidence from recent studies, Edmondson argued that the presence or absence of psychological safety tends to be a group-level experience, as the construct characterizes the team as a unit and is conceptualized as being emergent from the collective. This is "unlike trust, which pertains primarily to a dyadic relationship, whether between individual or collective such as firms..." (Edmondson, Amy C., 2004 p. 244). Our willingness and ability to trust others has significant impact the presence of psychological safety in the workplace. While my dissertation research was not focused on psychological safety, the impact of trust on safety substantiated the need to focus research on the early beliefs and intentions of an individual regarding trusting others at work before one is called to trust others.

### **Why Developmental Readiness to Trust?**

Developmental readiness to trust includes an individual's propensity to trust, along with the ability and the motivation to attend to and make meaning out of new knowledge of trust and of trusting behaviors. Developmental readiness to trust considers the extent to which employees hold positive views of the need for trust and the belief that trusting others will have positive implications. Brockner and Siegel (1996) agreed, stating that, "The fact that trust refers to expectations about another's behavior suggests that its bases can be decomposed into at least two broad categories: motivation (or intent) and ability" (p. 406). Furthermore, they indicated that motivation and ability impacted the level of trust, stating that:

[T]rust should be highest when the trustor believes that the trustee has both the motivation and the ability to live up to its commitments: trust should be lowest when the trustee is seen as lacking both the intent and the ability to behave in a trustworthy fashion (Brockner & Siegel, 1996 p. 406).

My dissertation study builds on previous research on change and on trust formation where studies (Dietz & Den Hartog, 2006; Prochaska, J. O. & DiClemente, 1983; Prochaska, JM et al., 2001), have distinguished between an individual's intention to trust and the decision to trust, where will-do is shifted to the action of trusting. This same distinction is made in literature on developmental readiness to lead where readiness to develop is distinct from readiness to enact (Reichard & Beck, 2017) and readiness to trust represents an intention to take action within a short time frame.

There are theoretical implications raised by this research for connecting how we think about trust with how we feel about trust, and how we act in a trusting manner. From a theoretical perspective, this research supports expanding the constructs developmental readiness and developmental readiness to lead to include this new area of trust development. The discussion in this study is intended to increase our understanding of an individual's ability and motivation to trust before entering into a relationship. This includes examining the theoretical underpinnings of trust, developmental readiness to change, and ability and motivation to trust research for comprising developmental readiness to trust.

Regarding trust itself, the literature review demonstrates the complexity of trust with 32 different types of trust identified from past studies in this literature review. This leads to a discussion of propensity to trust, initial trust, and the conditions for trust. Literature on change and developmental readiness provides the foundation for conceptualizing developmental readiness to trust as ability and motivation to trust. This includes extending and applying Prochaska and DiClemente's (1983) stages and process for change where developmental readiness takes place in the preparation stage of change. Using TTM (Prochaska, JM et al., 2001) stage-based approach to change provides the understanding that each stage is distinct, and where

contextual and individual differences play a role in motivating change (Narayan, Steele-Johnson, Delgado, & Cole, 2007). This is followed by the conceptual basis for developmental readiness to trust and its components.

## **Literature Review**

This review on developmental readiness to trust includes four areas of research: trust, change, motivation, and developmental readiness. My review involved searching library databases, including PsycINFO, Web of Science, ABI/INFORM, and Google Scholar, using keywords and mining journal reference tables for relevant research. In the area of change and readiness, keyword searches included change, change models, change frameworks, readiness to change, motivation to change, developmental readiness to change, readiness to trust, readiness factors, resistance to change, change disposition, change traits, readiness disposition, readiness traits and leader developmental readiness. In the area of trust, keyword searches included trust antecedents, interpersonal trust, trust propensity, trust beliefs, trust intentions, trust exchange, trust development, trust formation, trust processes, trust measurement, trust locus, and psychological safety. Searches included: trust and readiness; trust and change; as well as trust and developmental readiness. Searches on motivation included: types of motivation, motivation formation, trust and motivation; trust and intentions; motivation development; and motivation to change.

This search required an inspection for relevance along with an examination of the relationship to trust in groups for big picture. I eliminated research involving simulations or games regarding trust that assessed and predicted behavior. My goal was to gain a deep understanding of individual trust formation and development, to evaluate the conditions and behaviors that foster positive trust beliefs and intentions in an individual for trusting others at

work. In parallel, I examined change conditions and behaviors, which enable positive transformation, along with the role of individual readiness for accelerating developmental change.

### **Complexity of Trust**

The literature review for this dissertation identified 32 types of trust, revealing the contextual implications and complexity of trust both from a cognitive and affective perspective. “Trust, in particular, is both a set of beliefs and expectations and an emotional ("affective") attitude, and not as two separate components, but as a single integrated emotional structure” (Flores & Solomon, 1997 p. 62). See Table 2.1 for trust types, definitions, and authors for reference in alphabetical order.

Table 2.1

#### *Description of Types of Trust*

Terms	Definition	Reference
Affective trust	Affective trust is the process where both parties engage in reciprocity of care and concern.	McAllister, 1995
Calculus-based trust	Emerges from a focused and systematic cognition evaluation of another party based on calculation of the outcome of a relationship.	Lewicki & Bunker, 1996
Category-based trust	Trust is predicated on trustee's social or organizational category; presumptive trust.	Meyerson, Weick, Kramer, 1996
Cognitive trust or character	Refers to trust based on an instrumental evaluation of the personal characteristics of the leader, including integrity, competence, reliability and dependability.	McAllister, 1995
Collective trust	Trust elevated to a shared perception by followers that the top management team attempts to act in accordance with stated beliefs about goals.	Cummings & Bromiley, 1996

Terms	Definition	Reference
Compensatory trust	Based on the prediction that some members in a collective may fail to engage in desirable behavior and individuals may engage in compensatory actions to offset this.	Kramer et al. 1996
Conditional trust	This is the state of trust in which both parties are willing to transact with each other; preferred option to distrust since there is a stronger incentive to trust.	Jones and George, 1998
Deterrence-based trust	Threat of external force and sanctions; compliance focused.	Rousseau et al., 1998
Dispositional trust	The predisposition to trust others is a dispositional orientation.	Rotter, 1967
Elicitative trust	Motivated by the belief that one may induce others to engage in trusting behaviors by engaging in acts of trust themselves.	Kramer et al. 1996
Exchange-based trust	Sometimes referred to as relation-based trust; based on personal ties	Colquitt, 2007
Expressed trust	Trust towards others.	Lusher et al. 2012
Generalized trust	Trust in other people when there is no information to judge whether they are trustworthy or not.	Rotter, 1967
History-based trust	Individual's perception of other's trustworthiness is an experienced based process; trust is a function of the cumulative interaction.	Kramer et al. 1996
Identification-based trust	Over time parties come to know one another, developing shared values and a collective identity.	Lewicki and Bunker, 1996
Interpersonal trust	The expectancy held by an individual or group that the word and promise of an individual or group can be relied upon.	Rotter, 1967
Institution-based trust	Reflects the security due to structures or guarantees.	McKnight et al., 1998
Knowledge-based trust	Trust develops over time as knowledge is gained through experience.	Lewicki & Bunker, 1996, p.121

Terms	Definition	Reference
Moralistic trust	The belief in the moral rightness of trust, rather than the risk in trusting others.	Kramer et al. 1996
Mutual trust	Dyad where individuals come to share perception trust of each other, the mutual feature being the level or degree of trust.	Korsgaard et al., 2015
Perceived trust	Perceptions of being trusted by others.	Lusher et al., 2012
Personalized trust	Trust involving people who are personally known.	Rotter, 1967
Relational-based trust	The experience and observation of trust over time.	Rousseau et al., 1998
Role-based trust	Trust which relies on the position or role to influence and or hold power in a relationship.	Meyerson et al.1996
Rule-based trust	Based on a shared understanding of formal and informal rules of conduct.	Meyerson et al.1996
Swift trust	A team whose members share a common purpose and task that is bounded by a finite time frame; group assumes trust initially.	Meyerson et al.1996
Technology trust	The subjective probability by which organizations believe underlying technology infrastructure is capable of facilitating transactions according to their level of confidence.	Ratnasingam, 2005
Thick Trust	Trust in people who we are personally familiar.	Sturgis and Smith, 2010
Thin Trust	Trust in people we may not know personally.	Sturgis and Smith, 2010



Terms	Definition	Reference
Transitive trust	Due to the facilitation of transferring positive expectations from one known target to another less known one; drawing on and or benefitting from knowledge of others demonstrated trustworthiness.	Kramer, 2010
Unconditional Trust	This is characterized by a trust based on past decisions and experiences of the trustee. Unconditional trust assumes the trustee is trustworthy.	Jones and George, 1998
Volitional trust	Intention and decision to render oneself vulnerable to another person.	Heyns, 2015

This dissertation focused on trust prior to a social encounter when the beginning of trust formation requires trust to be created when it does not exist. Researchers (McKnight et al., 1998) supported the theory that individuals do not start with or at a zero level of trust. They found that initial trust between individuals in the workplace was based on an individual's disposition to trust or on institutional cues and that in new encounters, individuals engage in cognitive processing involving trust beliefs and trust intentions. Examining initial trust was supported by Poole and Van de Ven (1989) who argued the processes by which trust forms initially are not the same as those by which it forms later. Given the context of this research is the workplace, conditional trust was used for the type of trust assessed, where conditional trust is described as when at "the beginning of a social relationship when each person does not simply assume that the other is trustworthy; rather, each suspends belief that the other's values may be different from their own" (Jones, G. R. & George, 1998, p. 534). This study built on existing research for providing the conceptual areas of trust which were used to describe developmental readiness to trust.

Next is an examination of trust formation which includes measuring trust, initial trust, and trust conditions followed by research on change and developmental readiness. This leads to a description of the three areas of trust comprising developmental readiness to trust in the workplace, specifically ability and motivation to trust.

### **Measuring Trust**

Measuring trust is rooted in seminal work by Julian Rotter with his scale to measure interpersonal trust assessing individual behaviors associated with benevolence, integrity, competence and propensity to trust. This grew to include research and scales for measuring trust in teams, trust in management, and trust in organizations as a few examples. Rotter's scale development (1967; 1971) relied on social learning theory, the Marlowe-Crown Social Desirability Scale (Crowne & Marlowe, 1960), and previous research investigating interpersonal trust using game theory. Rotter's trust scale has further been used in a broad range of research measuring trust and propensity to trust such as propensity to trust and intention to trust (Gill et al., 2005), propensity to trust and social exchange (Bernerth & Walker, 2009), propensity to trust and trustworthiness (Colquitt et al., 2007), and a validated scale to measure propensity to trust (Frazier et al., 2013). Trust in management and organizational trust has been measured by Mayer et al. (1995) and Mayer and Davis (1999) with Mayer and Davis's scale utilized by Huff and Kelley (2003) to measure levels of organizational trust. In addition further scales for measuring organizational trust were published by Rawlins (2008; 2009), and Carvell (2012).

All of these previous studies were focused on measuring the conditions leading to trust and specific targets of trust using meta-analysis and scales. Table 2.2 highlights the research where scales were developed and used for measurement in the workplace ranging from interpersonal trust to organizational trust.

Table 2.2

*Scales to Measure Trust*

Researchers	Date	Measurement Context
Rotter	1967	Interpersonal trust
Walker & Robinson	1979	Early trust measure
Butler	1991	Early trust measure
Mayer, Davis, & Schoorman	1995	Organizational trust
Mayer & Davis	1999	Trust of management
Huff & Kelley	2003	Levels of organizational trust
Spector & Jones	2004	Trust and mistrust
Tzafrir & Dolan	2004	Employee trust
Dietz & Den Hartog	2006	Framework organizational trust
Rawlins	2008	Organizational trust and transparency
Vidotto, Vicentini, Argentero, & Bromiley	2008	Organizational Trust Inventory, OTI
Costa & Anderson	2011	Trust within teams
Bulloch	2013	Interpersonal trust
Frazier, Johnson, & Fainshmidt	2013	Propensity to trust
McLeary & Cruise	2015	Organizational trust

My research expands on the existing research for measuring trust, which indicated the salience of a specific situation or specific other to be trusted by investigating trust in the case with no referent. This study proposed that focusing on activating an individual's developmental readiness to trust others involved assessing an individual's ability to trust, and their motivation to

trust others in general versus focusing on the conditions of trust in a specific person or situation. This leads to the examination of when and how trust begins and trust antecedents.

### **Where Does Trust Formation Begin?**

Understanding trust origination is important for examining an individual's readiness to develop, the key conceptual areas examined for this study included early influences on trust, such as an individual's propensity to trust, initial trust, newcomer trust, and swift trust. Next is a review of the research and relevance of propensity to trust and its impact on initial trust.

### **Propensity to Trust**

Propensity to trust was identified in early research by Rotter (1967) as a stable individual characteristic representing an individual's disposition to trust or distrust others. Propensity indicates a consistent tendency to be willing to trust others across a broad spectrum of situations and trust targets (McKnight et al., 1998). This suggests that every individual has some baseline level of trust that will influence their willingness to rely on the words and actions of others. Propensity to trust acts like a filter for interpreting the actions and perceived trustworthiness of others, which then provides a basis for trust formation (Colquitt et al., 2007), while also influencing fairness perceptions. Bianchi and Brockner described this in the following way stating that, "People who were more trusting had more positive perceptions of procedural and interactional fairness, even when they were exposed to identical fairness information" (Bianchi & Brockner, 2012 p. 46). Research has shown that trust judgments are adapted to pre-existing trust beliefs, indicating that people are faster at recognizing words that signal untrustworthy behavior in others (Gurtman, 1992).

Propensity to trust can also have a significant impact at the team level. Diversity in propensity to trust (Ferguson & Peterson, 2015) can reduce trust, impacting the cognitive and

affective responses in groups and creating a negative initial impact on trust. This diversity and its impact in turn, can affect group climate and subsequent team development. When members of newly formed groups have initially low trust in each other, they tend to minimize their vulnerability towards one another (Boss, 1978; Butler, John K. Jr, Cantrell, & Flick, 1999; Costa & Anderson, 2011) inhibiting trust formation. Propensity to trust can predict collectivism and positive social exchange, where individuals with high propensity to trust also engage in organizational citizenship behaviors (Dyne, Vandewalle, Kostova, Latham, & Cummings, 2000). Individuals with a high propensity to trust promote trusting behaviors generating trusting behaviors in others, Heyns and Rothmann stated:

Individuals with a higher propensity to trust will tend to have more positive perceptions regarding the trust target's trustworthiness in terms of ability, benevolence, and integrity characteristics which, in turn, will promote the development of trust and the willingness to actively engage in trusting behaviours. (Heyns & Rothmann, 2015, p. 8)

McKnight et al. (1998) argued that initial trust formation in organizational relationships distinguished two types of disposition to trust: faith in humanity and trusting stance. Faith in humanity is a belief that others are typically reliable and well meaning; while trusting stance is when one believes that dealing with people as though they are well meaning and reliable reflects a conscious choice to trust. Faith in humanity is shaped by trust related experiences while "trusting stance does not lead to beliefs about the other person; rather, it directly supports one's willingness to depend on that person" (McKnight et al., 1998, p. 478). Research by Spector and Jones (2004) reinforced the positive impact that trusting stance has on initial trust levels in the workplace. Frazier et al. (2013) utilized McKnight et al. (1998) in a similar conceptualization of trusting stance in a validated scale to measure propensity to trust. Frazier et al. identify four areas of

propensity to trust which were used in this research, these are trust tendency, stance, faith in humanity, and in newcomers.

**Moralistic trust.** In addition to propensity to trust faith in humanity, moralistic trust is based on the belief in the goodwill of others, (Yamagishi & Sato, 1986). However moralistic trust is different than propensity in that it is a general outlook on human nature and does not rely on disposition. Moralistic trust is not based on reciprocity and is viewed as a moral imperative to treat people as if they were trustworthy (Uslaner, 2010), and is a statement on how we should behave. Central to moralistic trust is the belief that most people share your fundamental values. In moralistic trust, trustors believe that intentions and behavior reflect the traits of the trustee, rather than the situation. This is consistent with the notion that trust has a moral element and is associated with an expectation of the trustee's integrity. However, this is not always a good assumption, thus:

[A] frequent criticism of moralistic conceptions is that they encourage trust in situations where it is not warranted, leaving individuals vulnerable and open to exploitation. To guard their theories against this kind of criticism, writers on moralistic trust carefully distinguish trust from concepts such as gullibility. (Bulloch, 2013, p. 1292)

Moralistic trust is the belief others share your fundamental moral values and as such we face fewer risks seeking agreements (Uslaner, 2002). Moralistic trust is not a prediction of trusting actions and this study adopts Uslaner views of moralistic trust from a valence point of view.

**Propensity to trust and optimism.** Frazier, Johnson, Paul, & Fainshmidt (2013) compare and distinguished between propensity to trust and optimism, with the examination of trust formation. These scholars state that, "...propensity to trust captures one's general tendencies in social interactions with others rather than a generally positive worldview that is captured by optimism" (2013, p. 87). Optimism represents holding general positive views of others and the

world which leads to positive expectations. Optimism, is defined as an “attributional style that explains positive events in terms of personal, permanent, and pervasive causes and negative events in terms of external, temporary, and situation-specific ones” (2007, p. 778). Frazier et al. (2013) indicated that optimism has some conceptual overlap with propensity to trust given both are about favorable expectations. This dissertation study relied on the argument these authors make in that optimism represents a positive view of the future while propensity to trust is specific to making oneself vulnerable to the actions of another unidentified individual, resulting in excluding optimism for capturing trust.

### **Initial Trust, Newcomer Trust, and Swift Trust**

Three types of trust which involved the earliest stages of trusting are relevant given developmental readiness involves the earliest stage of trusting others. Initial trust refers to the early stage of trust, when parties have little to no experience interacting with each other (McKnight et al., 1998). Two of these three types, initial trust and newcomer trust, rely heavily on an individual’s disposition to trust, particularly during a first encounter, when individuals have had little opportunity to observe each other’s behavior. The third type, swift trust, involves trusting typically associated with virtual teams (Crisp & Jarvenpaa, 2013; Germain & McGuire, 2014; Meyerson et al., 1996) and does not rely on propensity to trust.

Research on early trust formation in organizations (McKnight et al., 1998) examined the levels of initial trust formation. They argue that initial trust formation can be conceptually broken out into two constructs, trusting intention and trusting beliefs. Intentions reflect one’s willingness to depend on another person in a given situation, while beliefs represent the judging of another person’s competency, honesty, and benevolence. McKnight, Cummings, and Chervany (1998)

classified four types of initial trust: (1) Calculative-based trust based on rational considerations; (2) Personal trust developed during childhood; (3) Cognition based trust linked to one's experience; and (4) Institution based trust that represents the protection provided by institutions. This conceptual framework indicates that early trust forms due to both the propensity to trust and institution-based trust and they argued that a moderate to high level of initial trust is grounded in personality factors that predispose individuals to trust others more generally.

Research on factors regarding trust formation between team members (Spector, M. D. & Jones, 2004) found a positive relationship between initial trust and trusting stance. Of greater interest were the findings that indicated that, "men possess a higher initial trust level for other men than they do for women. Women, however, showed no differences in trust level across gender" (Spector, M. D. & Jones, 2004, p. 317). According to Yu et al. (2014) :

Both faith in humanity and trusting stance are likely to determine initial trust-related behavior with strangers. However, faith in humanity produces trust-related behavior based upon the expectation that trust will be reciprocated, whereas trusting stance produces trust-related behavior based upon rules that do not require expectations of reciprocity. (p. 17)

Chen, Yu, and Chien (2016) and Lee and Choi (2011) argued that initial trust and trusting belief are distinct concepts in the trust process where initial trust reflects willingness to trust without prior knowledge, while trusting belief is an outcome of interactions. Newcomer trust implies initial trust and research on newcomer trust and diversity in propensity to trust (van der Werff & Buckley, 2014), examined the effect due to differences propensity on the level of trust between newcomers in a group. van der Werff and Buckley (2014) indicated that newcomers are not starting from a baseline of zero trust due to socialization, which may transpire prior to group interaction. However, the influence of one's disposition to trust is not limited to such situations, as propensity can still shape trusting beliefs even after more information about the trustee



becomes available (Searle et al., 2011). Fundamentally, initial trust and trust of newcomers rely on faith in humanity and trusting stance, both which are regarding propensity to trust.

Swift trust may also be considered initial trust where swift trust involves positive practices for trusting others in a specific context. Swift trust is a presumptive, precognitive form of trust (Germain & McGuire, 2014) that describes team members who have not yet built a working relationship and oftentimes is a factor in virtual teams and global virtual teams. Swift trust refers to the need for team members to suspend uncertainty due to the nature and constraints of virtual and temporal teams. Swift trust has been defined as a practice that involves the collective perception and ability to relate matters that are capable of addressing topics pertaining to vulnerability, uncertainty, risk and expectations in short-lived temporary organizations (Meyerson et al., 1996). While swift trust is defined as a collective perception, the relevance to this research involves its emphasis on a different set of antecedents due to its temporal nature. Due to the time constraints involved with swift trust, Meyerson et al. argued that predispositions, categorical assumptions, and implicit theories are critical to trust development. They go on to posit that swift trust is an example of thin trust due to the temporal nature of the group, less about interpersonal interacting and more about the cognitive decision to take action. Swift trust is an example of initial trusting which, while context specific, individuals make the decision to trust early to avoid barriers to trust which may impede interactions which are conducted virtually. Swift trust is a demonstration that individuals can adapt to trust earlier and more than they might otherwise.

**Situation context.** In research that examined the relationship between propensity to trust and trusting intention, some studies found a positive relationship between the two (Dyne et al., 2000; Mayer & Davis, 1999), while others have found no relationship (Gill et al., 2005). Propensity is thought to drive trusting beliefs, especially when there is little information about

the trustee, such as during the early stages of a relationship (McLeary & Cruise, 2012), and in ambiguous situations (Gill et al., 2005). According to Mischel (1977), situations can be characterized as being on a continuum that goes from weak to strong. Gill et al. (2005) characterized weak situations as having “highly ambiguous behavioral cues that provide few constraints on behavior, and do not induce uniform expectations” (p. 293), which can impact trust formation. In weak situations, individuals can exercise personal discretion, and personal differences which can then influence the subsequent behavior that’s observed. Strong situations have “salient behavioral cues that lead everyone to interpret the circumstances similarly and induce uniform expectations regarding the appropriate response” (p. 293). Strong situations may involve constraining and suppressing differences. In well-defined strong situations, Gill et al. (2005) suggested propensity to trust is likely to be overwhelmed by the situation, and the specific experiences of the trustor. Initial trust situations also can represent weak situations in that trustors have little information about a trustee, that results in ambiguous cues and unclear expectations.

While developmental readiness to trust is not based necessarily on having a relationship, understanding the situational context and degree that individual’s rely on propensity can help in shaping intervention strategies for trust building. Given the important role propensity to trust has on initial trust formation and as motivation for trusting others, it was included in my analysis of an individual’s readiness to trust others. Based on previous research it was unclear going into this study if propensity to trust was a component on its own or if it was regarding trust beliefs which is about ability to trust or regarding its role for motivating trust. This leads to further examination of trust transactions and conditions of for trust.

## **The Conditions for Trust Formation**

Four dimensions have been found to form the conditions for trust: ability, integrity, and benevolence, and an individual's propensity to trust (Mayer et al., (1995). Researchers (Colquitt & Rodell, 2011; Mayer et al., 1995; Zsolnai, 2005) distinguished between trust, propensity to trust, and trustworthiness. They conceptualized the antecedents of trust as ability, integrity, and benevolence with trustworthiness being a construct which comprises all three of these facets, while propensity to trust, reviewed previously, is considered a stable, dispositional individual difference. Next is a review of the three antecedents of trust for understanding their relationship to developmental readiness to trust others, competency, integrity and benevolence.

### **Competency**

Our ability to be trusted or to trust others is the combination of skills and competencies that make up our expertise and that enable an individual to have influence (Mayer et al., 1995). This influence is domain specific, with synonyms such as competence and perceived ability highlighting the task nature of this dynamic. Ability is 'that group of skills, competencies, and characteristics that enable a party to have influence with some specific domain' (Mayer et al., p. 717); it captures the 'can-do' component of trustworthiness (Colquitt et al., 2007).

Mayer et al. (1995) described a model of perceptions of trustworthiness of the trustee that represented the antecedents to interpersonal trust. Research defining trust as an ability (Dowell, Heffernan, & Morrison, 2013) has identified three drivers of ability-based trust: performance, expertise, and communications competency. Dowell et al. (2015) argued that performance competency is cognitive in nature, as it involves rationale thought processes with three themes, which are frequency, obligation fulfillment and cooperation. Early trust research indicated that ability appears to be a more important predictor of trust for coworkers, while integrity is more

important for trust in people occupying higher positions of leadership (Colquitt et al., 2007). More recent research posed a different argument, positing that ability is not related to trust of coworkers in jobs that are low in complexity (Tan & Lim, 2009).

### **Integrity**

Integrity is defined as “the trustor’s perception that the trustee adheres to a set of principles that the trustor finds acceptable” (Mayer et al., 1995, p. 719). Mayer et al. argued that integrity can be judged by examining previous behaviors; reputation; the similarity between the behavior of a trustee and the trustor’s internal beliefs; and the consistency between words and actions. Integrity is the perception that a trustor holds of the trustee, including a judgment of the trustee’s integrity (Colquitt et al., 2007). The trust that one party has for the other involves the character judgment of the trustor (Bitmis & Ergeneli, 2013; Gabarro, 1978). Many things can contribute to what impacts the perception of integrity that the trustor holds, including past actions, morals, values in use/displayed and guiding personal principles and action. Furthermore, scholars argue that integrity is the primary driver of trust decisions regarding typical tasks in work groups, meaning that integrity is more important than competency (Colquitt et al., 2007).

The notion of contractual trust is similar to integrity in that both involve keeping promises and agreements (Dowell et al., 2013; Dowell et al., 2015). Dowell et al. (2013) found three drivers for integrity trust: honesty in what is said; honesty in actions; and candid, open communication. Congruence between an individual’s actions and words, and in being candid, were shown via their communication to others to develop trust integrity.

### **Benevolence**

Benevolence, referring to the trustee’s intention to act well towards others, without having any personal profit motives (Schoorman et al., 2007), is an important affective condition for trust.

In other research, benevolence corresponded best to the ‘will-do’ component of trustworthiness (Colquitt et al., 2007), and was closely associated with synonyms, such as loyalty, openness, caring and supportiveness (Mayer et al., 1995). Dowell et al. (2013) identified benevolence trust drivers as discretionary activities that conveyed a friendly attitude. Trust is fostered (Cummings & Bromiley, 1996) when trustors believe that another person will not take advantage of them. Benevolence perceptions on the part of the trustee, may be biased by individual traits or status, such as one’s agreeableness (Martela & Ryan, 2016; Piff, Kraus, Côté, Cheng, & Keltner, 2010) and research on trust in coworkers and organizations (Tan & Lim, 2009) showed that benevolence is significant because it precedes trust formation (Cook, J. & Wall, 1980).

The focus of this research is on a trustor’s perception of their own willingness to trust others. Since ‘can-do’ does not necessarily result in ‘will-do’, it is evident that benevolence affects trust formation separately and independently of ability (Colquitt et al., 2007). In this context, having the ability to trust does not necessarily mean someone is willing to trust.

**Trustworthiness.** According to Mayer et al. (1995), trustworthiness is an individual’s interpretation of the three antecedents of trust, specifically competency, integrity, and benevolence, and is measured on a continuum where trustworthiness is considered a primary attribute associated with leadership (Caldwell, Hayes, & Long, 2010). Earlier research (Flores & Solomon, 1998) argued that the concept of trustworthiness is central to predicting trust. In research on risk taking and job performance (Colquitt & Rodell, 2011) scholars argued that trustworthiness is a combination of ability, integrity and benevolence, and that perception of any of these facets can increase or decrease the perceived trustworthiness of others.

While earlier research on trust indicated that benevolence and integrity might be a single dimension, Colquitt and Rodell’s (2011) study indicated the importance of both as having a

unique relationship with explaining the formation of trust, both representing cognitive and affective sources of trust (Lewicki & Bunker, 1996; McAllister, 1995). If our evaluation of others' trustworthiness is vital for predicting trust formation, then focusing on our ability to trust others is essential for increasing trustworthiness at the individual level. The literature on the conditions for trust laid the groundwork for understanding what contributes to the existence of trust. Next is a review of the literature on developmental readiness and change used for defining the preconceived components for the new construct developmental readiness to trust.

### **Developmental Readiness and Change**

Development has been defined by various theorists, such as in Loevinger et al. (1985) theory of ego development, which focused on explaining how people make meaning of the world around them, and how they evolve through more complex stages over a lifespan. According to Loevinger (1985), growth, or consciousness development, is followed by increased self-awareness, interpersonal awareness, and the capacity for reflection. Readiness, on the other hand, is the extent of change acceptance and belief that changes are positive (Armenakis et al., 1993). Furthermore, Vincent, Denson, and Ward (2015) argued that the consciousness development process is likely to be mediated by enduring psychological and personality factors and that such factors, when considered together, may allow for an assessment of an individual's readiness for development.

### **Developmental Readiness to Change**

Developmental readiness to change required examining development of readiness and change literature for extending the concept of developmental readiness to change and developmental readiness to lead to developmental readiness to trust. Readiness is defined as change acceptance, as well as the extent to which employees believe that such changes are likely

to have positive implications for themselves (Armenakis et al., 1993). Early research on readiness to change focused on an individual's resistance to change starting with an examination of an individual's personal tendencies towards change (Oreg, 2003; Oreg et al., 2008). Oreg's research validated a scale that measured an individual's inclination towards change that was used to predict resistance resulting in four factors describing an individuals' disposition towards change: "These are (a) routine seeking, (b) emotional reaction to imposed change, (c) short-term focus, and (d) cognitive rigidity" (Oreg, 2003, p. 690). Oreg's scale comprised risk tolerance and positive self-concept factors for measuring comfort with change. Understanding an individual's comfort and tolerance for risk can predict cooperation and or resistance. Research on change (Oreg et al., 2008) and on trust (McEvily & Zaheer, 2004) has asserted that it is important to consider both the target of change, as well as an individual's disposition regarding the change.

McEvily and Zaheer (2004) argued that trust can be changed, and demonstrated that trust can be created by deliberate actions, that included identifying shared interests, developing common expectations, leveraging a critical mass of influence, and compressing networks into physical space and time. Vakola (2014) identified several key individual readiness factors: change appropriateness; belief in support from management; belief in personal capability to change; and the belief that change is beneficial. Using Holt's (2007) scale, individual readiness to change is based on the interaction of our personal predispositions and situational responses, which are affected by an individual's cognitive and emotional processes.

This dissertation involved assessing an individual's disposition towards changing, specifically, acceptance that changing by increasing their trust in others is positive. This is an individual's disposition towards increasing the level of trust of others versus an individual's disposition towards trusting others. An individual's disposition to change the level or degree of

trust is important for evaluating individual readiness for development to trust, by directly trying to understand an individual's motivation to change it. Oreg et al.'s (2008) research reinforced the role of character disposition in predicting resistance and to understanding attitudes towards change and specifically relevant in this dissertation with regards to trust.

Much like trust, readiness involves both cognitive and affective processes. Rafferty and Simons (2006) introduced an integrated model of readiness, which assessed individual and system readiness along with contextual factors. Shifting to a readiness mindset requires influencing attitudes and beliefs to change behavior. "In this battery, readiness for change is conceived as a multifaceted concept that comprises an emotional dimension of change, a cognitive dimension of change, and an intentional dimension of change." (Bouckennooghe et al., 2009, p. 561). More recently Vakola (2013) conceptualized readiness as a combination of an individual dimension and an organizational dimension. Rafferty and Simons (2006) reduced personal characteristics for change to two factors: positive self-concept and risk tolerance. In addition, Rafferty and Simons argued that the area representing the affective element of change readiness has been omitted in previous research, which I will attempt to address in my dissertation research by measuring the affective nature of trusting others.

Next is a review of how readiness applies to the stages of change for extending to readiness to change trust. Prochaska and DiClemente's (1983) trans-theoretical model (TTM) is used to examine the change readiness process. Introduced in 1983, the TTM proposed that change occurs in five cognitive stages: pre-contemplation, contemplation, preparation, action and maintenance. "The word *transtheoretical* was used to describe a universal change process that applied to all human behavioral change, and that the process of change is similar for all individuals" (Tyler, C. L. & Tyler, 2006, p. 47). In the TTR model, readiness for change equates



to the preparation stage, where individuals have positive attitudes towards change and indicate a readiness to take action.

In the precontemplation stage, individuals have no awareness or thought to change, and have no motivation to change in the next six months. In relation to trust, individuals in this stage may not recognize that their behavior may have negative consequences for interpersonal trust. When confronted with relevant scenarios, they may be unable to identify trust issues. Trust may not surface as an explicit value or principle for individuals at this stage.

When an individual moves to the contemplation stage, they become aware of a problem, and acknowledge that possible shifts in behavior may occur. In the second stage, individuals are aware that trust issues may be relevant to them and may require attention and care. Individuals are more receptive to learning about trust in this stage. In the preparation stage, an individual will shift towards intention for action, where the decision is made and action is taken. It is in the third stage where individuals have the intention to trust and the willingness to trust others. Ideally this is a stage where individuals gain new knowledge of trust, which provides them with an opportunity to examine their own thinking on trust. In the fourth stage, the action stage, individuals modify behavior and their focus is on full engagement in the change process. The shift to the final stage, the maintenance stage, occurs when the new behavior takes over and the change is sustained.

Prochaska et al. (2001) clearly linked progression through the stages of change to an individual's readiness for change. Results by Harris and Cole (2007) provided confirmation that pre-contemplation and contemplation refer to different motivations for change, and indicated that change efforts and interventions must be tailored for each. Harris and Cole's model suggests that individuals are on a continuum of change in relation to their awareness and intention to alter their

own behaviors. Other research has indicated (Norcross et al., 2011) that individuals in the pre-contemplation stage of change are not conscious of their underestimation of the pros of changing and their overestimation of the cons of changing.

Integrating Boyatzis' Intentional Change Theory (ICT) provides a model for leveraging the TTM model while providing a model of motivation for individual sustainable change. ICT explains development in terms of desired changes in people, and is portrayed by researchers as nonlinear and discontinuous (Boyatzis, Richard E., 2009; Boyatzis, Richard & McKee, 2006; Boyatzis, Richard E., 2006). In research on development, Boyatzis identified five states that describe the leadership development emergence process, starting with identifying an individual's ideal self, called core identity (Boyatzis, Richard E., 2008), followed by becoming aware of the real self. Applying this to trust development (Boyatzis, Richard E., 2006) requires an individual to reflect on their vision of ideal trust and to compare this to their actual ability to be trustworthy. The ICT discovery and emergence process of core identity and awareness of the current self can be connected to the TTM pre-contemplation and contemplation stages of development. Progressing from the stage of desire to increasing self-awareness of the real self, acknowledges the motivation in seeing the discrepancies between the two. This dissertation focused specifically on these two stages, pre-contemplative and contemplative areas of individual development for being ready to develop trust towards others.

Extending this research to trust readiness, in the pre-contemplation stage an individual is unaware of trust relevance, the dynamics of trust, and/or the benefits of trusting others in the workplace. In the contemplation stage, an individual is aware that trust is relevant and that it may need to be addressed. In the preparation stage, an individual believes that trust is positive, and they shift from intention to trust to trusting others. The preparation stage involves believing that

change can succeed, and is described as self-liberation, followed by the action and maintenance stages, where intrinsic and extrinsic rewards are experienced. ICT becomes more relevant when designing interventions to increase pre-contemplative and contemplative awareness around trusting others where strategies to reflect on ideal trust could potentially motivate increasing the desire and intention to trust others.

### **Developmental Readiness to Lead**

Research on developmental readiness to change was extended to the construct of developmental readiness to lead by Avolio and Hannah (2008; 2009) where they stated that increasing a leader's developmental readiness to lead will positively accelerate a leader's development. In making this extension they argue that developmental readiness to lead involves an individual's ability and motivation to lead.

When examining a multi-level view of organizations, Hannah and Lester (2009) discussed the relationship between developmental readiness to lead and building learning organizations. Their study targeted the leader's approach for building conditions for learning by examining the readiness of individual followers, the structure and conditions for learning, the promotion of knowledge diffusion along with taking action for improving the institutionalization of learning. Hannah and Avolio argued that both motivation and ability impact a leader's development.

Early theory-building suggests that leaders' motivation to develop is promoted through interest and goals, learning goal orientation, and developmental efficacy; while ability to develop is promoted through leaders' self-awareness, self-complexity, and meta-cognitive ability" (Hannah & Avolio, 2010, p. 1182).

While this dissertation is *not* investigating measuring trust in leadership, leaders play a role in setting the organizational conditions. Applied to the concept of trust, deconstructing

developmental readiness involves ability to trust, motivation to trust, and propensity to trust in the workplace.

### **Developmental Readiness and Trust**

This dissertation literature review set out to provide an overview of trust and developmental readiness to be clear on what needs to be measured. It highlights three main areas which are drawn upon for measuring and validating this new construct. Specifically, drawing on existing research for how to think about building a genuine state of trust before a relationship is formed and the conditions to intend to trust, which may or may not be known or exist. Next is a review of what comprises ability, trust beliefs and motivation, trust intentions, propensity to trust was discussed earlier, outlining what constitutes ability to trust and what motivation influences an individual's willingness to develop trust as a competency.

### **Ability to Trust, Trust Beliefs**

Trust beliefs are reflected in an individual's ability to trust. In research on the source of beliefs, according to Kaplan and Fishbein (1969), an individual's own beliefs are the best estimate of attitude, and that intentions can best be predicted by attitude. Ability to trust is defined as an individual's general competency to engage in trust decisions and actions; their self-perception of personal benevolence and integrity; and the ability to adapt (Colquitt et al., 2007). The domain of expertise for the purpose of this dissertation is trust. Thus, the scale developed in this dissertation is intended to evaluate an individual's perception of their own competency and their ability to trust others. Overall there are four areas which comprise ability to trust for this dissertation including competency, integrity, benevolence, and view of ability.

## **Ability to Trust Theory**

In examining an individual's ability to trust, it is worthwhile to note that Dweck and Leggett (1988) proposed two theories that people hold on ability. In the first, entity theory, individuals see ability as relatively fixed; whereas in the second, incremental theory, individuals believe ability can be increased with effort and learning. How one views ability can impact motivation to develop and in research on motivation Weiner (1985) argued that attribution theory has important motivational consequences both positive and negative. Bandura (1993) argued that students who have an entity theory are less likely to adopt learning goals because they believe that their learning will not raise their ability. This would indicate lower self-efficacy if they believed they could not raise their ability to trust. For the purpose of this dissertation study, assessing if an individual views their ability to trust as inherent, or as an acquired skill, as something that they were born with or as something that can be incrementally developed is considered an individual's view of their ability.

In addition, ability encompasses competency to trust, integrity, and benevolence. In research on trust formation, Dowell et al. (2013) listed three different drivers of competency trust, three drivers of integrity trust, and two drivers of benevolence trust. The competency-based trust drivers were performance, expertise and communication. The three themes of performance competency included frequency for modeling desired behavior, ability to meet obligations, and competency in communication. The three drivers of integrity trust were honesty, integral actions and candid responses. Honesty referred to truthfulness, honesty in what is done, and being frank in communication. The two forms of benevolence trust were discretionary activities and a friendly attitude. Perceived ability and integrity are different from perceived benevolence. Ability and integrity have stronger cognitive components (McAllister, 1995), whereas benevolence has

affective foundations. Integrity is distinct from ability in that ability in one domain does not predict ability in another domain, while integrity is evaluated globally (Jones, S. L. & Shah, 2016). While a breach in integrity can have negative consequences, a breach of ability may not.

This dissertation study relied on the definition of ability to trust measuring the three antecedents of ability to trust. Competency is interested in an individual's general competency to engage in trust decisions and actions. An individual's capability to trust included assessing an individual's perception of their success and confidence in trusting, and their understanding of trust dynamics for evaluating competency towards trusting others. Integrity assessed cognitive qualities including individual's self-views of honesty, consistency, accountability, and fairness while benevolence assessed affective qualities of trust such as caring and openness.

### **Motivation to Trust and Trusting Intentions**

Motivation to trust involves beliefs regarding the perceived importance of success and of probable outcomes that shape intentions. Motivational attitudes are shaped by our goals, our self-concept, and task difficulty, which are in turn shaped by social relationships, influences, and experiences. According to Fishbein's theory (Ajzen & Fishbein, 1970; Ajzen & Fishbein, 1972; Fishbein & Ajzen, 1975; Kaplan, K. J. & Fishbein, 1969), there are three primary determinants of an individual's intentions towards a behavior, in this case trusting others. These are an individual's attitude towards trusting others, perceived norms regarding trusting others, and self-efficacy with respect to trusting others.

Motivation can come in the form of previous experience and action outcomes. Expectancy of "success is a perception of general competence; it represents future oriented conviction that one can accomplish the anticipated task" (Cook, D. A. & Artino, 2016, p. 1000). This can be interpreted as I am unlikely to trust others if I do not believe I will be successful without their

assistance. Thus, the more one believes trusting will lead to good outcomes, the more favorable one's attitude will be towards trusting others. Bandura (1989) highlights that anticipated outcomes contribute to when people strive to gain beneficial outcomes, representing the belief that humans have agency over situations and efforts. Motivation can come in a number of forms including in the form of beliefs, which shape intentions, where the belief itself is motivational. An example of this is when your beliefs that a common goal can act as motivation for us to perform, this is labeled goal orientation. Researchers identify the role of self-efficacy as critical for motivation (Bandura, Albert, 1986; Chen, 2004; Reichard, Walker, Putter, Middleton, & Johnson, 2017), where an individual's self-efficacy beliefs serve to determine the level of an individual's motivation.

Overall there were six areas related to motivation to trust based on literature which were used for building the motivation to trust scale and items. These are the general motivation to trust, cognitive and affective, expectancy outcomes, specifically instrumentality and valence, self-efficacy, likelihood to trust, and learning goal orientation towards trusting. Each area and the literature support are reviewed next.

### **General Motivation to Trust**

Self-determination theory was used to support measuring an individual's general motivation to trust others in the workplace. In research on intrinsic and extrinsic motivation, Deci and Ryan (2000) maintain that an understanding of human motivation requires consideration of competence, autonomy, and relatedness. They stated that "to be motivated means to be moved to do something" (Ryan & Deci, p. 54), and that people have different amounts of motivation, as well as different types of motivation. The researchers wrote:

That is, they vary not only in level of motivation (i.e., how much motivation), but also in the orientation of that motivation (i.e., what type of motivation). Orientation of motivation concerns the underlying attitudes and goals that give rise to action—that is, it concerns the why of actions. (p. 54)

This research assessed general motivation to trust others, which involved intrinsic and extrinsic motivation and included an individual's affective orientation (Tyler, T. R. & Kramer, 1996) towards trusting others.

### **Expectancy-Value**

Expectancy theory (Vroom, 1964) has had a prominent position in research on motivation. Vroom's Valence, Instrumentality and Expectancy Model has served as a resource as it relates to interpretation and application for assessing expectations for motivating trust. Expectancy theory is classified as a process theory of motivation (Isaac, Zerbe, & Pitt, 2001) as it is about individuals' perceptions and interactions due to personal expectations. The expectancy-value theory of motivation considers the degree or expectancy of success, and the value of or intrinsic interest in the outcome (Atkinson, 1964; Vroom, 1964; Wigfield et al., 2009). According to Eccles and Wigfield (2002), expectancy focuses on beliefs about competence and efficacy, whereby different choices made are assumed to have costs associated with them. In addition Eccles and Wigfield argued that expectancies and values directly influence performance and task choice, which are cognitive outcomes, along with an individual's perceptions and attitudes, which are affective outcomes. Expectancy-value is related to the question "Can I do this task?" (Eccles & Wigfield, 2002, p. 110) and more specifically for this dissertation research, to asking the question "Can I trust others?". Individuals who answered the task question positively performed better and were motivated to select challenges.



**Instrumentality.** Instrumentality refers to the perceived relationship an individual sees between the level of performance and the achievement of positive outcomes. When individuals are extrinsically motivated, they engage in activities for instrumental or other reasons to reach a desired state such as receiving a reward. In contrast, when individuals are intrinsically motivated, they engage in activity due to interest in it and because they enjoy it (Eccles & Wigfield, 2002; Wigfield & Eccles, 2000).

**Valence.** Vroom defined valence as possible affective orientations toward outcomes interpreted as the importance, attractiveness, desirability, or anticipated satisfaction with outcomes (Vroom, 1964). For this study ability beliefs are distinguished from expectancy for success in that ability is focused on present and expectancy is focused on future, with expectancy requiring an understanding of previous experience in trusting others and its impact on trusting in the future. In addition, based on Uslander's (Uslander, 2002) research moralistic trust is identified as the valence of the belief that trust is morally right.

### **Self-Efficacy**

Self-efficacy is about beliefs an individual has about their capability and it forms the foundation for motivated action (Bandura, Albert, 1993; Zimmerman, Bandura, & Martinez-Pons, 1992). Self-efficacy activates learning processes which can serve to motivate individuals to increase trust of others. Perceptions of self-efficacy to trust reflect an individuals' belief regarding the extent to which their actions can influence the outcome of trust. Bandura (1977; 1986) defined self-efficacy as an individual's level of confidence that they can develop a specific ability or skill for employment in a specific context or role. Such confidence causes individuals to make greater efforts to develop those skills, as well as enhancing the level of effort applied to those experiences (Lord & Hall, 2005). Bandura (2005) characterized self-efficacy as involving strength, generality

and difficulty. Bandura (1993) distinguished between two types of expectancy beliefs: the belief that certain behaviors lead to certain outcomes; and the belief that one can perform the behaviors necessary to produce a predicted outcome.

The distinction between outcome expectancies and efficacy is a major determinant in goal setting, effort, and persistence. Self-efficacy to trust reflects individuals' beliefs regarding the extent to which they will make a difference in motivating and influencing trust outcomes. In other words, self-efficacy helps to achieve the outcomes.

Kramer, Brewer, and Hanna (1996) described two types of efficacy and trust: casual efficacy, which has to do with our own presumption of the impact of our own actions and social efficacy, which is the belief that one can influence trust in groups by first modeling trusting behavior themselves. The first is a casual efficacy and has to do with the presumed impact of one's own actions on the greater good. Will my trusting make a difference or be inconsequential? The second is social efficacy and is the belief that one can influence trust in groups socially. This is about an individual's belief to what extent can they induce others to engage in trusting acts. The concept of leader self-efficacy was core to motivation to lead in research conducted by Hannah (2006), who stated that leaders are the agents for their own leadership development. The second type of efficacy involves the trustor modeling the trusting behavior they want to induce in others. This dissertation incorporates an examination of self-efficacy in two ways, first is related to an individual's perception of their general ability and confidence to trust and second is related to motivating trust from an agentic view.

### **Likelihood to Trust Others**

Propensity to trust has been relied on in the past to predict trust. My research on developmental readiness makes a distinction between propensity and the transactional, reciprocal

nature of trust interactions for predicting trust. While propensity to trust involves an individual's tendency towards trusting in new situations, can we predict trust in other scenarios? Research on reciprocal trust (Nguyen et al., 2010) in the context of writing product reviews helped frame how to conceptualize trust likelihood behaviors for assessing if they influence an individual's motivation to trust. Nguyen et al. focused on trust reciprocity behaviors and reciprocal trust prediction behavior measures that can be employed for predicting if an individual will initiate, return, and attract trust. The authors described reciprocal behaviors stating that:

A user who initiates trust with many other users in a non-discriminative manner is said to demonstrate the trust *initiating* (I) behavior. A user who returns trust to anyone who trusts them, is said to demonstrate the trust *returning* (R) behavior. A user who gains trust from many others without having to initiate trust earlier is said to demonstrate the trust *attracting* (A) behavior. (Nguyen et al., 2010, p. 72)

Including the *likelihood to trust* in this dissertation allowed for the investigation of the influence of previous trust transactions on predicting future trust motivation to initiate trust and the likelihood one will return trust. This dissertation assessed three scenarios for predicting trust, the first was the likelihood an individual will trust others in the scenario of them initiating trust. The second measured trust returning behavior, specifically the likelihood the person would return trust if it was initiated by others. The third measured trust-attracting behaviors, specifically, if I initiate trusting others, the likelihood others will trust me is high. The distinction between propensity to trust is that it is measuring trusting a new acquaintance while likelihood is measuring initiating trust in a new situation. While propensity to trust is about an individual's tendency to trust likelihood of trusting is based on expectations of trust reciprocity.

### **Learning Goal Approach to Motivation**

Individuals with a learning orientation hold a self-theory that gaining new knowledge and mastery of skills can be learned. Researchers (Dweck & Leggett, 1988; Elliott & Dweck, 1988)

argued that employees may hold a dispositional goal orientation (Dweck & Leggett, 1988) which may be a learning goal orientation or a performance goal orientation. When individuals are high in learning goal orientation mastery is the emphasis versus performance goal orientation where one compares one's abilities to others. Although performance and learning orientations were believed to be individual differences (Elliott & Dweck, 1988) research shows that training can prompt learning and performance oriented responses (Wood & Bandura, 1989). Learning goal orientation is associated with tendencies such as intrinsic motivation, incremental mindset, and response to failure when choosing tasks for enabling development of a competency (Elliott & Dweck, 1988). Researchers argue that, consistent with social learning theory (Bandura, Albert, 1989) individuals who are high in learning goal orientation are more likely to draw on beliefs of efficacy (Huang & Luthans, 2015). Research on learning goal orientation was extended to frame learning goal orientation to specifically regard mastering trust as the competency.

### **Summary**

Research on trust has predominantly focused on the theoretical and quantitative methods, utilizing surveys and experimental research including games that simulate decision-making scenarios. My research methodology for this dissertation was influenced by Edmondson and McManus (2007), in analyzing methodological fit for research they highlighted the need to pay attention to the consistency among elements of the project, such as prior work, research design, and contribution to theory. They suggested that research falls on a continuum from nascent to mature, with three stages: nascent, intermediate, and mature. Nascent theory addresses novel questions and often simply suggests new connections. Intermediate theory involves the use of new concepts that connect with an established construct. Mature theory involves the development

of precise models that are supported by research. Based on Edmondson and McManus's work (2007), mature theory applies to well-developed constructs and models that are studied over time, with a body of work of cumulative knowledge. Based on the literature review that I conducted for this study, I believe that research in trust is in the intermediate theory stage, and that trust research is focused on the development of new constructs and on understanding trust formation, development, and developmental readiness.

Specifically, this dissertation strives to build on existing research on developmental readiness and trust to introduce and examine the new construct of Developmental Readiness to Trust Others in the Workplace. This research adds to the body of literature on measuring trust at the individual level, to understand an individual's readiness to engage in trusting actions and on individual judgments towards trust intentions and actions in the workplace. There are theoretical and practical implications raised by this research for connecting how we think about trust with how we feel about trust, and how we act in a trusting manner.

Theoretical implications for developmental readiness included extending and applying Prochaska and DiClemente's (1983) stages and process for change to the construct developmental readiness to trust where developmental readiness takes place over three stages of change. Going from the precontemplation to the contemplation stages, with the intent to take action to trust transpiring in the third, preparation stage of change. Using TTM (Prochaska, JM et al., 2001) to guide a stage-based approach to change, requires understanding that each stage is distinct, where contextual and individual differences play a role in motivating change (Narayan et al., 2007). This new construct of Developmental Readiness to Trust can provide a means to increase an individual's self-awareness around trust, thereby providing a means for also understanding how

others may see them as trusting. This provides a means for a deeper understanding of the impact motivation to trust has on one's trusting experience.

### **Chapter III: Methodology**

The role and impact of trust in the workplace is evident in the literature review conducted for Chapter II. Studies indicate the importance of building and fostering trust however there is no valid or reliable instrument existing to measure an individual's readiness to develop trust. The aim of this study was to demonstrate construct validity of a newly developed scale as a measure of the aspects of the construct developmental readiness to trust others in the workplace. The main purpose of this study was to build a scale and calculate its reliability and validity through analysis based on confirmatory factor analysis. The developmental readiness to trust scale was created based on extensive literature reviews of trust, developmental readiness, change, and motivation. This study focused on the individual level of analysis and through exploratory factor analysis and confirmatory factor analysis tested whether the items designed to measure the three trust-related concepts reliably measured their respective dimensions and produced a validated scale. This chapter outlines the research questions, research methodology, research design, and implementation plan used for validating this new construct.

#### **Research Questions**

The overarching research question was: Is there evidence that the three trust-related concepts of motivation, propensity, and ability to trust theoretically constitute an individual's developmental readiness to trust others in the workplace?

- RQ1. What themes emerge from analysis of narrative interview data related to the developmental readiness to trust construct?
- RQ2. What factors emerge from exploratory and confirmatory factor analyses of the items designed to measure propensity, motivation, and ability to trust?

- RQ3. What is the relationship between the subscales that emerge from factor analysis of the items designed to measure propensity, motivation and ability to trust?
- RQ4. How does the factor model identified via component principal analysis compare to a unidimensional factor of developmental readiness to trust?
- RQ5. How are the subscales that emerged from factor analyses of the items designed to measure propensity, motivation and ability to trust related to these theoretical concepts?

### **Research Design**

A mixed methods approach was used to conduct the research for this dissertation. The rationale for using mixed methods was to expand and strengthen the study's conclusions (Koskey, Sondergeld, Stewart, & Pugh, 2018; Schoonenboom & Johnson, 2017). In Phase 1, a qualitative (qual) study was performed that included interviews, subject matter expert reviews, and construct and item development based on the results of this information gathering phase. During Phase 2, the quantitative (QUAN) study, I performed a pilot to pretest the survey with results used to inform, clarify, and edit the final study survey and the proposed scale items; I then administered the full survey and analyzed data to establish the construct validity of the scale. This process involved following the three steps proposed for evaluating a new construct: articulating theoretical origins and relationships, developing a measurement method, and conducting testing to provide evidence for the construct validity of the new scale (Cronbach & Meehl, 1955; O Leary-Kelly & Vokurka, 1998).

### **Mixed Methods Research**

A mixed methods research approach uses both quantitative and qualitative research methods, either concurrently or sequentially, to understand a phenomenon of study (Fetters, Curry, & Creswell, 2013; Greene, 2015; Koskey et al., 2018; Leech & Onwuegbuzie, 2009;



Venkatesh, Brown, & Bala, 2013). The overall purpose of mixed methods research is to use both approaches in combination to provide a better understanding of research problems and complex phenomena than either method can on its own (Creswell, 2009; Schoonenboom & Johnson, 2017). Venkatesh et al. highlighted that “mixed methods research has been termed the third methodological movement (paradigm), with quantitative and qualitative methods representing the first and second movements (paradigms) respectively” (p. 22). These recommendations were important for this study because of the need to develop construct definitions and to propose scale items. Bergman (2010) argued that mixed methods study designs are appropriate for exploring how respondents make sense of their experiences or reports on questionnaires. Bergman stated:

[S]ystematic inquiry into the variations of social constructions of meaning among interview and survey respondents may not only help in validating research instruments and scales, but may go further in that they could produce complementary subsets of results, which would enrich overall findings. (Bergman, 2010, p. 172)

Quantitative research is also frequently criticized because:

In the case of quantitative analysis the researcher is looking not so much at [the] individual, as at the aggregate level [of data]. The principal problem or concern is with average effects rather than individual differences. The goal being to account for general patterns versus subtleties. (Bentz & Shapiro, 1998, p. 123)

The design of the theoretical framework for this dissertation research took into consideration the level of mixing of methods, the orientation of time, and the emphasis of the approach (Leech & Onwuegbuzie, 2009). In the language of mixed methods research, this study used a qual -> QUAN design. The use of capital letters in “QUAN” implies the priority of quantitative data collection and analysis, and the “->” sign implies the sequential placement of the qualitative and quantitative study phases. Finally, the placement of qual before the QUAN indicates that this was an exploratory study design. The data from the qualitative analysis informed the quantitative construction and the administration of the pilot and final surveys. In

addition, the pilot survey included an open-ended question for narrative comments; these data were captured, analyzed, and used to inform the final survey questions.

### **Phase 1: Interviews, Subject Matter Expert Reviews, and Item Development**

In the qualitative phase I conducted interviews related to experiences of trust for the purpose of developing initial items for scale development, assessing the need to modify the proposed scale items for the pilot and final survey instruments, and crystalizing the construct definitions. The interviews focused on gaining a deeper understanding of an individual's perception of their personal motivation and ability to trust. I also sought feedback from subject matter expert reviews and worked on item development based on existing literature. These activities were intertwined, starting with initial construct definitions, development of initial items, gaining feedback and further elaboration from interview data, modifying construct concepts and items, seeking feedback through expert reviews, and finally finalizing the theoretical constructs and proposed scale items.

#### **Interviews**

Interviews were conducted as an element of the survey item development process. Interview narratives data were used to help understand an individual's point of view of their personal experiences of trust in the workplace, specifically examining motivation and ability. Through the interviews I tested my understanding of the three proposed concepts, looking to see if any aspects of the concepts emerged; the interviews were not conducted to look for another construct or to get information on all the sub-concepts. McNamara (2009) and Turner (2010) both contend that *why* questions infer cause and effect, which may not exist, and may cause participants to feel defensive, thereby inhibiting their response; thus, no "why" questions were posed in the interview. This guidance informed the interview approach and care was taken to

ensure that interview questions were open-ended and worded as neutrally as possible. In addition, care was taken in regard to the sequence of questions, the participant selection, and the interview preparation.

The first interview was followed by five additional interviews. Five relevant themes emerged related to ability and motivation to trust others. Three of the five themes involved ability to trust, integrity, competency and view of ability and two motivation themes, specifically based on previous experience and goal orientation. These themes contributed to defining three high level concepts (ability, motivation, and propensity to trust), and the detailed descriptions and results are provided in Chapter IV.

**Interviewees.** Volunteer interviewees were recruited using my professional networks via an email invitation. Participants were required to: be adults (at least 18 years of age); to have at least 3 years of work experience; to have experience working on teams of three or more team members; and to be currently working. The 3-year work experience criterion was different than the survey eligibility requirement of currently working. The rationale for these criteria was to interview participants who were currently working, and who had experience working and trusting others on the same team, as opposed to working alone. Of the six interviewees, four were female and two were male. They worked within a range of industries, including aerospace, technology, marketing, insurance and retail. Interviewee job roles included: individual contributors; a manager of a small team; and a retail store manager. Participant's work experience ranged from three to over 15 years.

**Interview process.** I conducted the first interview in person using five straightforward, open-ended questions. The first of six interviews indicated that there was a need to provide more context for framing feelings and motivation towards trust. The first interview highlighted the need

for three modifications for the next set of five interviews. First, I identified the need to provide more situational context for questions related to trust in the workplace; thus, for the other interviews I provided the definition of trust in the introduction and I changed the language from asking about general relationships at work, to describing their team experience at work. Second, I identified the need to help participants distinguish between thinking about trust and feelings of trust; this was accomplished by directly asking the participant how they felt about trusting, and then shifting the language in questions from “think of a time when you are” to “reflect on your level of trust when.” Third, I identified the need to distinguish between intentions towards trust, propensity to trust, and motivation to trust. This further distinction was accomplished by implementing three changes: (a) adding scripting to the beginning of interviews, which stated that there are many things which impact desire and intentions to trust others; (b) specifically asking participants what hindered or inhibited their desire to trust; and (c) an additional question on propensity to trust was included.

Based on the learning from the first interview, I updated the interview protocol and then conducted the other five interviews using Zoom technology. I recorded and transcribed the interview sessions and any identifying information was removed. The IRB approval, email invitations, interview consent form, interview protocol, and questions are included in Appendix A and describes study details on confidentiality, the purpose of the study, the use of data and information, and reference to a consent required. I analyzed the interview narratives using a coding structure with predetermined categories for measuring word and phrase frequency for trust behaviors, feelings about trust, and motivation to trust others. The interview questions were targeted at improving construct clarity and item accuracy and clarity and improvements were made to item wording.

**Interview protocol.** The five interview questions asked the participant to describe a time of high and low trust at work, and the behaviors that contributed to general feelings of trust at work. They also asked what motivated them to trust. There were five questions in the final interview protocol. These five questions were:

1. Think of a time when you were in a high trust relationship at work and what was happening that promoted trust. What were you thinking and feeling?
2. Think of a time when you were in a low trust relationship at work. What was happening that impacted your willingness to trust and what do you think impacted your coworker's willingness to trust?
3. Think of a time when you were in a team with high trust relationships at work. What behaviors do you think contributed to high trust?
4. In general, at work, how do you feel about trust?
5. In general what motivates you to trust and why?

To prevent biasing responses and to better understand the distinction between propensity to trust and motivation to trust, I was careful to not use the word “tendency.” Research by Qu and Dumay (2011) provided insight on how to inform the interview design and on the role of the researcher. Qu and Dumay stated:

Interviews provide a useful way for researchers to learn about the world of others, although real understanding may sometimes be elusive. Even when the interviewer and the interviewee seem to be speaking the same language, their words may have completely different cultural meanings. Thus, communicating becomes more difficult when people have different worldviews. (p. 239)

They also argued (2011) that due to the active role that researchers take in question design, it is possible for researchers to inadvertently bias data collection. This dissertation study utilized individual interviews with a structured interview process, where the researcher read from a script

with as little deviation from the script as possible. Highly standardized procedures were used to reduce the probability of the results being influenced by the interviewer's bias. As the authors stated:

Structured interviews are therefore rigid as the interviewer reads from a script and deviates from it as little as possible. All interviewees are asked the same questions in the same order to elicit brief answers or responses from a list. (Qu & Dumay, 2011, p. 244)

This research followed the same script and set of questions for all interviews as a means of mitigating potential research bias. As an example, a section of the interview is excerpted below on feelings and trust.

I'd like to ask you some questions about how you think about trust and about how you feel about trust. When considering how I feel about feelings, think about surprise as an example. Now, some people don't ever like being surprised. On the other hand, some people love to be surprised, and love surprising others. Surprise is a feeling that they like and really enjoy and they want to have more of it in their lives. They go out of their way to have it. So, there's no right or wrong about this. People are just different.

After conducting interviews and analyzing the narrative data, I used the results to make changes to items used for constructing the scale focusing on improving content and face validity, item clarity, and item relevance. Once these changes were made, described in Chapter IV, the scale and items were used for conducting expert reviews for the next step in the scale development process where the feedback was incorporated into the item construction development.

**Expert reviews.** To avoid relying solely on statistical methods to eliminate items, I followed Henseler et al.'s (2015) recommendation to have at least two expert reviewers scrutinize items. In a study on content analysis for new scale development, Worthington and Whittaker (2006) recommended that an expert review of items be performed to assess the quality on a number of different dimensions including content validity, clarity, grammar, and face validity,

prior to conducting exploratory factor analysis. This is supported by scholars (Baron, 2017; Hinkin, Timothy R., 1995) who agree that that after items have been generated, they should be assessed for content validity. In addition, Hinkin (1998) states that the content adequacy testing process could serve as a pretest, permitting the deletion of items that are conceptually inconsistent. To supplement the literature review and to contribute to content adequacy, face and content validity, three expert reviews were conducted. The first two reviews involved two research assistants from the U.W. Foster School of Business Center for Leadership and Strategic Thinking. One was an evaluation of all items and focused on item wording, clarity, and framing for making changes to the final set of proposed statements developed for this research. The second was a review of questions used to conduct the qualitative interviews. The third was a review of the survey draft by a survey learning group of Antioch PhD students. This group provided feedback on item content and construction, item clarity, and item flow. In sum, these reviews evaluated if the construct domain had been captured and provided a higher degree of objectivity.

**Construct development.** To validate the new developmental readiness to trust scale, initial potential scale items were created to measure the three broadly defined constructs of ability to trust, motivation to trust, and propensity to trust. Items designed to measure ability to trust and motivation to trust were created for this study by extending research on trust, developmental readiness and motivation. The items for propensity to trust were from a validated four-item propensity to trust scale (Frazier et al., 2013). Based on expert recommendation to increase the number of items for measuring propensity to trust, five items from this same study which were not in the final set of the four validated Frazier et al. (2013) validated scale items, were added back in for this phase of my dissertation study.

Bagozzi and Edwards (1998) proposed that, “constructs and their measure can be fruitfully conceived through specification of three characteristics that capture their meaning: depth, breadth, and dimensionality” (p. 80). This dissertation research assessed depth by the number of items proposed for each construct and in the final components. Breadth was addressed by examining and including items that covered the subcategories of each construct. Dimensionality included looking at both a two-factor and unidimensional factor derived model (Avolio, Bass, & Jung, 1999; Ding & Ng, 2007).

The literature review and expert reviews confirmed three conceptual areas for developmental readiness to trust. These were labeled for this research as: Ability to Trust, Motivation to Trust, and Propensity to Trust. Four conceptual sets of items fell under Ability to Trust: (a) competence for trusting, (b) integrity, (c) benevolence, and (d) view of ability. Six conceptual sets of items were grouped under Motivation to Trust: (a) general motivation to trust others, (b) instrumentality, (c) valence, (d) self-efficacy, (e) likelihood to trust others, (f) motivation to learn to trust. Four conceptual sets of items were grouped from the Propensity to Trust items (Frazier et al., 2013): (a) tendency to trust, (b) trusting stance, (c) trust in humanity, and (d) trust in new situations.

**Item development.** The proposed scale items were generated based on theoretical justification and the extensive literature review in Chapter II. I followed Hinkin’s (1998; 1995) guidelines for item generation, content adequacy assessment, questionnaire administration, factor analysis, reliability analysis, and validity testing, in that order.

**Item generation and content adequacy.** Item development relied on inductive development of the content domain (Hinkin, T. R., 1998). This was performed using a thorough review of literature of trust, change, developmental readiness, and motivation constructs.



Available instruments, articles, and studies were used to inductively refine content for this new construct, developmental readiness to trust. The literature review was conducted in accordance with the research on scale development, which states that item development starts with clearly defined constructs with a sound theoretical basis (de Vaus, 2014; Spector, P. E., 1992). This included backwards literature searches from a recent known publication, to the earlier items cited, and then to forward searches on seminal research finding articles (Shaffer, DeGeest, & Li, 2016), which is called footnote chasing. As Shaffer et al.:

In the context of a discriminant validity analysis, it is important to note that some constructs may be developed explicitly as an extension or refinement of other constructs. Backward and forward searching may be a particularly useful way to identify the predecessors or descendants of such constructs. (2016, p. 84)

This was particularly relevant while researching an individual's developmental readiness to trust, as it required an examination of trust theories, motivation theories, and change readiness theories and constructs. This review provided a clear link between an individual's motivation and ability to trust and their readiness to trust, thereby establishing the theoretical foundation for this new construct. For every item that was developed, I noted the research that it was derived from, as well as the specific preconceived areas it was intended to measure. The annotated list of items used for the EFA and CFA with theoretical foundations can be found in Appendix K.

Gehlback and Brinkworth's (2011) research provided guidance with two challenges that needed to be considered when developing items. First, when deciding how many items the survey scale will contain, one must primarily rely on professional judgment. I used Gehlback and Brinkworth's (2011) recommendation to use a conservative approach by developing more items than I needed for the final scale. The pilot study survey included the 64 proposed items, reflecting each of the three preconceived factors and the 14 themes across all three areas. The second

challenge Gehlbach and Brinkworth (2011) considered was the actual wording of each item, this poses a challenge due to the need to guard against bias, evaluative or offensive language, and the need to ensure clarity. Spector (1992) provided guidelines, highlighted by Baron (2017), which pointed out that each item should: express only one idea; avoid jargon; and use both positive and negative wording, while avoiding the use of reverse negative words and prefixes, such as “not,” and “un-.” While developing items for this study, I worked to avoid jargon and assumed that participants had a 12th grade reading level.

In addition, I paid attention to avoiding tautology issues with items generated to measure each subcategory of items. Tautology is defined as ‘a needless repetition of an idea’ from the American College Dictionary and “saying the same thing twice” from the Concise Oxford Dictionary. To avoid measuring the same trust dynamic, I particularly paid attention to avoiding tautology issues between propensity to trust and motivation to trust (Gelman, Cimpian, & Roberts, 2018) and questions assessing positive character attributes such as agreeableness and optimism (Garssen, Visser, & de Jager Meezenbroek, 2016).

**Item response scale.** This research used the 7-point Likert type response scale for all proposed scale items. I relied on research on scale development (Baron, 2017; Hinkin, Timothy R., 1995) to establish scale response intervals and number of points. Researchers have argued that there is a notable cost of having too few response anchors, because the measurement error seems to be greater when there are too few response anchors than when there are too many (Baron, 2017; Gehlbach & Barge, 2012; Weng, 2004). The first consideration for the design of the scales for this research was that much of the research measuring trust that I relied upon, utilized a 7-point Likert-type response scale for measuring items. Likert-type response scales (Allen & Seaman, 2007; Wright, Quick, Hannah, & Hargrove, 2017) are widely used for measuring

attitudes such as opinions, dispositions, and preferences, which is congruent with measuring an individual's self-perception of their propensity, motivation and ability to trust. An important feature of the 7-point response scale is that participants can distinguish between strong agreement, agreement, and somewhat in agreement as opposed to a 6-point scale with a neutral mid-point (DeVellis, 1991).

### **Propensity to Trust Items**

Frazier et al. (2013) validated a four-item propensity to trust scale as a result of a series of four studies on propensity to trust. Their research used two different Liker-type response scale versions, one with a 5-point and the other with a 7-point, for indicating the level of agreement or disagreement. While one of the studies for scale validation conducted by Frazier et al. used the 7-point response scale, the final model used the 5-point response scale. Frazier et al. stated, "The consistency of our factor loadings across all four studies supports the notion that changes in scale anchors from five to seven do not substantially impact the results. The internal consistency of the scale was acceptable" (p. 85). This supported adapting the propensity to trust items in this dissertation to the 7-point scale in order for the data that was collected to be consistent with the response options for the other items in the study's survey.

The propensity to trust subcategory included the four items from the validated scale along with five additional items from this same study (Table 3.1). Four conceptual sets of items form the Propensity to Trust subcategory: (a) tendency to trust, (b) trusting stance, (c) trust in humanity, and (d) trust in new situations.

Table 3.1

*Propensity to Trust Others Theoretical Subcategories and Items*

Subcategory	Description	Item
Trust in Humanity	Ease of trusting others	I believe that people usually keep their promises.
Trust in Humanity	Ease of trusting others	I am seldom wary of trusting others.
Trust in Humanity*	Ease of trusting others	Trusting another person is not difficult for me.
Trusting in new situations	Trusting in new situations	I generally give people the benefit of the doubt when I first meet them.
Trusting in new situations, newcomers*	Trusting in new situations	My typical approach is to trust new acquaintances until they prove I should not trust them.
Trusting Stance	Usual tendency to trust	Even if I am uncertain, I will generally give others the benefit of the doubt.
Trusting Stance*	Propensity to Trust	I trust people until they give me a reason not to trust them.
Usual tendency to trust*	Level of trust tendencies	My tendency to trust others is high.
Usual tendency to trust	Usual tendency to trust	It is easy for me to trust others.

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\* Indicates validated items from Propensity to Trust Scale

### **Ability to Trust Items**

Items in the preconceived Ability to Trust category were based on previous trust research and were adapted in three ways. The first adaptation was made to reflect the evaluation of ability in the domain of trust itself, versus previous trust research where ability was described as expertise and competency in doing the job (Mayer et al., 1995). The second way was in adapting from previous research a focus on evaluating others' competency to evaluating an individual's self-perception of their personal ability to trust. The third distinction from previous trust research was the inclusion of items intended to assess an individual's entity perception of trust, meaning the trait versus state distinction discussed in my review of the literature.

The first change involved creating new items to address measuring Ability to Trust as a competency, resulting in a total of eight items measuring competency to trust. The second change resulted in seven items adapted to measure integrity and seven items adapted to assess how a participant sees their own benevolence. The third modification included the addition of three items added to measure an individual's perception of ability as a stable trait or as something that can change incrementally in order to understand one's view of ability to develop trust. The result was a total of 25 new items created to measure Ability to Trust (Table 3.2), defined as an individual's general competency to engage in trust decisions and actions, self-perception of personal integrity, and self-efficacy and awareness of trusting beliefs and actions (Colquitt et al., 2007).

Table 3.2

*Ability to Trust Subcategories and Items*

Sub-Concept	Measuring	Item Description
Benevolence	Caring	I would never knowingly do anything to hurt another person.
Benevolence	Openness and caring	Other's needs and desires are very important to me.
Benevolence	Caring	I go out of my way to help others.
Benevolence	Monitoring for Trust	I often work around others to get things done the way I want them.
Benevolence	Supportive	I see myself as someone others can rely on.
Benevolence	Caring	It is easy for me to care about the welfare of others.
Benevolence	Caring	I look out for the needs of others.
Competency	My perception of capability to trust others	I know when to trust others.
Competency	History	I am seen as someone who increases the level of trust others have in me.
Competency	Confidence in my ability to increase trusting others	I am confident that I can increase my ability to trust others.
Competency	Reputation	Others know me to be someone who can trust others in the workplace.
Competency	Understanding	I understand what is involved in trusting others.
Competency	Confidence in my ability to trust	I am confident in my ability to trust others.
Competency	View of Ability	I see my ability to trust as an asset.
Competency	Success	I have many successful relationships in the workplace based on trust.
Integrity	Consistency	I see myself as being consistent in my actions.
Integrity	Honesty	Being honest with others is very important to me.
Integrity	Reliability	I view myself as someone who keeps their word.

Sub-Concept	Measuring	Item Description
Integrity	Value congruence	Trust is a very important personal value for me.
Integrity	Commitments	Keeping the commitments I make is very important to me.
Integrity	Trustor's sense of personal fairness towards others	I try hard to be fair in my dealings with others.
Integrity	Trustor's sense of personal fairness towards others	I try hard to be fair in my interactions with others.
View of Ability	Trait view of trust ability	I view my ability to trust others as something I was born with.
View of Ability	Incremental view of trust ability	I believe I can increase my ability to trust others.
View of Ability	Incremental view of trust ability	I view my ability to trust others as something I can increase.

### **Motivation to Trust Items**

The items to measure Motivation to Trust were created for this research and I relied on previous research on motivation (Bandura, Albert, 1989; Cook, D. A. & Artino, 2016; Dweck & Leggett, 1988) and developmental readiness to create those items (Armenakis et al., 1993; Avolio & Hannah, 2008; Holt, Daniel et al., 2007). There were six main themes, or subcategories, for measuring intentions towards trusting called Motivation to Trust for this study. These subcategories were: (a) general motivation to trust, (b) instrumentality, (c) valence, (d) self-efficacy, (e) likelihood to trust others, and (f) motivation to learn. The final set of items created resulted in 30 new items to measure Motivation to Trust others (Table 3.3).

Table 3.3

*Motivation to Trust Subcategories and Items*

Subcategory	Measuring	Item
Instrumentality	Perceived instrumentation of trusting others.	Past experience trusting others motivates me to continue to trust others.
Instrumentality	Perceived valence of trusting others.	Trusting others increases my chances of their trusting me.
Instrumentality	Instrumentality in trusting others.	People know I have a reputation for trusting others.
Instrumentality	Perceived instrumentation of trusting others.	Whether or not others trust me depends on my own trustworthiness.
Likelihood to Trust	How likely will others reciprocate?	If I initiate trusting others, the likelihood others will trust me is high.
Likelihood to Trust	How likely are you to initiate trust in a new situation?	The likelihood I will initiate trust in others in a new situation is high.
Likelihood to Trust	How likely are you to return trust if another person initiates trust?	If another person initiates trust in me, I am likely to return it.
Likelihood to Trust	How likely are you to return trust if another person initiates trust?	If another person initiates a sense of trust in me, I am likely to return it.
Learn to Trust	Motivation to learn to trust.	Learning to trust others is very important to me.
Learn to Trust	Motivation to learn to trust.	I would feel bad about myself if I did not trust others.
Learn to Trust	Extrinsic motivation	I say trusting is important to me because others would think badly of me if I did not.
Learn to Trust	Intrinsic motivation	The reason I broaden my ability to trust others is because it is important for me to learn about trust.



Subcategory	Measuring	Item
General motivation to trust others	How I feel about trust versus what I believe about trust.	I feel that trusting others is very important.
General motivation to trust others	Tolerance for differences in levels of trust of trustees.	I have a low tolerance for working with others who fail to trust others.
General motivation to trust others	Valence in trusting others.	I have a successful track record for trusting others.
General motivation to trust others	Motivation to trust others.	I am motivated to trust others.
General motivation to trust others	How I feel about trust versus what I believe about trust.	It is very important to me to be trusted by others.
Self-Efficacy	Self-perception of level of trust I have in others and my own value of trust, discrepancy.	I see myself as someone who trusts others as I would like to be trusted.
Self-efficacy	Confidence in my ability to increase the level of trust others have in me.	I see actions I can take to increase the trust others have in me.
Self-efficacy	Confidence in ability to increase trust others have in me	I am confident in my ability to increase the level of trust others have in me.
Self-efficacy	Use of self-reflection to think about trust in my life and actions.	I often reflect on how the level of trust others have in me is linked to my actions
Self-efficacy	Motivation to increase trust others have in me.	I am motivated to learn how to increase the level trust others have in me
Self-efficacy	Trustor's level of confidence an individual has in their own ability to trust others.	I am confident in my ability to trust others.
Self-efficacy	Motivation to increase trust in others.	I am motivated to learn how to increase my trust in others
Valance	Perceived valence of trusting others.	I see the benefits in trusting others.

Subcategory	Measuring	Item
Valence	Trustor's belief that trust is good.	I believe that trust is a public good.
Valence	Expectation that others will engage in acts of trust if I engage first in trust actions / Elicitative Trust.	If I trust them first, the likelihood others will engage in acts of trust is high.
Valence, Moralistic Trust	Trustor's belief that trust is morally right.	I believe that building trust is morally right.
Valence	Expectation that others will engage in acts of trust.	I believe others will engage in acts of trust.
Valence	Expectation that others will return the same level of trust.	I believe others are likely to return the trust I have placed in them.

**Reverse items.** In addition to the 64 positively worded items generated on a theoretical basis, ten negatively worded trust items were developed and added to the list of statements (Table 3.4). Including reverse scored items allowed for an assessment of response-pattern bias (Wright et al., 2017). These statements were used to determine if participants were legitimately responding to items and whether the scale was measuring both positive and negative outcomes. Wright et al. argued that negatively worded items keep participants engaged and can have a positive impact on construct validation.

Table 3.4

*Reverse Items*

Subcategory	Item Description
Ability	It is a struggle for me to trust others.
Ability	Trusting others is difficult for me.
Ability	I am seen as someone who avoids trusting others.
Ability	I have low confidence in my ability to trust others
Motivation	I see little benefit in trusting others.
Motivation	I see no benefit in trusting others
Motivation	I have low motivation to increase my trust in others.
Motivation	I feel that trusting others is of little importance
Propensity	My tendency to trust others is low.
Propensity	I hold back on trusting others until I know them well.

**Phase 2: Survey Instrument, Pilot Study, Final Survey Administration, Data Preparation, and Data Analysis.**

Phase 2 included the final development of the survey instrument, conducting a pilot study, administering the final survey, moving the data from Survey Monkey to SPSS, cleaning the data in preparation for data analysis, and data analysis. Each of these steps is described below.

**Final survey instrument.** The full survey instrument included the proposed scale items and the filter and demographic questions. The survey design included the survey's look and feel, such as the format, the order of questions, the question clusters, and the flow. The final survey had nine sets of proposed developmental readiness to trust scale items; each set included four to five items in a random order. Each set of statements was framed under a question that asked the individual about their perspective on their team at work and referenced a peer in the workplace to

provide context and relevance. The complete pilot survey is in Appendix G and final survey is in Appendix I.

The survey contained four sections: (a) the introduction; (b) filter questions that identified potential respondents as being an adult member of a work team that they could name and reference; (c) items and survey questions; and (d) demographic questions. The introduction was designed to be brief and to convey that the area of focus of the research was trusting others in the workplace. The introduction read:

I am conducting dissertation research on trust in the workplace. Studies show us that our productivity, our satisfaction, and our relationships are impacted by the positive or negative level of trust in our work environment. Trust can mean different things to different people and my research is focused on understanding an individual's point of view of trusting in the workplace.

Filter questions were used to establish eligibility for participation in the study. The introduction page indicated that by clicking next the participant was confirming they are at least 18 years of age. The next page asked the filter questions of whether the potential respondent was currently employed in a for profit, nonprofit, government agency, self-employed, or not working right now. If the individual was not working, they were directed to the final thank you survey page.

### **Pilot Study**

Phase 2 included a pretest pilot. The pilot study was conducted to detect problems and to make any appropriate adjustments for the final study survey (Abell, Springer, & Kamata, 2009). Early interview narratives were used to inform modifications to the pilot. The pilot study provided further feedback on the substance, flow, and logistics of the questions and statements, and also provided experience with the data collection and analysis procedures.

The pilot study included 74 items, 10 of which were reverse scored. The goal of the pilot was to recruit at least 20 volunteer participants; this goal was met with 23 full responses out of 31

potential participants that I recruited from my professional network via a short email invitation. The survey pilot was open for 14 days, and it required that participants be currently working and members of a team with at least three team members. Participants accessed the pilot by clicking on a link in the invitation email that directed them to the survey. The survey used the SurveyMonkey ® platform to collect participant consent and survey responses for both the pilot and the final survey. Feedback from the pilot survey was incorporated into the final survey. The changes included: improving flow by going from eight pages of questions in the pilot to 10 pages of questions in the final survey and the elimination of one of the 74 items, which reduced the item pool to 73 items.

### **Final Study Survey Administration**

The final survey solicited responses from my professional network and from a solicitation through Amazon's Mechanical Turk. Two separate SurveyMonkey® data collectors were established for the two distinct sources used for soliciting survey respondents. One collector was for potential respondents from my own professional social networks and the second collector was for potential survey respondents recruited using Amazon's paid Mechanical Turk. Mechanical Turk premium specifications were paid to require that participants be currently working in the United States, working full or part time, and to allow each participant to complete only one survey.

**Sample size.** Sample size is important to consider and to plan for to ensure that the results are relevant. Researchers Bonett and Wright (2015) argued that sample size determination was one of the most important aspects in the design of a reliability study. Furthermore, they argued that if the sample size is too small, the confidence interval will be too wide. In contrast, if the sample size is too large, it will waste resources. The final count of completed clean responses was

417 out of a total of 492 potential participants that opened the survey. This exceeded the goal of achieving a sample size of 300 or more, which is an optimal size for conducting exploratory factor analysis (Worthington & Whittaker, 2006).

**Participants.** The target group for the final study included professionals, who were at least 18 years old that were working part or full time. In the full study working in a team was not required. I used the filter question option, “No, I am not working at this time” to remove individuals that were not currently working from the participant pool. An invitation was sent directly to my professional network connections via email, and I also posted an invitation on my LinkedIn. Two weeks prior to the final survey launch date, I emailed my professional networks soliciting support for the survey launch and this was followed up two weeks later with an email with the survey link. Participants who volunteered to participate, clicked on a link in the invitation email, and they were directly sent to the SurveyMonkey® survey introduction page. The goal was to make the invitation easy to understand, easy to forward on to professional networks, and compelling enough to stimulate consent and participation.

**Data cleaning.** All Mechanical Turk and SurveyMonkey® files were examined for evidence of duplicate responses, time to complete the survey, and a pattern of repetitive responses. In addition, data were reviewed for response completion, response spread, and respondent feedback. The data were cleaned and incomplete responses were eliminated prior to analysis. The data were also examined for consistent outliers across multiple variables. Cases where the data were consistently outliers for multiple variables were further examined for repetitive response patterns and decisions were made about whether or not to retain the case.

**Data analysis.** Multiple types of data analysis were used, including tests for outliers using SPSS and AMOS; descriptive analysis; factor analysis using Principal Components Analysis

(PCA), Confirmatory Factor Analysis (CFA); and convergent validity and reliability analysis.

SPSS was used to run descriptive statistics, including mean scores, standard deviations, percentage distributions, and measures of skewness and kurtosis. The measures of skewness and kurtosis were reviewed to assess whether items were normally distributed. Mean scores, standard deviations, and percentage distributions were used to describe the respondent characteristics and responses to the proposed scale items.

### **Exploratory Factor Analysis**

Exploratory factor analysis was used to identify a factor structure for the items designed to measure the constructs. As a previous study described:

Exploratory factor analysis and especially principal component analysis (PCA) are therefore recommended because they are considered to be the best methods to identify the unobservable, ‘latent’ factors that underlie or ‘explain’ a set of observed variables that are ordinal- or interval-scaled. (Coste, Bouée, Ecosse, Leplège, & Pouchot, 2005 p.641)

The exploratory factor analysis process included decisions in three areas of analysis: (a) decisions during data inspection for responses and items, such as removing response spread issues and outliers; (b) the selection of the factor rotation method; and (c) selecting Principal Component Analysis (PCA) as the factor analytic method for factor loading and cutoff.

**Bivariate correlations.** This study used Pearson bivariate correlation analysis to examine the strength and direction between two items (Evans, 1996). Evans (1996) suggested that values between 0 and .19 indicate a very weak relationship, between .20 and .39 indicate a weak positive relationship, between .40 and .59 indicates a moderate positive relationship, .60 and .79 is a strong relationship and .80 and 1.0 is a very strong positive relationship. Bivariate correlation analysis were run between each proposed scale item with every other proposed item to ensure that the items had correlations of at least  $\geq .30$  with at least one other item. Proposed scale items that

do not have a bivariate correlation with at least one other item designed to measure the same overarching construct are considered to be unrelated to the construct.

**Rotational analysis.** The factor model derived from PCA analysis for this study utilized varimax rotation to make relationships between items obvious. “Varimax [rotation] minimizes the number of variables that have high loadings on each factor and works to make small loadings even smaller” (Yong & Pearce, 2013, p. 84). The goal was to associate each variable with, at most, one factor. Rotation methods, either orthogonal or oblique, depend on the assumption of correlation (Tabachnick & Fidell, 2007). For the purpose of this study, PCA with varimax rotation, an orthogonal rotation, was used to maximize the dispersion of loadings within factors and to understand how strongly each item relates to the factor (Yong & Pearce, 2013). Orthogonal rotation made it easier to see the components.

**Principal component analysis.** Principal component analysis (PCA) was used to examine the matrix of item correlations produced by SPSS, and to reduce these into a smaller set of components. Theoretically, these components can then form the basis for latent factors. For this study, PCA was run after reviewing mean scores and measures of skewness and kurtosis as well as correlational analysis to identify any proposed scale items that were not normally distributed or related to the overarching construct of developmental readiness to trust. PCA results from four different suppression levels were reviewed, including .25, .30, .35 and .40. The lower suppression levels yielded a lower number of items with fewer components while higher suppression levels yielded a higher number of items with higher numbers of components. Based on this analysis, the decision was made to use a .35 suppression level for all PCA analyses in this study. The PCA process was run with multiple iterations until the model produced a matrix where there were no cross loadings and all items loaded on a component. The Kaiser criterion, where factors with



eigenvalues of greater than one are considered for retention, and scree plots were examined for component analysis. The scree plot was used to assess the pattern of eigenvalues looking for the bend where the data flattens out (Costello & Osborne, 2005; Gaskin, 2013; Hinkin, T. R., 1998).

**Confirmatory factor analysis.** Upon completing PCA, the resulting final factor pattern matrix was loaded into AMOS for running Confirmatory factor analysis (CFA). In research on exploratory factor analysis, authors (Finch, Brazier, Mukuria, & Bjorner, 2017) argued that “CFA differs from PCA in that it does not allow for all items to freely load on all factors, but it requires the investigator to impose a measurement model to the data” (p. 1364). CFA was run and tested for goodness of fit in an iterative manner using model fit ranges, modification fit indices, and standardized residual covariances to identify discrepancies between items and to make decisions for what items were eliminated. “Residual covariances (i.e., the difference between the sample covariances and the covariances expected under the fitted model) provide a natural estimate of the fit of covariance structure models” (Maydeu-Olivares & Shi, 2017). This dissertation research relied on the benchmark of a standardized residual covariance value  $> 2.5$  (Gaskin, 2016) for evaluating fit of items during CFA to determine which of the items was negatively impacting goodness of fit. Model fit analysis was conducted one item at a time, and standardized residual covariance analysis was conducted by sparingly, one at a time, removing items to test impact on fit. The CFA concluded with validity test results, which were conducted on the factor structure.

**Model fit.** Several considerations were made to determine the best fit during the CFA process, and to identify which items should remain as part of the final Developmental Readiness to Trust scale. Decisions on item elimination were based on model goodness-of-fit indices and standards including Chi-squared ( $\chi^2$ ) and degrees of freedom (Miles & Shevlin, 2007; Mulaik et al., 1989; Slocum-gori & Zumbo, 2011), modification indices, and items with low factor loadings.

Researchers (Brown, 2015; Fayers & Aaronson, 2012) have cautioned that relying on  $\chi^2$  and degrees of freedom (df) is misleading for evaluating goodness of fit, influencing me to use Goodness-of-Fit statistics created by Jöreskog and Sorbom (Miles & Shevlin, 2007; Sörbom, 1989) in addition.

In summary, items were trimmed from the final models based on low item loadings,  $\chi^2$  tests, df, CMIN/DF, comparative fit index (CFI), goodness of fit index (GFI), root mean square error of approximation (RMSEA), modification indices, and standardized residual covariance analysis. While modification indices were analyzed in the model fit process, df,  $\chi^2$  testing, and CFI, GFI, and RMSEA values assessed with each item change were made for making model fitting decisions (Avolio, Wernsing, & Gardner, 2018).

Regarding RMSEA for fit adjusting for model parsimony, a cut-off value close to .06 (Hu, Li-Tze & Bentler, 1995) or a less stringent upper limit of 0.07 (Steiger, 2007) was followed for analysis in this research. The GFI statistic calculates the variance that is accounted for by the population covariance (Tabachnick & Fidell, 2007), with values that range from 0 to 1 with an acceptable cutoff point of .90 or .95 with larger sample sizes (Hooper, D., Coughlan, J., Mullen, M., 2008). The CFI assumes latent variables are uncorrelated and compares the sample with this null model. A cutoff criterion of  $\Rightarrow 0.95$  is recognized as a good fit (Hooper, D., Coughlan, J., Mullen, M., 2008; Hu, Li-Tze & Bentler, 1995). This dissertation analysis utilized modification indices indicating covariances between items, where items were considered for removing when the modification index with one or more items was over 14 as a benchmark (Gaskin, 2013; Sörbom, 1989) and items with high modification indices could not be covaried. Discriminant validity testing identified items which had an impact on the validity and these items were evaluated for removal. Table 3.5 summarizes the benchmarks used in analysis for evaluating

model fit, model reliability, and model dimensionality, specifically convergent and divergent validity. Thresholds for Cronbach's  $\alpha$ , Chi-square, CMIN, CFI, GFI, and RMSEA are from Hu and Bentler (1999), CR, AVE, and MSV from Malhotra, Mukhopadhyay, Liu, and Dash (2012), and modification indices from Kaplan (1990).

Table 3.5

*EFA Measurement Thresholds*

Measure	Threshold
Cronbach's $\alpha$	$\geq .7$ and $.90 \leq$
Chi-square	As close to zero
CMIN	$< 3$ is good, $< 5$ is highest threshold
CFI	$> .95$ is great, $> .80$ is low threshold
GFI	$> .90$
RMSEA	$< .05$ is good, $> .10$ bad
CR	$> .70$
AVE	$> .50$
MSV	$< \text{AVE}$
Modification Indices	$> 20$

**Reliability analysis.** Reliability analysis, specifically internal-consistency reliability, was used to demonstrate how individual items on the scale consistently measured the construct (Spector, P. E., 1992). Reliability analysis was conducted to measure how closely related the items on the scale were to each other. "[O]nce the items with desirable statistical properties have been identified, the different dimensions in the measurement model should be checked for adequate composite reliability ( $> 0.60$ ) and Cronbach's alpha values ( $> 0.70$ ) to indicate the required level of reliability" (Malhotra et al., 2012, p. 852). Cronbach's  $\alpha$  as computed by SPSS was used to measure internal reliability, the standard coefficient target for  $\alpha \geq .70$  was used as the standard (Cronbach & Meehl, 1955; Nunnally, 1978). Reliability was examined from two

points of view. One was a top level analysis, which was used to understand how all of the items related to the scale and to address whether reliability was sufficient (Avolio et al., 1999; Slocum-gori & Zumbo, 2011). The second was with reliability analysis at the subscale level, to determine if the correlation was high enough to represent the variable; this value will generally increase for factors with more variables (Bagozzi & Phillips, 1991; Bagozzi & Moore, 2011).

**Validity testing.** Discriminant validity testing (Fornell & Larcker, 1981) was used to demonstrate the extent to which factors were distinct and uncorrelated. Convergent validity was used to measure the strength of the relationship between different measures. For models with two or more factors, as described in Chapter IV, assessment of composite reliability as well as convergent and divergent validity were run. The aim was for each factor to have at least three variables; however in some cases two is adequate.

### **Chapter III Summary**

Chapter III outlines the mixed methods approach for scale development and the analysis of a pilot pre-test of the survey followed by the survey administration and data analysis procedures. Included in this chapter, were the specifications that I used to determine which model best fit the data collected for this dissertation.

### **Ethical Protections**

Ethical standards are a serious consideration in any research on trust. This study worked to maintain ethical standards in accordance with research on human subject policies, practices, and standards. Ethical approval was sought prior to data collection from Antioch University's Institutional Review Board. An informed consent form was included as a part of the introductory section of the survey and the scale, and all participants were required to agree to participate to continue with the survey. Participation in Phase 1 and Phase 2 was anonymous and confidential.

During Phase 1, participants' identities may have been known to me, but remained confidential. All participation was voluntary and anyone participating in the study could chose to end their involvement at any time and for any reason.

### **The Researcher**

I have over twenty-five years of work experience, primarily in technology jobs and teams, with a strong business background. Most recently I have been working for the U.W. Center for Leadership and Strategic Thinking in the Foster School of Business.

My certifications include Series VII SEC License, certification in Whole Systems Design, certification in Organizational Psychology, and a MA in Organizational Psychology. I have background experience in large transformational projects, including: the transition from analog to digital technology for voice and data networks; the advent of client server technology; the introduction and use of the internet for Fortune 100 and Fortune 500 companies; data management, including warehousing and reporting for large internet and customer service databases; and the evaluation of the relevance of the software application and cloud services. This experience includes more than 18 years of experience managing teams ranging in size from three to 60 members. I have been an active member of employee resource groups throughout my career, including lead positions on employee, management, and executive development initiatives and communities. I was an active member and lead for the Women in IT employee resource groups and industry communities. I am a recipient of Women in Technology International leadership award, and I volunteer for non-profits focused on eliminating poverty for women.

My curiosity led me to obtain a MA in organizational psychology in 2008 and an appreciation for the role of trust in teams. I witnessed more and more negative trust dynamics in the workplace and observed the high cost of low trust to businesses, customers, and employees. I

witnessed few leaders who foster trust in the workplace. What was the issue? If most people would agree that trust is important, then why did trust thrive in some teams and not in others? This led me to enroll in the Antioch PhD program in Leadership and Change, providing the opportunity to examine trust more deeply.

This question led to an introduction to Dr. Bruce Avolio at the U.W. Center for Leadership and Strategic Thinking and his work on developmental readiness to lead. Taking the Developmental Readiness to Lead self-assessment was a pivotal moment for me, when I could directly see the connection between readiness, leadership capabilities and motivation. The concept of developmental readiness to lead provided insight into why some leaders are more effective than others and could potentially be extended to explain why there are differences in trust development in teams.

## Chapter IV: Research Findings

The purpose of this study was to develop and validate a new construct that measures an individual's attitude towards trusting others in the workplace. This study used a two-phase, mixed methods approach. Chapter IV describes the results of an exploration of the variables identified to measure developmental readiness to trust and their underlying relationships based on inter-item correlations and factor analysis. The scale development and factor analysis processes are described in detail, including descriptions of data cleaning, statistical analyses, and a discussion on construct dimensionality, model fit, and discriminant validity. This chapter also covers the results from the Phase 1 interviews and expert reviews, as well as the Phase 2 survey quantitative and narrative data, with an examination of participant comments and demographics.

### Research Question 1

Research Question 1 was, "*What themes emerge from an analysis of narrative interview data related to the Developmental Readiness to Trust construct?*" The Phase 1 small qualitative study entailed conducting and examining the content from six interviews and using the interview analysis to facilitate development of the initial potential scale item pool. Phase 1 also included seeking feedback on the proposed scale items and the survey through layperson and subject matter expert reviews.

I conducted interviews with six laypersons to assess the need to modify the initial proposed scale items for the final survey instrument. The items for the Motivation to Trust and Ability to Trust constructs were created in Phase 1 through a review of the literature and interviews that focused on gaining a deeper understanding of an individual's perception of their own personal motivation and ability to trust. I used a semi-structured interview process including five open-ended questions related to ability to trust others, feelings towards trusting others, and

motivation to trust. The interview protocol, email and personal introduction, and questions were presented in Chapter III. Following the interviews and development of potential scale items, expert reviews were conducted by two research assistant at the Center for Leadership and Strategic Thinking at the University of Washington, Antioch University PhD students in the Survey Research Group, and members of my dissertation committee. Changes to the proposed items based on these reviews were presented in Chapter III.

**Interview participants.** Volunteer interviewees were recruited using professional networks via an email invitation. Participant requirements were that the volunteers be adults (at least 18 years of age), have at least three years of work experience, have experience working on teams of three or more team members, and be currently working. The rationale for these criteria was to interview participants who were not only currently working, but who also had experience working and trusting others on the same professional team instead of merely working as an individual contributor. Of the six total interviewees, four were female and two were male. The interviewees came from a broad range of industries, including aerospace, technology, marketing, insurance, and retail. Interviewee job roles included individual contributors, a manager of a small team, and a retail store manager. The range in work experience was from three to over 15 years.

**Interview narrative analysis.** Interview narrative data were analyzed within the trust concepts established through the literature review and the added focus of this study's overarching research question related to developmental readiness to trust. The trust concepts fell into three pre-conceived categories labeled: Ability to Trust, Motivation to Trust, and Propensity to Trust. Interview data were analyzed within the context of these three construct-based categories. Interviews led to improving item clarity and to the addition of potential scale items. I analyzed the



interview narratives using a word frequency count and thematic analysis. These analyses contributed to identifying sub-categories within the three main categories.

Six sub-categories related to Ability to Trust and Motivation to Trust emerged from the narrative analysis of the interview data. Three of the sub-categories fell under the Ability to Trust category: perception of *competency*, the role of *integrity*, and an individual's *view of ability* to trust. Three of the sub-categories fell under the Motivation to Trust category: previous experience or *instrumentality*, *valence*, and goal orientation, specifically *learn to trust* goal orientation. These three sub-categories tapped into the ways in which the interviewees' previous experience and personal goals related to their motivation to trust.

**Ability to Trust sub-categories.** There were four Ability to Trust sub-categories identified through the Chapter II's literature review, these were (a) *competency*, (b) *integrity*, (c) *benevolence*, and (d) *view of ability*. Three of these sub-categories appeared consistently across interviews.

***Ability to Trust competency.*** The Ability to Trust *competency* sub-category showed up in how participants described the impact of trusting others and others trusting others in having a positive impact on work outcomes from the interviews. Trusting others was seen as a desirable competency when working together. Interviewees stated:

I'm motivated to trust people that I work with because the work goes faster when you're not having to second guess everything that you hear when you know that the materials presented to you are true.

It's just a lot of extra work to work closely with a group who you don't trust.

Seven items were included to measure self-perception of the Ability to Trust--*competency* sub-category.

- I am confident that I can increase my ability to trust others.

- I know when to trust people.
- Others know me to be someone who trusts others in the workplace.
- I understand what is involved in trusting others.
- I am seen as someone who increases the level of trust others have in me.
- I see my ability to trust others as an asset.
- I have many successful relationships in the workplace based on trust.

***Ability to Trust integrity.*** The Ability to Trust *integrity* sub-category was related to the trustor's perception of honesty and fairness (Mayer et al., 1995), and why others are trusted in the workplace. The word "honesty" came up 12 times across all interviews, with comments such as, "When I think about trust, I think about honesty." Behaviors such as follow through, positive intentions, and congruency between words and action were examples of how integrity was observed in others; the phrase "follow through" was used 10 times across all interviews. For example, one interviewee said:

I would define someone that I trust is someone who does what they say they will do, someone who has followed through. That specific behavior is what builds trust for me in my experience and the lack of that behavior is what can erode trust for me.

Follow through and someone doing what they say they will do was captured in the Ability to Trust *integrity* preconceived category for the proposed scale items. Transparency was also mentioned in conjunction with honesty. Honesty and transparency are behaviors that align to the definition of integrity (Mayer et al., 1995), with "honesty" aligned with behavioral integrity, and "transparency" aligned with behavioral consistency. Transparent or transparency was mentioned seven times in simple statements such as, "To me, trust is transparency." Other examples of transparency and honesty comments from two interviewees were:

I think it's about a built and sustained rapport with another person or a group of people through multiple interactions of, you know, of being authentic and humble about yourself and being transparent and then also listening to that same transparency and honesty from another person.

So, I was not motivated to trust with a particular project that I was working on because I knew the leadership on that project were very shady. These were people who played a lot of office politics. These were people who would misrepresent and outright lie if they felt it was to their benefit.

Interview narrative supported the inclusion of seven proposed scale items for Ability to Trust *integrity* for measuring being consistent, keeping one's word, keeping commitments, fairness, honesty, and transparency.

- I see myself as being consistent in my actions.
- I view myself as someone who keeps their word.
- Keeping the commitments I make is very important to me.
- I try hard to be fair in my dealings with others.
- I try hard to be fair in my interactions with others.
- Being honest with others is very important to me.
- Trust is a very important personal value for me.

***Ability to Trust view of ability.*** The Ability to Trust *view of ability* sub-category was related to an individual's point of view regarding trust development, and whether trust is something that they personally can impact. For example, one participant responded, "Right, like I think more of trust like a color, like you just perceive it or have it or don't." This sub-category supported the inclusion of three items to measure an individual's *view of ability* as being fixed or something that they could change (Plaks, 2017).

- I believe I can increase my ability to trust others.

- I view my ability to trust others as something I can increase.
- I view my ability to trust others as something I was born with.

**Motivation to Trust sub-categories.** Chapter II identified six conceptual sub-categories grouped under the Motivation to Trust category: (a) *general motivation* to trust others, (b) *instrumentality*, (c) *valence*, (d) *self-efficacy*, (e) *likelihood to trust others*, and (f) motivation to *learn to trust*. Narrative data from the interviews highlighted three of these sub-categories; these were the relationship between previous experience and trust, labeled *instrumentality*, *valence*, and motivation to *learn to trust*. These three themes are described next.

***Motivation to Trust instrumentality subcategory.*** Interview participants affirmed the role of outcomes when thinking about their motivation to trust others at work. This aligns with expectancy theory instrumentality in which previous experience outcomes influence future efforts to trust. Below is an example of interviewee narrative quotes from a participant that spoke to Motivation to Trust *instrumentality*:

We went out to dinners together, we got to know each other's personal lives...you know everyone's families. And I think that to build the trust that we needed... we put the personal into our work. We made it about our families, we made it about getting home, we made it about being able to get up the next day and tell our stories.

Four items were created to measure *instrumentality*, these are:

- Past experience trusting others motivates me to continue to trust others.
- Trusting others increases my chances of their trusting me.
- People know I have a reputation for trusting others.
- Whether or not others trust me depends on my own trustworthiness

***Motivation to Trust valence sub-category.*** Interview narrative related to the Motivation to Trust category, linked achievement and past performance with the perceived value of the

outcomes of experience (Wigfield et al., 2009). The interview narratives affirmed the role of experience for making future decisions to trust others. In describing their motivation to trust others, interviewees described an expectation that “others behave as they state they will behave” and “someone who does as they say they will do.” This aligns with motivation expectancy theory, in which previous experience contributes to promoting or preventing future intentions. Below is an example of interviewee narrative quotes from a participant that spoke to Motivation to Trust *valence*:

[I]n general, when I think about trust and I think about motivation, I think of them as very different kinds of things. Like I feel like I'm motivated to achieve a goal, I do or do not trust others as I move towards that goal.

For example, in a situation that has staff ranking, I could see how that would motivate people not to trust others because if people are motivated by their compensation rewards and they know there can be only one winner, so to speak, they're not going to trust others to have their best interests in mind because they know it's sort of every person for themselves.

Six items were created to measure *valence*, and the affective nature of motivation to trust; these are:

- I believe that building trust is morally right.
- I believe others will engage in acts of trust.
- I see the benefits in trusting others.
- I believe others are likely to return the trust I have placed in them.
- If I trust them first, the likelihood others will engage in acts of trust is high.
- I believe that trust is a public good.

***Motivation to Trust learn to trust sub-category.*** There was a sub-category for evaluating motivation related to learning to trust that is specifically focused on an individual's learning

orientation. Narrative interview data supported labeling this sub-category as Motivation to Trust *learn to trust*. Motivation to Trust *learn to trust* measures an individual's intrinsic, internal motivation, and extrinsic, external motivation. This is supported by Bandura (2005) and Avolio and Hannah's work on Developmental Readiness to Lead and the role of goal orientation and motivation (2008; 2009). Responses related to this sub-category referred to the role of an internal and external *learn to trust* orientation on influencing motivation to trust others in a team.

Interviewees described the positive impact of having a common goal and external orientation on motivation to trust others. One interviewee stated,

If I was forced to work with others to accomplish a common goal, it's inefficient to have a lack of trust in that situation. So I guess that's the only situation I can think of where I would feel more motivated to trust.

In this case, the common goal acted as an external motivation for this participant to trust to be efficient.

The items designed to measure the Motivation to Trust *learn to trust* sub-category were:

- Learning to trust others is very important to me.
- I would feel bad about myself if I did not trust others.
- I say trusting is important to me because others would think badly of me if I did not.
- The reason I broaden my ability to trust others is because it is important for me to learn about trust.

**Other narrative response analysis.** The interviewee narrative clearly showed their understanding for the subject of their trust. Four words were used most frequently to describe who participants identified as the subject of their trust. In order of high to low frequency these words were: (a) people, 84 times; (b) team, 52 times; (c), them, 38 times; and others, 18 times. Both interview and pilot survey narrative data indicated that participants also successfully related

the survey questions to the workplace, as demonstrated by specific comments. For example, some comments highlighted impact of negative trust experiences, such as working with someone concerned with office politics. The interviewee stated:

And, when you know you have those kind of people on a team, it's very hard to trust not just them but it's hard to trust any teams that they're reporting to. It's impossible to trust any results that they talk about and it really -- it makes -- one person doing that can make the environment bad for everybody.

Other comments pointed to the challenge of working with someone who is not trusted. For example, one interviewee stated, “It is very hard to work with someone who has lost my trust. This is especially true when the person is a direct report or in my management chain of command.” The comments also referred to the situational nature of trusting. For example, an interviewee noted that “...the last CEO and another high-level executive were both seen as untrustworthy.”

Pilot study narrative responses also showed that individual agendas, issues of trust, and leadership quality in complex organizational cultures may motivate the existence or absence of trust in the workforce. For example, one interviewee explicitly addressed leadership by stating, “I trust the organizational leaders to do what they believe is the best for the strategic good of the company and as far as possible, for the social and economic good of the communities in which we do business.”

**Narrative analysis contribution to proposed scale items.** The effect of analysis of interview and pilot study narrative was threefold. The first effect was in ensuring that there were items designed to measure each of the pre-theorized concepts, specifically detailed in the categories and sub-categories. In addressing the first consideration, additional items were added to Motivation to Trust *instrumentality* to enable evaluation of participants’ expectancy outcomes

and to Ability to Trust *view of ability*, an individual's viewpoint of their own ability as either innate versus developed. The second effect was on clarifying that the "self" was the point of reference for each statement, such that each statement was framed from the "I" reference point in the context of their workplace. The third effect was on editing proposed scale items for improving clarity. This required the need to shift from academic to lay language for some items.

**Item modification based on expert reviews.** Expert reviews resulted in the addition of seven items, bringing the final number of items to 74 for the pilot pretest survey. The first expert reviewer recommendation was regarding the number of Propensity to Trust items, involved increasing from the four contained in the Frazier et al. (2013) validated scale items to a total of nine items. The four validated items included were: *I trust people until they give me a reason not to trust them*, *My tendency to trust others is high*, *Trusting another person is not difficult for me*, *My typical approach is to trust new acquaintances until they prove I should not trust them*, and are designated in analysis and in tables with an "\*"."

The five additional Propensity to Trust items were drawn from the same Frazier et al.'s (2013) research. The expert review of Ability to Trust items resulted in a recommendation to try two different wording choices for the item, *I try hard to be fair in my dealings with others; thus*, an item was added, *I try hard to be fair in my interactions with others*, both intended to measure integrity. The expert review of Motivation to Trust items resulted in a recommendation to try two different wording choices for the item *If another person initiates a sense of trust in me, I am likely to return it; thus*, an item was added, *If another person initiates trust in me, I am likely to return it* intended to measure likelihood to trust.

**Final results of interview data analysis and expert review feedback.** Finally, I included



10 reverse scored items to ensure a closer respondent reading of items and to make it possible to see if respondents focused on the actual item and did not merely select the same pattern of responses for all items. The final pilot survey had a total of 74 proposed scale items. Of the 74 items in the pilot survey, 25 were designed to measure the preconceived Ability to Trust construct and 30 items were designed to measure the preconceived Motivation to Trust construct. There were nine Propensity to Trust items in the pilot and final survey. One item was eliminated from the pilot, this left 73 items for the final survey.

The pilot 74 items were placed in a random order in the survey, under the lead-in “thinking about trust in your workplace, how strongly do you disagree or agree with the following statements,” to pose questions in a reflective nature and to avoid leading participants in any specific direction. To build on the narrative data from the Phase 1 interviews, the pilot and final surveys also included an open-ended question at the end of the survey. The open-ended question was, “*Do you have any other thoughts about trust in your workplace that you would like to share?*”

### **Data Preparation and Pilot Study Analysis**

Before conducting factor analyses, the data file was cleaned, and descriptive statistics were run for both the pilot and full study survey data. Descriptive statistics included a description of the study participants as well as measures of central tendency for all of the proposed scale items and bivariate correlations for each proposed scale item with each of the other items. Following this review, both exploratory and confirmatory analyses were run.

**Pilot study statistics.** There were 23 completed pilot study surveys. Analysis included a review of descriptive statistics and narrative responses to the open-ended questions. Results of the

pilot study were used to make decisions about possible changes to the final survey. The pilot survey responses for the proposed trust concept items were coded as 1 (*strongly disagree*), 2 (*disagree*), 3 (*somewhat disagree*), 4 (*neither agree nor disagree*), 5 (*somewhat agree*), 6 (*agree*) and 7 (*strongly agree*).

Pilot study data analyses included frequency and percentage distributions, as well as mean scores and measures of skewness and kurtosis. As authors have suggested (Abell et al., 2009; Baron, 2017; Tabachnick & Fidell, 2007), items with levels of skewness and kurtosis  $\geq 2.5$  or  $\geq 3.0$  are not normally distributed and should potentially be eliminated. This guideline was followed and rational was provided for any exceptions.

Descriptive statistics were run with the pilot study data using SPSS and grouping the items by the preconceived categories of Ability to Trust, Motivation to Trust, and Propensity to Trust (Table 4.1). For Ability to Trust, two items exhibited markedly high kurtosis. These items had similar wording and one, 8h *I try hard to be fair in my dealings with others* had a kurtosis of over 11; thus, it was eliminated from the final study survey. The other item, 8j *I try hard to be fair in my interactions with others* had a kurtosis 6.48 and was not eliminated. All other items were included in the final study survey.

Table 4.1

*Descriptive Statistics for Pilot Study Items Ability to Trust Construct Grouping (N=23)*

Item	Mean	Std. Dev.	Skewness	Kurtosis
2b. I know when to trust people.	5.61	0.839	-1.135	3.203
2d. I would never knowingly do anything to hurt another person.	6.44	0.945	-1.741	2.250
2e. It is a struggle for me to trust others.	3.09	1.505	0.628	-0.699
2g. I see myself as being consistent in my actions.	6.04	0.638	-0.033	-0.239
3a. Being honest with others is very important to me.	6.61	0.499	-0.477	-1.951
3b. Other's needs and desires are very important to me.	5.87	1.014	-0.578	-0.608
3e. Trusting others is difficult for me.	2.65	1.265	1.025	0.976
3f. I view my ability to trust others as something I was born with.	3.74	1.484	0.218	-1.275
3g. I go out of my way to help others.	5.96	0.928	-1.029	0.720
3i. I often work around others to get things done the way I want them.	4.09	1.621	-0.363	-0.913
4a. I am seen as someone who avoids trusting others.	2.00	0.853	0.963	1.061
4d. I am seen as someone who increases trust others have in me.	5.30	1.146	-0.265	-0.942
4i. I view myself as someone who keeps their word.	6.26	0.689	-1.307	4.132
4k. I am confident that I can increase my ability to trust others.	5.39	0.941	-0.194	-0.893
5c. I believe I can increase my ability to trust others.	5.22	0.951	-0.129	-1.325
5g. Others know me to be someone who trust others.	5.74	0.915	-0.984	0.333
5j. I see myself as someone others can rely on.	6.30	0.765	-1.268	2.396
6a. I understand what is involved in trusting others.	5.91	0.733	-0.619	1.041
6g. I am confident in my ability to trust others.	5.91	0.793	-0.437	0.150
6h. Trust is a very important personal value for me.	5.87	1.014	-0.578	-0.608
6k. Keeping the commitments I make is very important to me.	6.52	0.730	-1.998	5.306

Item	Mean	Std. Dev.	Skewness	Kurtosis
7d. I have low confidence in my ability to trust others.	1.87	0.920	1.045	0.686
7e. It is easy for me to care about the welfare of others.	6.35	0.935	-1.526	1.751
7g. I see my ability to trust others as an asset.	5.87	1.140	-0.529	-1.131
7h. I have many successful relationships in the workplace based on trust.	5.83	1.114	-0.923	0.467
7i. I look out for the needs of others.	6.09	0.900	-1.001	0.755
8d. I view my ability to trust others as something I can increase.	5.30	0.876	-0.226	-0.903
8h. I try hard to be fair in my dealings with others.	5.96	1.261	-3.043	11.339
8j. I try hard to be fair in my interactions with others.	6.09	1.164	-2.264	6.476

For the Motivation to Trust category, all items had a measure of skewness  $< 3.0$  and only one reverse scored item had a measure of kurtosis  $\geq 3.0$ . No Motivation to Trust items were eliminated for the final survey. The preconceived Motivation to Trust category comprised of 30 items was created to measure sub-categories including four items designed to measure *instrumentality*, six to measure *valence*, eight to measure *self-efficacy*, four to measure *general motivation* to trust, four to measure motivation to *learn to trust*, four to measure *likelihood to trust* and four reverse scored items (Table 4.2).

Table 4.2

*Descriptive Statistics for Pilot Study Items Motivation to Trust Construct Grouping (N=23)*

Item	Mean	Std. Dev.	Skewness	Kurtosis
2h. It is very important to me to be trusted by others.	6.52	0.593	-0.806	-0.218
2i. I am motivated to learn how to increase my trust in others.	5.61	1.118	-0.191	-1.281
2j. I believe that others are likely to return the trust I have placed in them.	5.00	1.168	-0.750	1.362
3d. Learning to trust others is very important to me.	5.35	1.265	-0.730	0.586
3j. I am motivated to trust others.	5.22	1.043	-0.476	-0.849
3k. I am confident I have the ability to trust others.	6.00	0.953	-0.689	-0.277
4b. If I initiate trusting others, the likelihood others will trust me is high.	5.04	1.224	-0.741	0.093
4c. I see actions I can take to increase the trust others have in me.	5.65	0.885	-0.508	-0.206
4e. Trusting others increases my chances of their trusting me.	5.17	1.403	-1.094	2.377
4f. Past experience trusting others motivates me to continue to trust others.	5.35	1.027	0.037	-1.114
4g. I would feel bad about myself if I did not trust others.	4.78	1.757	-0.518	-0.595
4h. Whether or not others trust me depends on my own trustworthiness.	5.04	1.821	-0.416	-1.127
4j. If another person initiates a sense of trust in me, I am likely to return it.	6.00	0.674	-0.975	2.904
5b. I see no benefit in trusting others.	1.65	0.775	1.364	2.472
5d. I feel that trusting others is very important.	6.00	0.905	-0.404	-0.780
5e. I have low motivation to increase my trust in others.	2.52	1.201	0.720	-0.238
5f. I believe others will engage in acts of trust.	5.65	0.982	-1.098	1.372
5h. I believe building trust is morally right.	5.74	1.096	-0.563	-0.910

Item	Mean	Std. Dev.	Skewness	Kurtosis
5i. The reason I broaden my ability to trust others is because it is important to me to build trust.	5.70	0.926	-0.822	-0.019
6b. I have a low tolerance for working with others who fail to trust others.	5.13	1.325	-0.517	0.260
6d. I see the benefits of trusting others.	6.04	0.825	-0.617	0.167
6e. I feel that trusting others is important.	5.91	0.900	-0.637	-0.005
6f. I see myself as someone who trusts others as I would like to be trusted.	5.78	0.951	-0.565	-0.336
6i. I see little benefit in trusting others.	2.13	1.424	2.026	5.307
6j. I have a successful track record for trusting others.	5.61	0.839	-0.629	-0.008
7b. The likelihood I will initiate trust in others in a new situation is high.	5.61	0.941	-0.165	-0.694
7c. I often reflect on how the level of trust others have in me is linked to my actions.	5.30	1.295	-0.902	0.503
7f. I am confident in my ability to increase the level of trust others have in me.	5.70	0.926	-0.446	-0.400
7j. People know I have a reputation for trusting others.	5.52	1.082	-0.769	-0.094
7k. I believe trust is a public good.	5.96	1.261	-0.955	-0.241
8b. I say trusting others is important to me because other would think badly of me if I did not.	2.87	1.792	0.681	-0.413
8c. I am motivated to learn how to increase the trust others have in me.	5.04	0.976	-0.093	-0.490
8f. I feel that trusting others is of little importance.	1.74	0.864	1.023	0.507
8i. If I trust them first, the likelihood others will engage in acts of trust is high.	5.17	1.154	-0.758	1.154

For the Propensity to Trust category, all items had measures of skewness  $< 3.0$ . Three items had measures of kurtosis somewhat  $> 3.0$ , with measures up to 5.1, but none of these were eliminated, including the reverse scored items. Three of the four items from the validated Propensity to Trust scale (Frazier et al., 2013) had kurtosis  $> 4$ . Given that this four-item scale had been validated in previous research, and given the exploratory nature of this research, these

items were not eliminated. The final survey included 9 items in the Propensity to Trust category including the four items validated for the Propensity to Trust Scale, five additional items used in the (Frazier et al., 2013) scale development process, and two reverse worded items. The Propensity to Trust item sub-categories were (a) *tendency* to trust, (b) faith in *humanity*, (c) trust *stance*, and (d) *new situations* (Table 4.3).

Table 4.3

*Descriptive Statistics for the Pilot Study Items Propensity to Trust Construct Grouping (N=23)*

Item	Mean	Std. Dev.	Skewness	Kurtosis
2a. I believe that people usually keep their promises.	5.35	1.071	-1.512	0.964
2c. I give people the benefit of the doubt when I first meet them.	6.00	1.044	-1.311	1.964
2f. I trust people until they give me a reason not to trust them.*	6.17	0.937	-1.829	5.037
3c. My tendency to trust others is high.*	5.52	1.238	-2.099	4.628
3h. I am seldom wary of trusting others.	4.35	1.152	-0.373	-0.937
5a. It is easy for me to trust others.	5.48	0.947	-1.865	2.599
6c. I hold back on trusting others until I know them well.	3.17	1.267	0.966	0.768
7a. Even if I am uncertain I will give others the benefit of the doubt.	5.09	1.311	-0.837	0.210
8a. My tendency to trust others is low.	1.87	0.815	0.807	0.618
8e. Trusting another person is not difficult for me.*	5.57	1.080	-1.845	4.582
8g. My typical approach is to trust new acquaintances until they prove I should not trust them.*	5.83	0.717	-0.538	0.878

\*Propensity validated items

Correlation analysis with the pilot study data indicated high correlation between the three primary theoretical trust constructs/category scales, as well as high correlations for most of the sub-constructs/sub-categories. This provided an early heads-up that the theorized components,

categories and sub-categories, might not emerge from the factor analysis, as they were pre-conceived in the study planning process. See Table 4.4 for correlations across preconceived categories.

Table 4.4

*Pilot Study Correlations Across the Three Preconceived Trust Constructs (N=23)*

	Propensity to Trust	Ability to Trust	Motivate to Trust
Propensity to Trust	1		
Ability to Trust	0.65	1	
Motivation to Trust	0.77	0.85	1

Table 4.5 shows the bivariate correlations for the Ability to Trust and Motivation to Trust subcategories with each other. It also shows the correlations of these subcategories with the Propensity to Trust overall category mean scores.

Table 4.5

*Pilot Study Correlations Across Each Pre-Conceived Trust Sub-Category (N=23)*

	Bene- volence	Integrit y	Comp- etency	View of Ability	General Motiv- ation	Instru- ment- ality	Valence	Self- Efficac y	Learn to Trust	Likely to Trust	Prop- ensity
Benevolence	1										
Integrity	0.67										
Competency	0.64	0.77									
View of Ability	0.31	0.51	0.80								
General Motivation	0.56	0.63	0.77	0.58							
Instrumentality	0.46	0.65	0.61	0.43	0.79						
Valence	0.66	0.71	0.83	0.65	0.76	0.66					
Self-Efficacy	0.56	0.81	0.86	0.69	0.79	0.77	0.78				
Learn to Trust	0.43	0.26	0.41	0.45	0.54	0.56	0.53	0.44			
Likely to Trust	0.42	0.66	0.65	0.54	0.64	0.74	0.73	0.73	0.54		
Propensity	0.36	0.62	0.65	0.59	0.67	0.62	0.71	0.65	0.54	0.77	1



This pilot study correlation analysis indicated there may be issues with convergent and divergent validity testing. For example, Ability to Trust and Motivation to Trust have a high correlation ( $r = 0.85$ ), as do Motivation to Trust and Propensity to Trust ( $r = 0.77$ ). The high correlation between Motivation to Trust and Propensity to Trust could be an early indication for understanding if Propensity to Trust is viewed as intrinsic or extrinsic Motivation to Trust. In addition, there were high correlations between sub-categories, for example, between Ability to Trust *competency* and Motivation to Trust *self-efficacy* ( $r = 0.86$ ), Ability to Trust *competency* and Motivation to Trust *valence* ( $r = 0.83$ ). There were also low correlations between Ability to Trust *view of ability* and Motivation to Trust *benevolence* ( $r = 0.31$ ) and Ability to Trust *benevolence* and Propensity to Trust ( $r = 0.36$ ).

The final analysis conducted on the data from the 74 items from the pilot survey resulted in one item being eliminated for the final survey. The final survey had 73 items placed in a random order in the survey, 28 items designed to measure Ability to Trust, 34 items created to measure Motivation to Trust, and 11 items to measure Propensity to Trust, this includes the 10 reverse scored items. Next is a description of the data cleaning and data analysis conducted for preparation for the principal component exploratory factor analysis and confirmatory factor analysis using the final survey data results.

**Data File Cleaning.** The data cleaning process for full final sample data file was iterative, starting with a visual review of participant case responses and ending with outlier analysis using SPSS and AMOS. The data preparation process for analyzing the combined SurveyMonkey® data sets included sorting and cleaning survey cases, looking for incomplete or potentially unreliable responses, and identifying and removing outlier response cases from the data set. The

survey filter question asked participant work status. Of the 492 total survey respondents, 13 participants selected, “No, I am not working right now.” This left 479 eligible cases. After a review of each of the 479 responses, sixty-two cases were removed from the data file due to missing data or unreliable response patterns (Table 4.6). A case was deemed unreliable if it was incomplete or contained patterned responses, or if it was an outlier. No changes were made to fill in missing data. In addition, reverse scored items were used to evaluate responses for negative response pattern compared to positively worded items. The final result of the item data screening and cleaning process was a total sample of 417 good cases. Fifty of these cases originated in my own professional social network links, while 367 came from Amazon’s Mechanical Turk. See Table 4.6 for breakout.

Table 4.6  
*Survey Response Screening (N=492)*

Response Description	Number of Responses	Percent (%)
From Professional Network	96	20
From Mechanical Turk Network	396	80
Filter question / not currently working	13	3
Incomplete / missing data	31	6
Bad - repeat responses across all items	7	1
Outliers based on analyses in SPSS	19	4
Outliers based on analyses in AMOS	5	1
Final Responses	417	100
Professional Network	50	12
Mechanical Turk Network	367	88

The KMO Measure of Sampling Adequacy ( $m$ ) and Bartlett’s Test of Sphericity were used to ensure that sample size was sufficient to conduct factor analysis. The sample size is considered good (George & Mallery, 2016; Stevens, 1996), if the value of  $m$  is between .800 and 1.000. The

KMO for this sample was .963, indicating it was an adequate size for conducting factor analysis. Appropriate factor loading cutoff thresholds depend on the sample size of the data set. Generally, a smaller sample size requires a higher loading. For the purpose of this study, the sample size of 417 is considered large, such that factor loading cutoffs of  $\geq .50$  are acceptable, with each component having loadings averaging to  $\geq .70$  (Gaskin, 2000).

### **Participant Demographics**

Of the 417 cases included in this study for analysis, 55.1% were female, 44.4% were male, and < 1% identified as transgender or as other gender. Over 66.2% worked in a for-profit organization. The other 34% worked for either a nonprofit entity (12.2%), a government agency (8.9%), or was self-employed (12.7%). Slightly more than half (54.6%) held individual contributor roles in their workplace, 17.1% were supervisors, 17.6% were managers, and 6.0% were organizational leaders. Fewer than 1% of the survey respondents had been working for less than one year, and almost two-thirds (63.5%) had been in the workforce for at least 11 years, this does not include any participant who responded *not currently unemployed*. All participants who clicked *not currently working* were filtered out. Over 58% had an undergraduate or a graduate college degree. The majority of participants self-identified as white/Caucasian. A complete breakdown of demographic information and data gathered is provided in Table 4.7.

Table 4.7

*Participant Demographics for Phase 2 Survey (N=417)*

Participant Demographics Responses	Frequency	Percent (%)
<b>Employment Type</b>		
Work for a for profit corporation	276	66.2
Work for a nonprofit corporation	61	12.2
Work for a local, state, or national government agency	37	8.9
Self employed	53	12.7
Total	417	100.0
<b>How long have you been working?</b>		
Less Than 1 Year	3	0.7
1 Year - 5 Years	60	14.4
6 Years - 11 Years	89	21.3
12 Years - 25 Years	151	36.2
More than 25 Years	114	27.3
Total	417	100.0
<b>Gender</b>		
Female	233	55.1
Male	180	44.4
Transgender	1	0.2
Other gender identity	1	0.2
Total	415	100.0
<b>Current role?</b>		
Individual contributor	226	54.4
Supervisor, line manager	71	17.1
Manager	73	17.6
Organizational leader	25	6
Other (please specify)	20	4.8
Total	415	100.0
<b>Highest level of school that you have completed?</b>		
Some high school, a high school diploma (or GED) or less	31	7.4
Some college, but no degree	82	19.7
2-year college degree	61	14.6
4-year college degree	166	39.8
Graduate-level degree/courses	77	18.5
Total	417	100.0
<b>Race/ethnicity</b>		

Participant Demographics Responses	Frequency	Percent (%)
American Indian or Alaskan Native	1	0.2
Asian / Pacific Islander	25	6
Black or African American	37	8.9
Hispanic	24	5.8
White / Caucasian	318	76.6
Multiple ethnicity / Other (please specify)	10	2.4
Total	417	100.0
<b>Principal industry of your organization</b>		
Advertising & Marketing	13	3.1
Agriculture	9	2.2
Airlines & Aerospace (including Defense)	2	0.5
Automotive	3	0.7
Business Support & Logistics	16	3.9
Construction, Machinery, and Homes	9	2.2
Education	46	11.1
Entertainment & Leisure	26	6.3
Finance & Financial Services	18	4.4
Food & Beverages	29	7
Government	22	5.3
Healthcare & Pharmaceuticals	51	12.3
Insurance	3	0.7
Manufacturing	23	5.6
Nonprofit	19	4.6
Retail & Consumer Durables	50	12.1
Real Estate	10	2.4
Telecommunications, Technology, Internet & Electronics	48	11.6
Transportation & Delivery	11	2.7
Utilities, Energy, and Extraction	5	1.2
Total	417	100.0

Demographic data showed a larger percent of women, 55.1%, responded to the survey as compared to men, 44.4%. In addition, only 7.4% of participants have no college education indicating participants are educated.

### **Descriptive Statistics for Potential Scale Items.**

Descriptive statistics were generated in SPSS for all potential scale items, including reverse scored items. Means, standard deviations, and measures of skewness and kurtosis were examined for all items. Items with measures of skewness  $\geq .25$  and kurtosis  $\geq 3.0$  were considered for elimination prior to starting factor analysis. See Table 4.8, 4.9, and 4.10 for descriptive statistics for all 73 items grouped under the preconceived constructs in the categories of Ability to Trust, Motivation to Trust, and Propensity to Trust and the 14 of sub-categories that fell under these categories. The descriptive statistics for Ability to Trust had only one item from the Ability *benevolence* sub-category with kurtosis  $> 4$ , this item, 8g *I see myself as someone others can rely on*, was not eliminated. See Table 4.9 for these data.

Table 4.8

*Descriptive Statistics for Ability to Trust Items (N=417)*

Sub-Category	Item	Mean	Std. Dev.	Skewness	Kurtosis
Benevolence	2d. I would never knowingly do anything to hurt another person.	6.09	1.063	-1.591	3.358
Benevolence	3b. Other's needs and desires are very important to me.	5.59	1.119	-0.837	0.564
Benevolence	4f. I go out of my way to help others.	5.58	1.177	-0.925	0.964
Benevolence	7e. It is easy for me to care about the welfare of others.	5.74	1.096	-0.887	0.509
Benevolence	8g. I see myself as someone others can rely on.	6.05	0.934	-1.564	4.253
Benevolence	9c. I often work around others to get things done the way I want them.	4.16	1.619	-0.146	-0.962
Benevolence	11f. I look out for the needs of others.	5.67	1.097	-0.964	1.220
Competency	2b. I know when to trust people.	5.55	0.997	-0.934	1.265
Competency	5g. Others know me to be someone who trust others in the workplace.	5.37	1.196	-0.870	0.553
Competency	6a. I understand what is involved in trusting others.	5.85	0.762	-1.180	3.341
Competency	6g. I am seen as someone who increases the level of trust others have in me.	5.42	1.072	-0.656	0.271
Competency	7g. I see my ability to trust others as an asset.	5.36	1.221	-1.030	0.923
Competency	7h. I have many successful relationships in the workplace based on trust.	5.59	1.068	-1.092	1.991
Competency	11b. I am confident that I can increase my ability to trust others.	5.24	1.144	-0.727	0.782
Reverse	2e. It is a struggle for me to trust others.	3.52	1.690	0.320	-1.020
Reverse	3e. Trusting others is difficult for me.	3.45	1.718	0.428	-0.983
Reverse	4a. I am seen as someone who avoids trusting others.	2.76	1.508	0.894	-0.056
Reverse	7d. I have low confidence in my ability to trust others.	2.78	1.524	0.933	0.004

Sub-Category	Item	Mean	Std. Dev.	Skewness	Kurtosis
Integrity	2g. I see myself as being consistent in my actions.	5.94	0.844	-1.110	2.370
Integrity	3a. Being honest with others is very important to me.	6.16	0.862	-1.416	3.842
Integrity	4d. I try hard to be fair in my interactions with others.	6.00	1.113	-1.667	3.503
Integrity	6e. Trust is a very important personal value for me.	5.72	1.126	-1.130	1.434
Integrity	8c. I view myself as someone who keeps their word.	6.13	0.902	-1.314	2.223
Integrity	10e. Keeping the commitments I make is important to me.	6.25	0.811	-1.160	2.021
View of Ability	5c. I believe I can increase my ability to trust others.	5.18	1.091	-0.726	0.547
View of Ability	8d. I view my ability to trust others as something I can increase.	5.25	1.038	-0.669	0.388
View of Ability	10b. I view my ability to trust others as something I was born with.	4.32	1.587	-0.247	-0.804

Motivation to Trust items all were within skewness and kurtosis benchmarks; thus, no items were eliminated based on these statistics. There were three items eliminated due to close wording of items. These similarly worded item pairs were: 9a *I am motivated to learn how to increase the level trust others have in me*, and 10f *I am motivated to learn to increase the trust others have in me*, resulting in eliminating item 9a. In addition items 7f *If another person initiates a sense of trust in me, I am likely to return it*, and 11a *If another person initiates trust in me, I am likely to return it* were close in wording resulting in elimination of 11a; and finally 10g duplicated the wording of 9e, with 10g removed (Table 4.9).



Table 4.9

*Descriptive Statistics for Motivation to Trust Items (N=417)*

Sub-Category	Item	Mean	Std. Dev.	Skewness	Kurtosis
Instrumentality	3g. Past experience trusting others motivates me to continue to trust others.	4.79	1.423	-0.681	-0.223
Instrumentality	4e. Trusting others increases my chances of their trusting me.	5.43	1.114	-1.018	1.439
Instrumentality	9e. People know I have a reputation for trusting others.	5.08	1.352	-0.848	0.273
Instrumentality	10g. People know I have a reputation for trusting others.	5.12	1.311	-0.768	0.041
Instrumentality	11d. Whether or not others trust me depends on my own trustworthiness.	5.28	1.344	-0.955	0.789
Learn to Trust	3d. Learning to trust others is very important to me.	5.29	1.216	-0.702	0.289
Learn to Trust	4g. I would feel bad about myself if I did not trust others.	4.28	1.482	-0.299	-0.664
Learn to Trust	8b. I say trusting others is important to me because others would think badly of me if I did not.	3.45	1.665	0.172	-1.069
Learn to Trust	8f. The reason I broaden my ability to trust others is because it is important for me to learn about trust.	4.69	1.353	-0.543	0.067
Likely to Trust	4b. If I initiate trusting others, the likelihood others will trust me is high.	5.23	1.146	-1.057	1.452
Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.	4.88	1.409	-0.801	-0.021
Likely to Trust	7f. If another person initiates a sense of trust in me, I am likely to return it.	5.72	1.052	-1.019	1.207
Likely to Trust	11a. If another person initiates trust in me, I am likely to return it.	5.67	1.053	-1.103	1.379

Sub-Category	Item	Mean	Std. Dev.	Skewness	Kurtosis
General Motivation	5d. I feel that trusting others is very important.	5.54	1.076	-1.053	1.577
General Motivation	6b. I have a low tolerance for working with others who fail to trust others.	4.11	1.406	-0.229	-0.605
General Motivation	8h. I have a successful track record for trusting others.	5.20	1.309	-0.952	0.411
General Motivation	9d. I am motivated to trust others.	5.16	1.229	-0.770	0.338
General Motivation	10c. It is very important to me to be trusted by others.	5.69	1.084	-0.987	1.163
Motivation Reverse	5b. I see no benefit in trusting others.	2.23	1.237	1.419	2.047
Motivation Reverse	5e. I have low motivation to increase my trust in others.	2.93	1.547	0.688	-0.464
Motivation Reverse	9f. I feel that trusting others is of little importance.	2.61	1.596	1.116	0.355
Motivation Reverse	11e. I see little benefit in trusting others.	2.58	1.639	1.143	0.412
Self-Efficacy	4c. I see actions I can take to increase the trust others have in me.	5.50	1.043	-0.975	1.686
Self-Efficacy	4h. I am confident in my ability to increase the level of trust others have in me.	5.47	1.019	-0.610	0.233
Self-Efficacy	6f. I see myself as someone who trusts others as I would like to be trusted.	5.50	1.199	-0.985	0.952
Self-Efficacy	7c. I often reflect on how the level of trust others have in me is linked to my actions.	4.98	1.397	-0.673	-0.028
Self-Efficacy	9a. I am motivated to learn how to increase my trust in others.	4.88	1.286	-0.639	0.119
Self-Efficacy	10a. I am confident in my ability to trust others.	5.37	1.272	-1.142	0.734
Self-Efficacy	10f. I am motivated to learn how to increase my trust in others.	4.98	1.269	-0.624	0.267

Sub-Category	Item	Mean	Std. Dev.	Skewness	Kurtosis
Valence	2f. I believe that building trust is morally right.	5.73	1.021	-0.871	1.105
Valence	5f. I believe others will engage in acts of trust.	5.32	0.960	-0.801	0.832
Valence	6d. I see the benefits of trusting others.	5.80	0.886	-0.892	1.303
Valence	9b. I believe others are likely to return the trust I have placed in them.	5.46	1.111	-1.104	1.479
Valence	9h. If I trust them first, the likelihood others will engage in acts of trust is high.	5.16	1.171	-0.758	0.296
Valence	11c. I believe that trust is a public good.	5.48	1.129	-0.714	0.359

Propensity to Trust items were all within skewness and kurtosis benchmarks; thus, no items were eliminated based on these statistics. See Table 4.10 for these results.

Table 4.10

*Descriptive Statistics for Propensity to Trust Items N=417*

Sub-Category	N=417	Std.		Skewness	Kurtosis
		Mean	Dev.		
Humanity	2a. I believe that people usually keep their promises.	5.22	1.090	-1.101	1.050
New Situations	2c. I generally give people the benefit of the doubt when I first meet them.	5.52	1.185	-1.144	1.373
Tendency*	3f. I am seldom wary of trusting others.	4.29	1.582	-0.218	-1.002
Humanity	5a. It is easy for me to trust others.	4.74	1.552	-0.710	-0.392
Tendency	7a. Even if I am uncertain, I will give others the benefit of the doubt.	4.95	1.274	-0.821	0.183
Propensity Reverse	6c. I hold back on trusting others until I know them well.	4.20	1.703	-0.052	-1.122
Stance	8a. My tendency to trust others is low.	2.95	1.717	0.793	-0.558
Propensity Reverse	3c. My tendency to trust others is high.	4.94	1.483	-0.723	-0.218
Humanity	8e. Trusting another person is not difficult for me.	4.77	1.577	-0.642	-0.545
New Situations	9g. My typical approach is to trust new acquaintances until they prove I should not trust them.	5.06	1.434	-0.765	-0.039
Stance*	10d. I trust people until they give me a reason not to trust them.	5.42	1.393	-0.968	0.364

\*Validated Propensity Items

**Bivariate correlations.** Next, bivariate correlations were calculated for all proposed scale items with every other item. Items that did not correlate with at least one other item at  $\geq .30$  were eliminated from the factor analysis. Four items did not correlate or correlated with few items at the  $\geq .30$  level. These were eliminated: 6b *I have a low tolerance for working with others who fail*

*to trust others, 8b I say trusting others is important to me because other would think badly of me if I did not, 9c I often work around others to get things done the way I want them, and 10f I am motivated to learn how to increase my trust in others. See supplemental file for correlations for all 63 items.*

**Reverse items.** The reverse worded items were recomputed as positive scored items. Descriptive statistics were generated and the recomputed reverse items were evaluated with the first Principal Component Analysis (PCA) run to assess whether the recomputed items loaded on a substantively meaningful component; they did not. Once the first PCA run was completed, reverse scored items were removed from the 73 initial items, leaving 63 items for further final evaluation in the factor analysis process.

**Summary item analysis in preparation for factor analysis.** In summary, the final result of data preparation was the elimination of seven items from the factor analysis process; four (6b, 8b, 9a, and 9c) were deleted due to low correlations and three (10f, 10g, and 11a) were deleted because of duplication and wording issues. This left 56 positively worded items designed to measure some aspect of developmental readiness to trust for the exploratory factor analysis.

Table 4.11

*Variable Screening Results*

Total Variables	Description
74	Total Items in Pilot
1	Removed after pilot due to low correlation
73	Total items in final survey
10	Removed Reverse
4	Removed Low correlation across all items
2	Removed for Wording
1	Removed for Duplicate
56	Total Final Items

## Research Question 2. Exploratory and Confirmatory Factor Analysis

Research Question 2 was, “*What factors emerge from exploratory and confirmatory factor analysis of the items designed to measure propensity, motivation, and ability to trust?*”

In the early exploratory analysis of all 73 items prior to analysis for eliminating any items, ten factors initially emerged using the eigenvalue criterion of  $\Rightarrow 1.0$  in conjunction with a scree plot. While ten factors loaded, the first component loads with 28.5% of the items, with component 2 loading with 4.8% and component 3 loading with 4.1%. All other components drop to less than 1.9% and no more than 1.0% for components 4 through 10, (Table 4.12). Early indications were that the construct would have one very strong factor with potential for two additional factors with lower eigenvalues.

Table 4.12

### *Initial Eigenvalues*

Component	Total	% of Variance	Cumulative %
1	28.483	39.018	39.018
2	4.776	6.543	45.561
3	4.137	5.668	51.229
4	1.851	2.536	53.765
5	1.769	2.423	56.188
6	1.554	2.129	58.317
7	1.352	1.853	60.169
8	1.204	1.649	61.819
9	1.167	1.599	63.417
10	1.000	1.370	64.788

Following cleaning of the database and running descriptive statistics for the proposed scale items, I ran PCA with varimax rotation and I explored the potential factors for the proposed developmental readiness to trust scale, with the goal of reducing the data set to only those items

that strongly loaded on components with eigenvalues  $\geq 1.0$ . Items loading at the .35 level on multiple components were eliminated, since loading on more than one component indicates that the item could measure more than one factor (Kahn, 2006). Items that did not load on any component were also eliminated because this implied that the item was probably not related to the theoretical construct.

In addition to loadings, consideration was given to ensuring that final components had enough items in each component to measure validity and reliability. Keeping a measure short is a means of minimizing response biases (Schriesheim & Eisenbach, 1990); however, too few items may result in a lack of validity, internal consistency, and reliability (Nunnally, 1978). The pattern matrices produced via PCA were exported to AMOS for confirmatory factor analysis (CFA), including reliability and validity testing. Model fit, modification indices, and standardized residual covariances were used to analyze items within each of the models. Validity testing was also conducted on final model results to evaluate if there were issues of convergent or divergent validation for estimating best fit.

**Initial PCA.** The first PCA iteration resulted in an eight-component matrix with 56 items. After five iterations eliminating all cross-loading items a three-component pattern matrix was produced. The initial iteration showed 24 items which loaded across multiple components. These 24 items were removed for the next iteration with 32 items. This second iteration resulted in five components, with four items loading across multiple components; these four items were eliminated before the next run. The third iteration with 28 items resulted in five components, with two items cross-loading and eliminated before the next run. The fourth iteration with 26 items resulted in four components with one item cross-loading on multiple components. After removing the cross-loading item, PCA was then run again with this fifth iteration resulted in 25 items in five

components and one cross loading item, which was eliminated. The sixth PCA had 24 items in five components with two cross loading which were eliminated, and the seventh run resulted in 22 items in three components with two cross loading which were eliminated. The final pattern matrix resulted after 8 iterations had 20 items in three components and no cross-loading issues.

Conceptual names were given to each of the final three components based on item wording and the preconceived theoretical origins of the statement. The first component contained nine items and was labelled Motivate1. Motivate1 consisted of four Propensity to Trust items, three Motivation to Trust items, and two items intended to measure Ability to Trust. The second component had nine items and was labeled Ability1. Ability1 consisted of seven items intended to measure Ability to Trust and two designed to measure Motivation to Trust. The third component was labelled Motivate 2. Motivate 2 consisted of four items, three designed to measure Motivation to Trust and one designed to measure Ability to Trust. The final pattern matrix is shown in Table 4.13. These results were exported into AMOS for further analysis to confirm the model structure and further improve fit through confirmatory factor analysis.



Table 4.13

*Factor loadings for Proposed Developmental Readiness to Trust Scale Based on PCA Results*

Factor	Sub-Category	Description	Motivate1	Ability1	Motivate2
Ability	Competency	5g. Others know me to be someone who can trust others in the workplace.	0.678		
Propensity	Stance	10d. I trust people until they give me a reason not to trust them.	0.686		
Motivation	Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.	0.764		
Motivation	Self-Efficacy	8h. I have a successful track record for trusting others.	0.773		
Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.	0.782		
Propensity*	Humanity	8e. Trusting another person is not difficult for me.	0.807		
Propensity*	Tendency	3c. My tendency to trust others is high.	0.857		
Propensity*	Tendency	5a. It is easy for me to trust others.	0.868		
Ability	Competency	2b. I know when to trust people.		0.368	
Motivation	Benevolence	3b. Other's needs and desires are very important to me.		0.534	
Ability	Benevolence	4f. I go out of my way to help others.		0.585	
Ability	Integrity	2g. I see myself as consistent in my actions.		0.704	
Ability	Benevolence	8g. I see myself as someone others can rely on.		0.708	
Ability	Integrity	4d. I try hard to be fair in my interactions with others.		0.709	
Ability	Integrity	10e. Keeping the commitments I make is important to me.		0.759	
Ability	Integrity	8c. I view myself as someone who keeps their word.		0.774	
Motivation	Likely to Trust	4b. Initiate trusting likelihood others is high.			0.554

Factor	Sub-Category	Description	Motivate1	Ability1	Motivate2
Motivation	Instrumentality	4e. Trusting others increases my chances of their trusting me.			0.642
Ability	View of Ability	8d. I view my ability to trust others as something I can increase.			0.757
Motivation	Learn to Trust	8f. It is important to learn about trust.			0.758

\*Propensity validated items

**CFA three-factor model.** PCA produced a three-factor model for evaluation. The PCA was derived after six rotations, the final sixth rotation resulted in a 20 item pattern matrix with three components which was loaded into AMOS. The final pattern matrix had a KMO statistic of .927 and  $df = 190$ , which indicated that the sample was a sufficient size for factor analysis. CFA was run on the three-factor pattern matrix model in AMOS. Several considerations helped determine the best fit during the CFA process, making it possible to identify which items should remain as part of the final Developmental Readiness to Trust scale. Brown (2014) cautioned that goodness-of-fit measures should not be the exclusive measure of model fit. It is also necessary to look at reliability and validity.

Model fit testing involved chi-square testing and examining fit indices, along with testing for convergent and divergent validity. The three-factor model resulting from PCA analysis was iterated to achieve a chi-square goal of as close to zero as possible (Cronbach & Meehl, 1955; Westen & Rosenthal, 2005), in parallel with achieving convergent and divergent validation. High modification indices were evaluated for impact on chi-square. The primary purpose of modification indices was in providing diagnostic information on model fit (Whittaker, 2012). When the modification index between two items is high, Gaskin (2013) recommends that one of the items be deleted, or that the items be covaried to improve the model fit. If items with high modification indices are on the same factor, they can be covaried; if they are on different factors,

they cannot be covaried. Items with modification index  $\geq 14$  (Whittaker, 2012) were covaried or were assessed for elimination, with appropriate modifications made after each round of data evaluation. Decisions about which items to retain were based on several criteria; if an item exhibited an unusually low loading on the factor, it was considered for deletion. Items with high  $\geq 2.5$  standardized residual covariances were also evaluated for removal to test whether their elimination improved model fit and items recommended for removal via validity testing in AMOS.

Seven CFA iterations for this model were run to improve model fit. In the first iteration one item pair 8d and 8f, had a modification indices of 41.541 and validity testing recommended removing 8f to improve convergent validity issues with Motivate2, item 8f was eliminated. In addition, in this first iteration the three-factor model was examined for items that could be covaried. First, looking at items within components that could be covaried, covarying two items in Motivation1, 8d *I view my ability to trust others as something I can increase* and 8f *It is important to learn about trust* was considered, but this did not improve model fit. Covarying did not improve model or model fit. This left 19 items in the next iteration.

In the second iteration items 3b and 3c had a high modification indice of 35.668 and 3c had three instances of high SRC of  $> 2.5$ , item 3c was eliminated. In the third iteration with 18 items in the model and validity testing suggesting removal of item 2b that had a standardized residual  $> 2.5$ , to improve convergent validity for Ability1 Item 2b was eliminated, leaving 17 items. Early iterations showed items 3b and 4f with a high modification index of 45.32. In the fourth iteration validity testing recommended removing item 3b to improve convergent validity with Ability1. As suggested item 3b was eliminated, leaving 16 items. In the fifth iteration validity testing recommended removing 8d to improve convergent validity for Motivate2; this

item was eliminated, leaving 15 items. This elimination resulted in the Motivate2 factor having only 2 items. The sixth iteration with 15 items still showed convergent validity issues and, as suggested, that item 4d in Ability1 should be eliminated. The seventh and final iteration showed that in removing item 4f the model achieved convergent and divergent validity. The final model had 13 items, 4 in Ability1, 7 in Motivate1 and 2 in Motivate2, (Table 4.14).

Table 4.14

*Three Factor Model Iterations*

Iteration	Item	Elimination Rational	#items
Start		Items at start	20
Iteration 1	8f	High modification indices, 45 with 8d first covaried, then eliminated 8f	19
Iteration 2	3c	2 high modification indices	18
Iteration 3	2b	Low loading .45, validity recommendation	17
Iteration 4	3b	High modification indices 47, validity recommendation	16
Iteration 5	8d	Loading .50, validity recommendation for Ability1	15
Iteration 6	4d	Validity recommendation .63 loading	14
Iteration 7	4f	Validity achieved	13

The three-factor model fit and all other tested models used the following five goodness-of-fit indices and criterion:

- Chi-square ( $\chi^2$ ), as close to zero
- (CMIN/DF) for absolute fit, < 3 is good, < 5 is highest threshold
- Comparative fit index (CFI) for comparative or incremental fit, >.90 acceptable, > .95 is great
- Goodness of fit index (GFI), >.90
- Root mean square error of approximation (RMSEA) for fit adjusting for model parsimony, < .05 good, >.10 bad

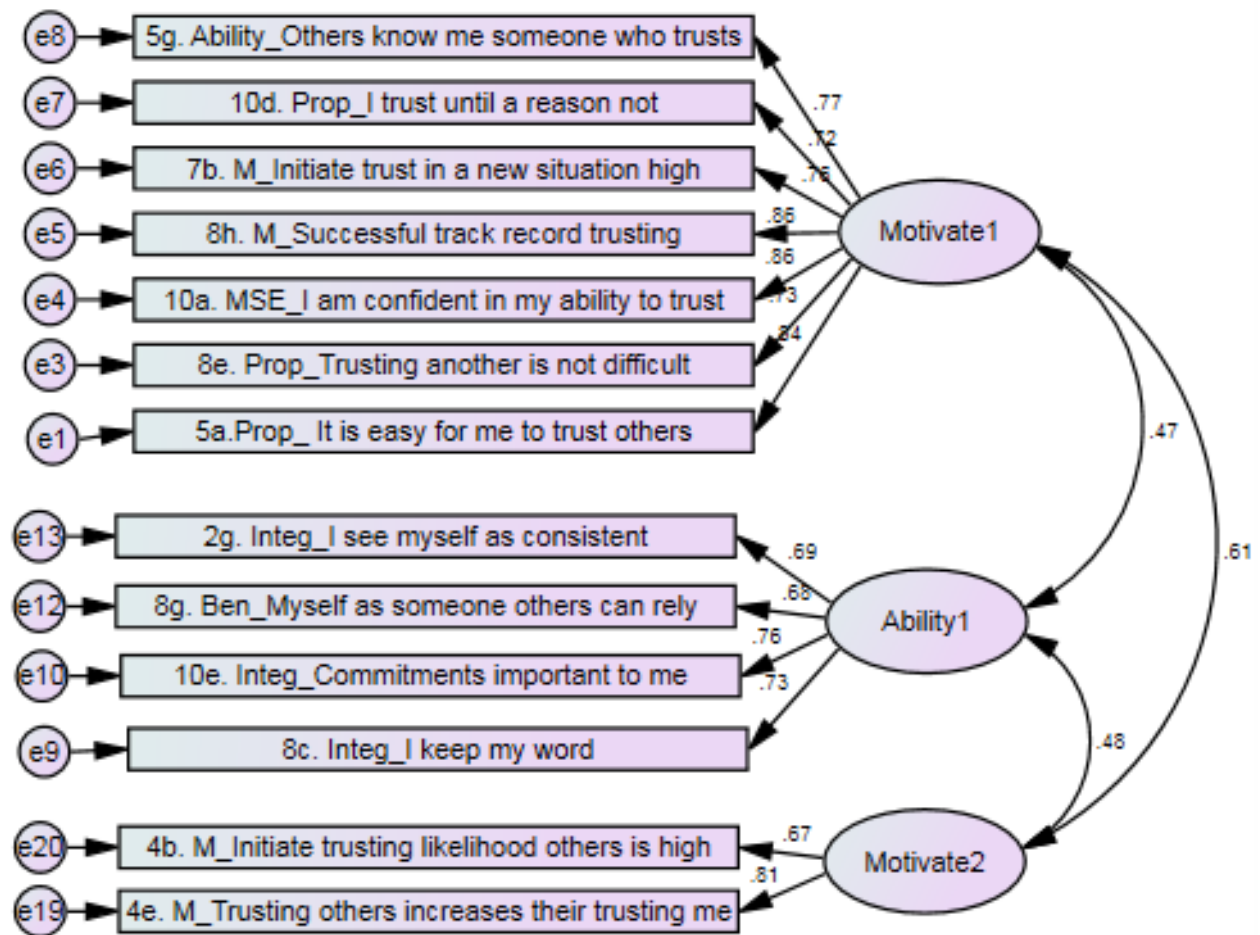


Figure 4.1. Three-factor model

The three-factor model description of components, categories, and items is shown in Table 4.14.

This is followed by goodness of fit and validity results in Tables 4.15 and 4.16.

Table 4.15

*Three-Factor Model Description*

Component	Category	Subcategory	Item
Ability1	Ability	Integrity	10e. Keeping the commitments I make is important to me.
Ability1	Ability	Integrity	2g. I see myself as being consistent in my actions.
Ability1	Ability	Integrity	8c. I view of myself as someone who keeps their word.
Ability1	Ability	Benevolence	8g. I see myself as someone others can rely on.
Motivate1	Ability	Competency	5g. Others know me to be someone who trust others in the workplace.
Motivate1	Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.
Motivate1	Propensity	Propensity*	10d. I trust people until they give me a reason not to trust them.
Motivate1	Propensity	Propensity	5a. It is easy for me to trust others.
Motivate1	Motivation	General	8h. I have a successful track record for trusting others.
Motivate1	Propensity	Propensity*	8e. Trusting another person is not difficult for me.
Motivate1	Motivation	Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.
Motivate2	Motivation	Likely to Trust	4b. If I initiate trusting others, the likelihood others will trust me is high.
Motivate2	Motivation	Instrumentality	4e. Trusting others increases my chances of their trusting me.

\*Propensity Validated Item

The goodness of fit statistics for this three-factor model began with a Chi-Square = 540.60,  $\alpha$  of 0.916, CMIN/DF = 3.24, CFI = 0.912, RMSEA = 0.073, and GFI = 0.873 while low, all are within acceptable ranges. However, the three-factor model with 20 items, while showing it is within convergent validity ranges, did not show it achieved divergent validity until the final iteration, see Table 4.15. The results produced the final model fit to Chi-Square = 154.0,  $\alpha$  0.899 CMIN/DF=2.48, CFI= 0.967, RMSEA = 0.060, and GFI= 0.943, all within ranges of the standards noted above. See Table 4.15 for a summary of results for each iteration for the three-factor model.

Table 4.16

*Three-Factor Model Iteration Results*

Factors	Item	# of Items	$\chi^2$	$\alpha$	CMIN/DF	CFI	RMSEA	GFI	df
Start		20	540.57	0.916	3.237	0.912	0.073	0.873	167
Iteration 1	8f	19	464.79	0.916	3.119	0.922	0.071	0.884	149
Iteration 2	3c	18	370.20	0.908	2.805	0.933	0.066	0.904	132
Iteration 3	2b	17	340.822	0.906	2.938	0.953	0.068	0.926	116
Iteration 4	3b	16	253.408	0.902	2.509	0.942	0.060	0.907	101
Iteration 5	8d	15	207.02	0.901	2.38	0.966	0.058	0.941	87
Iteration 6	4d	14	173.266	0.900	2.341	0.962	0.057	0.937	74
Iteration 7	4f	13	153.99	0.899	2.484	0.897	0.066	0.943	62

**Validity testing the three-factor model.** Along with model fit changes, I evaluated the composite reliability, CR, AVE, and MSV for the three-factor model. The results are based on accepted thresholds, specifically CR >.70, AVE >.50, MSV < AVE, (Brown, 2015; Gaskin, 2013; Gaskin, 2016). The first round of validity testing results for the three-factor model were

for: Ability1 CR = 0.843, AVE = 0.406, and MSV = 0.329, showing issues of convergent validity; for Motivate1 CR = 0.934, AVE = 0.639, and MSV = 0.414 and for Motivate2, with a CR = 0.724 and AVE = 0.400, and MSV = 0.414, showing issues of discriminant validity. The final round resulted in Ability1 CR = 0.808, AVE = 0.513, and MSV = 0.234, showing issues of convergent validity; for Motivate1 CR = 0.922, AVE = 0.630, and MSV = 0.374 and for Motivate2, with a CR = 0.709 and AVE = 0.551, and MSV 0.374, showing issues of discriminate validity.

It was not until the final run of the three-factor model that composite CR and AVE results were within recommended thresholds, and this model resulted in only two items for Motivate2. A factor with two or fewer variables is only considered reliable when the variables are highly correlated with each other, with  $r \geq .70$ , and are uncorrelated with other variables (Tabachnick & Fidell, 2007; Worthington & Whittaker, 2006). These parameters did not hold true for this model, since these two items have a correlation = .611.



Table 4.17

*Three-Factor Model Validity Testing Final Results*

Iteration	Factor	CR	AVE	MSV
1	Motivate1	0.934	0.639	0.414
	Ability1	0.843	0.406	0.329
	Motivate2	0.724	0.400	0.414
2	Motivate1	0.922	0.629	0.417
	Ability1	0.843	0.406	0.332
	Motivate2	0.691	0.435	0.417
3	Motivate1	0.922	0.629	0.416
	Ability1	0.844	0.438	0.31
	Motivate2	0.691	0.435	0.416
4	Motivate1	0.922	0.629	0.417
	Ability1	0.833	0.456	0.287
	Motivate2	0.691	0.435	0.417
5	Motivate1	0.922	0.630	0.372
	Ability1	0.833	0.456	0.255
	Motivate2	0.709	0.552	0.372
6	Motivate1	0.922	0.630	0.373
	Ability1	0.812	0.467	0.245
	Motivate2	0.709	0.552	0.373
7	Motivate1	0.922	0.630	0.374
	Ability1	0.808	0.513	0.234
	Motivate2	0.709	0.551	0.374

The results for the three-factor model indicated a moderate correlation between Motivate1 and Motivate2, with a correlation of .611. Motivate2 had two items as compared to the seven items in Motivate1. The model fit indices did not improve when Motivate1 and Motivate2 were covaried. Running the model while leaving three items in Motivate2 resulted in a  $CR < .70$  and an  $AVE < .50$ , both of which are indications that there are issues with convergent and divergent validity with Motivate2.

Further improvements in model fit, left only two items in the Motivate2 factor. This resulted in an issue with dimensionality for this model, specifically with regard to depth. A factor with fewer than three items is considered weak and unstable, while a factor with five or more strongly loading items (.50 or higher) indicates a solid factor (Costello & Osborne, 2005, p. 3). This model revealed that the two subscales for motivation to trust lacked divergent validity, indicating that an alternative two-factor model was worth examining.

**PCA two-factor model.** The three-factor models identified from the PCA and CFA analyses suggested that further factor analysis was warranted. To further evaluate for model fit and discriminant validity I ran CFA constraining the model set to two for all 56 items. Constraining the items in a rotated pattern matrix, the PCA analysis went through two iterations to remove cross loading items, for a final set of 38 items to be exported into AMOS. The first component (Motivate1) had 22 items, three from *instrumentality*, one from motivation to *learn to trust*, two from *likelihood to trust*, one *self-efficacy*, one *general*, and one *valence*. This component also included nine Propensity to Trust items, with three for *humanity*, two for *stance*, two for *new situations*, and two to measure *tendency*. In addition, three items intending to measure Ability to Trust were in this component.

The second component (Ability1) had 16 items: six from the Ability to Trust sub-constructs of *benevolence*, five from Ability to Trust *integrity*, three from Ability to Trust *competency*, and three from the Motivation to Trust preconceived construct, in the sub-categories of *self efficacy* and *valence*. See Table 4.18 for the factor loadings.

Table 4.18

*Constrained Two-Factor Loadings for the Developmental Readiness to Trust Scale*

Category	Subcategory	Item	1	2
Motivation	Likely to Trust	4b. If I initiate trusting others, the likelihood others will trust me is high.	0.414	
Motivation	Instrumentality	11d. Whether or not others trust me depends on my own trustworthiness.	0.414	
Motivation	Learn to Trust	8f. The reason I broaden my ability to trust others is because it is important for me to learn about trust.	0.439	
Propensity	Humanity	3f. I am seldom wary of trusting others.	0.510	
Propensity	Humanity	2a. I believe that people usually keep their promises.	0.548	
Ability	Competency	11b. I am confident that I can increase my ability to trust others.	0.554	
Propensity	Stance	7a. Even if I am uncertain I will give others the benefit of the doubt.	0.567	
Propensity	New situations	2c. I generally give people the benefit of the doubt when I first meet them.	0.606	
Ability	View	5c. I believe I can increase my ability to trust others.	0.615	
Motivation	Learn to Trust	4g. I would feel bad about myself if I did not trust others.	0.622	
Motivation	Valence	9h. If I trust them first, the likelihood others will engage in acts of trust is high.	0.664	
Propensity*	Stance	10d. I trust people until they give me a reason not to trust them.	0.682	
Propensity*	New Situations	9g. My typical approach is to trust new acquaintances until they prove I should not trust them.	0.690	
Ability	Competency	5g. Others know me to be someone who trust others in the workplace.	0.697	
Propensity*	Humanity	8e. Trusting another person is not difficult for me.	0.732	
Motivation	Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.	0.742	
Motivation	Instrumentality	9e. People know I have a reputation for trusting others.	0.769	
Motivation	Instrumentality	3g. Past experience trusting others motivates me to continue to trust others.	0.776	

Category	Subcategory	Item	1	2
Motivation	General	9d. I am motivated to trust others.	0.794	
Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.	0.802	
Propensity*	Tendency	3c. My tendency to trust others is high.	0.813	
Propensity*	Tendency	5a. It is easy for me to trust others.	0.833	
Motivation	Self-Efficacy	7c. I often reflect on how the level of trust others have in me is linked to my actions.		0.392
Ability	Competency	2b. I know when to trust people.		0.394
Motivation	Self-Efficacy	4c. I see actions I can take to increase the trust others have in me.		0.483
Motivation	Valence	2f. I believe that building trust is morally right.		0.508
Ability	Benevolence	2d. I would never knowingly do anything to hurt another person.		0.604
Ability	Benevolence	3b. Other's needs and desires are very important to me.		0.615
Ability	Benevolence	7e. It is easy for me to care about the welfare of others.		0.624
Ability	Competency	6a. I understand what is involved in trusting others.		0.633
Ability	Integrity	4d. I try hard to be fair in my interactions with others.		0.643
Ability	Benevolence	11f. I look out for the needs of others.		0.647
Ability	Benevolence	8g. I see myself as someone others can rely on.		0.654
Ability	Benevolence	4f. I go out of my way to help others.		0.661
Ability	Integrity	2g. I see myself as being consistent in my actions.		0.707
Ability	Integrity	8c. I view myself as someone who keeps their word.		0.721
Ability	Integrity	3a. Being honest with others is very important to me.		0.725
Ability	Integrity	10e. Keeping the commitments I make is important to me.		0.731

\*Validated Propensity item

### CFA Two-Factor Model

The PCA two-factor pattern matrix with 38 items was exported into AMOS and tested for model fit. The initial constrained two-factor model had issues with model fit with a Chi-square of

2455.80,  $\alpha = 0.950$ ,  $df = 664$ ,  $CMIN/DF = 3.699$ ,  $GFI = 0.724$ ,  $CFI = 0.800$ , and  $RMSEA = 0.081$ .

Over the course of twenty-one iterations the final two-factor model resulted in eighteen items, thirteen items in the Motivate1 component and five items in the Ability2 component. Model analysis included assessing items for high modification indices  $\geq 20$ , standardized residual covariance  $> 3.0$ , items loading  $< .50$ , and convergent and discriminant validity testing. Each iteration eliminated at most one item in order to understand the impact of each change. Where indicated based on high modification indices between items in the same factor, items were covaried first and in three of the four cases it was more optimal to eliminate an item versus covary. Model fit was achieved on iteration 21 when GFI was in the acceptable range of  $< .933$ . See Table 4.19 for results and rationale.

Table 4.19

*Rational for Item Elimination for Two-Factor Model*

Run	Item	Rational	Loading	#Items
1	5c	5c had 4 modification indices between 20 and 69, 11b, 4c, 8f, 3f, removed 5c	0.62	37
2	11f	11f had 3 modification indices between 26 and 68, 6a, 7e, 2f	0.70	36
3	5a	5 a had 2 modification indices between 35 and 39, removed 5a	0.84	35
4	11b	Covary 11b and 8f, then removed e17, 11b had 2 high modification indices of 38 and 59.	0.80	34
5	4f	Covary 4f and 7e and then removed 4f	0.66	33
6	2c, 7a	Covary, modification indices of 62 between 2c and 7a	NA	33
7	2f	High Modification Indices, 6 SRC >3.0	0.56	32
8	7c	2 high SRC, .41 loading	0.41	31
9	2b	SRC, validity test recommendation	0.46	30
10	8f	Low loading	0.43	29
11	4b	Low loading	0.45	28
12	4c	Low loading. Validity recommendation	0.51	27
13	7e	Validity recommendation for Motivate1	0.60	26
14	11d	Validity testing, removed, Motivate1 valid	0.46	25
15	3b	SRC 6 >3.0, Validity testing, removed 3b	0.59	24
16	2d	SRC 2 >3.0, Validity testing removed 2d	0.60	23
17	4d	Validity testing	0.62	22
18	6a	High modification indices	0.63	21
19	8e	High modification indices		20
20	10d	Covary 9g, then removed high modification indices >40	0.75	19
21	3f	Low loading	.49	19

Below is the final two-factor model after covarying and eliminating items to achieve a final model that meets convergent and divergent validity standards.

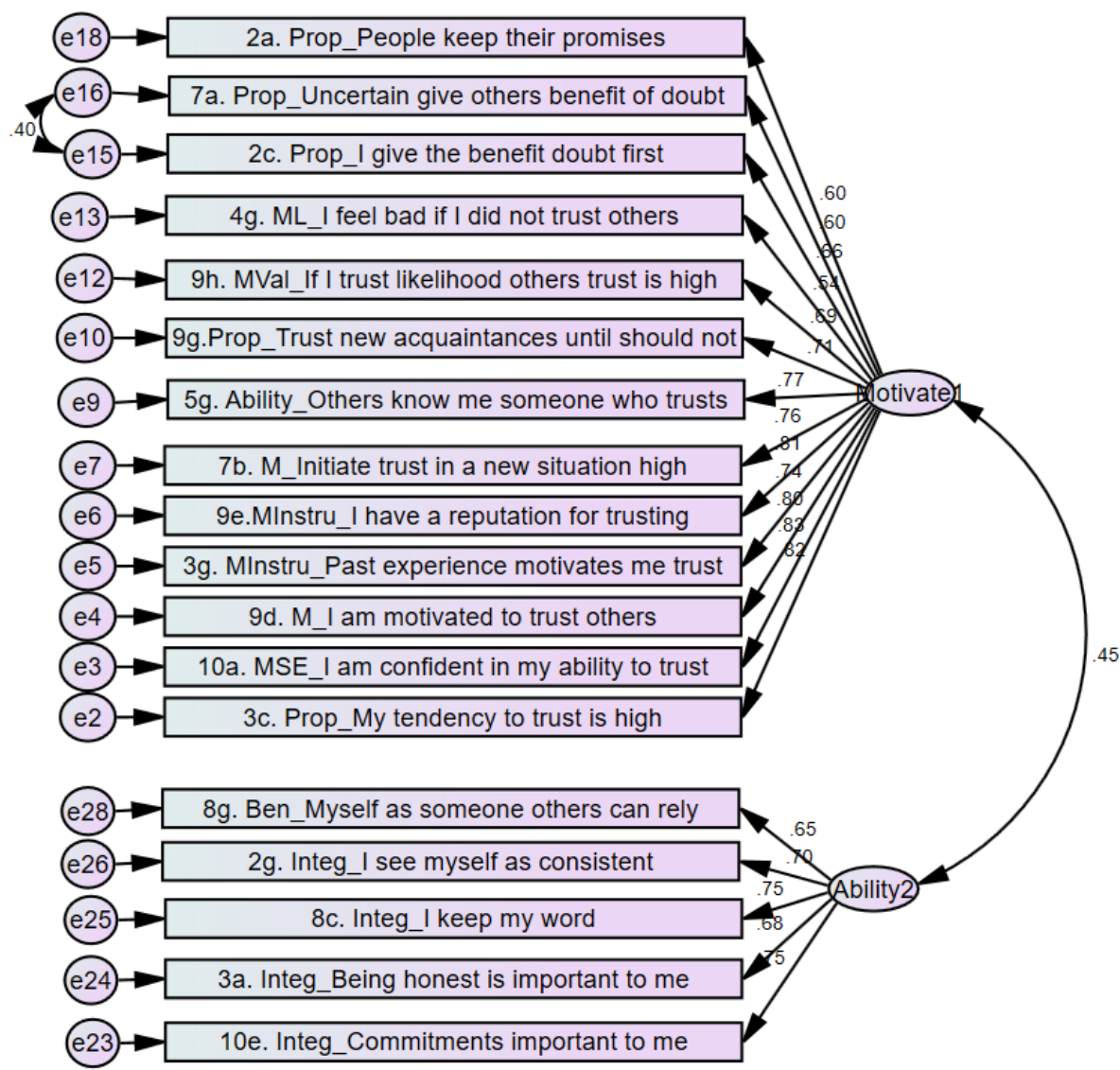


Figure 4.2. Two-factor model

The final two-factor model had 18 items with the Motivate1 component included five of the nine Propensity to Trust items, including the two validated items designed to measure Propensity to Trust (3c and 9g) and three added items (2a, 2c, and 7a), and eight items for

Motivation to Trust. One designed to measure Motivation *general* (9d), two designed for Motivation *instrumentality* (9e and 3g), one to designed to measure valence (9h), one designed to measure Motivation *self-efficacy* (10a), one designed to measure Motivation *learn to trust* (4g), and one designed to measure Motivation *likely to trust* (7b). In addition one item designed to measure Ability *competency* (5g), resulting in 16 items in the Motivate1 component.

The Ability2 component included four items designed to measure Ability to Trust including Ability *integrity* (2g, 8c, 3a, 10e) and one designed to measure Ability *benevolence* (8g), resulting in five items in the Ability1 component. See Figure 4. 2 for AMOS results and Table 4.20 with items and descriptions.



Table 4.20

*Two-Factor Model Items and Descriptions*

Factor	Category	Sub-Category	Item
Motivate1	Propensity	Humanity	2a. I believe that people usually keep their promises.
Motivate1	Propensity	Stance	7a. Even if I am uncertain I will give others the benefit of the doubt.
Motivate1	Propensity	New situations	2c. I generally give people the benefit of the doubt when I first meet them.
Motivate1	Motivation	Learn to Trust	4g. I would feel bad about myself if I did not trust others.
Motivate1	Motivation	Valence	9h. If I trust them first, the likelihood others will engage in acts of trust is high.
Motivate1	Propensity*	New Situations	9g. My typical approach is to trust new acquaintances until they prove I should not trust them.
Motivate1	Ability	Competency	5g. Others know me to be someone who trust others in the workplace.
Motivate1	Motivation	Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.
Motivate1	Motivation	Instrumentality	9e. People know I have a reputation for trusting others.
Motivate1	Motivation	Instrumentality	3g. Past experience trusting others motivates me to continue to trust others.
Motivate1	Motivation	General	9d. I am motivated to trust others.
Motivate1	Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.
Motivate1	Propensity*	Tendency	3c. My tendency to trust others is high.
Ability2	Ability	Benevolence	8g. I see myself as someone others can rely on.
Ability2	Ability	Integrity	2g. I see myself as being consistent in my actions.
Ability2	Ability	Integrity	8c. I view myself as someone who keeps their word.
Ability2	Ability	Integrity	3a. Being honest with others is very important to me.
Ability2	Ability	Integrity	10e. Keeping the commitments I make is important to me.

\*Validated propensity items

**CFA two-factor model fit.** The final two-factor model goodness of fit indices were: Chi-Square=410.120,  $\alpha$  =0.934, CMIN/DF=3.084, CFI=.933, GFI=.903 and RMSEA=.071, all within acceptable ranges. While validity benchmarks were achieved after the eighteen iteration

the final acceptable model fit was achieved in the twenty-first iteration where both CFI and GFI were in the acceptable range of >90. the goodness of fit results from each iteration for the two-factor model are shown in Table 4.21

Table 4.21

*Model Fit Statistics for Two-Factor Model*

Iterate	Item	# of item	$\chi^2$	Df	CMIN/DF	GFI	CFI	RMSEA
Start		38	2455.80	664	3.699	0.724	0.800	0.081
1	5c	37	2271.23	628	3.617	0.738	0.810	0.079
2	11f	36	2081.00	593	3.509	0.755	0.819	0.078
3	5a	35	1940.73	559	3.472	0.766	0.820	0.077
4	11b	34	1755.80	526	3.338	0.781	0.833	0.075
5	4f	33	1626.71	494	3.293	0.791	0.840	0.074
6	2d, 7a	33	1561.06	493	3.166	0.800	0.849	0.072
7	2f	32	1456.43	462	3.152	0.805	0.855	0.072
8	7c	31	1373.12	432	3.179	0.812	0.086	0.072
9	2b	30	1304.29	403	3.236	0.816	0.864	0.073
10	8f	29	1202.87	375	3.208	0.824	0.872	0.073
11	4b	28	1065.90	348	3.063	0.836	0.886	0.073
12	4c	27	1014.71	322	3.151	0.838	0.887	0.072
13	7e	26	923.76	297	3.110	0.847	0.893	0.071
14	11d	25	893.88	273	3.274	0.847	0.894	0.074
15	3b	24	779.46	250	3.118	0.860	0.905	0.071
16	2d	23	702.34	228	3.080	0.868	0.912	0.071
17	4d	22	672.39	207	3.248	0.867	0.911	0.074
18	6a	21	597.18	187	3.193	0.873	0.918	0.073
19	8e	20	531.881	168	3.166	0.882	0.922	0.072
20	10d	19	449.018	150	2.993	0.897	0.930	0.069
21	3f	18	410.12	133	3.084	0.903	0.933	0.071

**CFA two-factor model validity.** Discriminant validity testing final results are shown below for the two-factor model. The results are provided for each iteration. Motivate1 and Ability2 showed convergent validity in acceptable ranges at the start of the analysis. AVE was achieved for Motivate1 after the fourteenth iteration while Ability2 achieved AVE within an acceptable range at the eighteen iteration. See Table 4.22 for results from validity testing.

Table 4.22

*Two-Factor Model Validity Test Results*

Iteration	Factor	CR	AVE	MSV
1	Motivate1	0.948	0.461	0.344
	Ability2	0.907	0.383	0.344
2	Motivate1	0.946	0.465	0.343
	Ability2	0.907	0.383	0.343
3	Motivate1	0.941	0.454	0.351
	Ability2	0.899	0.378	0.351
4	Motivate1	0.940	0.461	0.348
	Ability2	0.899	0.378	0.348
5	Motivate1	0.940	0.461	0.342
	Ability2	0.891	0.374	0.342
6	Motivate1	0.940	0.460	0.338
	Ability2	0.891	0.374	0.338
7	Motivate1	0.940	0.460	0.325
	Ability2	0.886	0.379	0.325
8	Motivate1	0.940	0.460	0.315
	Ability2	0.886	0.397	0.315
9	Motivate1	0.940	0.460	0.304
	Ability2	0.885	0.415	0.304
10	Motivate1	0.941	0.475	0.302
	Ability2	0.885	0.415	0.302
11	Motivate1	0.941	0.491	0.298
	Ability2	0.885	0.415	0.298

12	Motivate1	0.941	0.491	0.284
	Ability2	0.883	0.431	0.284
13	Motivate1	0.941	0.491	0.264
	Ability2	0.876	0.441	0.264
14	Motivate1	0.942	0.509	0.259
	Ability2	0.876	0.441	0.259
15	Motivate1	0.942	0.509	0.234
	Ability2	0.869	0.455	0.234
16	Motivate1	0.942	0.509	0.224
	Ability2	0.861	0.470	0.224
17	Motivate1	0.942	0.509	0.223
	Ability2	0.849	0.485	0.223
18	Motivate1	0.939	0.510	0.212
	Ability2	0.834	0.503	0.212
19	Motivate1	0.939	0.510	0.201
	Ability2	0.834	0.503	0.201
20	Motivate1	0.933	0.505	0.203
	Ability2	0.834	0.503	0.206
21	Motivate1	0.934	0.525	0.206
	Ability2	0.834	0.503	0.206

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**Research Question 2 result summary.** As shown in Figure 4.5, the correlation between Motivate1 and Ability2 in the two-factor model was .453. One item, 4g in the Motivate1 factor had loadings of .54; all other items loaded on their respective factor at the .60 or greater level in the final model. This model resulted in the best fit and it was the model used for analysis related to the remaining research questions. The three-factor model had confidence issues with one factor having only two items. Analysis comparing the two- and three-factor models with respect to the test results for convergent and divergent validity also showed that the two-factor model had better MSV results.

### Research Question 3

Research question 3 posed the following: *What is the relationship between the subscales that emerge from factor analysis of the items designed to measure propensity, motivation, and ability to trust?* The process for addressing this question involved analysis of subscales. In the two-factor model, two subscales, or factors, were identified. These were Motivation to Trust, labeled Motivate1 and Ability to Trust, labeled Ability2.

The first subscale that emerged from PCA and CFA, Motivate1, had 16 items, eight were designed to measure Propensity to Trust, including the four validated items from the Propensity to Trust scale (Frazier et al., 2013); the other four were items included in the same study. Two items were designed to measure Propensity to Trust *humanity*, 3f *I am seldom wary of trusting others* and 2a *I believe that people usually keep their promises*. Two were measuring Propensity to Trust *new situations* 2c *I generally give people the benefit of the doubt when I first meet them*, and 9g *My typical approach is to trust new acquaintances until they prove I should not trust them*. Two were measuring Propensity to Trust *stance* 7a *Even if I am uncertain I will give others the benefit of the doubt* and 10d *I trust people until they give me a reason not to trust them* and one was designed to measure *tendency* 3c *My tendency to trust others is high*. This supports Propensity to Trust as one of the subcategories for measuring Motivation to Trust.

In addition to the Propensity to Trust statements, there were seven items designed to measure Motivation to Trust. The items were: Motivation to Trust *learn to trust*, 4g *I would feel bad about myself if I did not trust others*, motivation *likelihood of trusting*, 7b *The likelihood I will initiate trust in others in a new situation is high*, Motivation to Trust *instrumentation*, 3g *Past experience trusting others motivates me to continue to trust others*, and 9e *People know I*

*have a reputation for trusting others*, and Motivation to Trust valence 9h *If I trust them first, the likelihood others will engage in acts of trust is high*, and Motivation self-efficacy, 10a *I am confident in my ability to trust others* are also part of this factor. One item designed to measure Ability to Trust competency is 5g, *Others know me to be someone who trust others in the workplace* is in this final model in Motivate1. These items lined up with the preconceived theoretical concept of Motivation to Trust and indicated that there were additional motivational theories in play when considering motivation to trust and its relationship to propensity. The Motivate1 subscale, had item loadings ranging from .49 to .84 indicating convergent validity and evidence that Propensity to Trust and Motivation to Trust are related.

The second factor, labeled Ability2, included five items designed to measure Ability to Trust *benevolence* and *integrity*. The item designed to measure *benevolence* was 8g *I see myself as someone others can rely on*. The other four items designed to measure *integrity* were: 2g *I see myself as being consistent in my actions*, 8c *I view myself as someone who keeps their word*, 3a. *Being honest with others is very important to me*, and 10e *Keeping the commitments I make is important to me*. Within these Ability2 items, factor loadings ranged from .65 to .75 indicating convergent validity supporting that these items are measuring the same construct.

The Motivate1 and Ability2 factors had a moderate correlation ( $r = .45$ ) providing evidence of divergent validity between these two constructs. This model provides the evidence that Developmental Readiness to Trust Others is a construct with a two-factor structure. Results testing for the two-factor model indicated it met goodness of fit standards as well as convergent and discriminant validity requirements. Reliability, CR, was  $>.70$ ; convergent validity, AVE, was  $>.50$ ; and discriminant validity, MSV, was  $< AVE$ . See Table 4.22 for results.

Table 4.23

*Two- and Three-Factor Model Validity Test Results*

Factor	CR	AVE	MSV
Three-Factor			
Motivate1	0.922	0.63	0.374
Ability1	0.808	0.513	0.234
Motivate2	0.709	0.551	0.374
Two-Factor			
Motivate1	0.934	0.525	0.206
Ability2	0.834	0.503	0.206

In summary, my research provides initial support for the construct validity of the Developmental Readiness to Trust scale, with the two-factor model produced by CFA showing evidence of model fit and discriminant validity. This model drew on research on trust and motivation for the newly developed items for measuring Ability to Trust and Motivation to Trust. The Ability to Trust factor included Ability *benevolence* and Ability *integrity* sub concepts as well as Motivation to Trust, which included the concepts of Propensity to Trust and Motivation *instrumentality*, Motivation *valence*, Motivation *general* Motivation to *learn to trust*, and Motivation for *self-efficacy*.

**Research Question 4**

Research Question 4 asked, *How does the factor model identified via factor analysis compare to a unidimensional factor of developmental readiness to trust?* This research question asked how the factor model identified via PCA and CFA analysis compared to a unidimensional factor for Developmental Readiness to Trust. To address this question, an analysis was conducted on a single, general factor structure for Developmental Readiness to Trust. The data results from this model were compared to the data results from the two-factor model for purposes

of comparison, further analysis was conducted to examine the results of a single-factor item for this construct.

### **CFA Unidimensional Model**

The fixed number of factors selected in SPSS PCA was set to one and this resulted in 48 items being exported to AMOS to examine the pattern matrix through CFA, see Appendix L for results of this analysis.

**Unidimensional model fit, reliability, and validation.** The PCA model went through 28 iterations using CFA to get to the final model of 20 items in a single factor. The model began with a Chi-Square = 4790.00,  $df = 1080$ , CMIN/DF = 4.435, GFI = .564, CFI = 0.727, and RMSEA = 0.91. After eliminating 28 items the final Chi-Square = 510.791,  $df = 170$ , CMIN/DF = 3.005, GFI = .883, CFI = 0.937, RMSEA = 0.069. Iterations were examined based on high modification indices of  $> 20$ , early iterations focused on extremely high modification indices of  $> 100$ , iterations 18 to 26 eliminated items of modification indices of  $> 20$ . Initial covarying of items to achieve model fit did not endure. The final model had 20 items spread across the three original theoretical concepts: five from the Ability to Trust, four *competency*, one *view of ability*; 11 from Motivation to Trust, three *general motivation*, one *instrumentality*, one *likely to trust*, two *self-efficacy*, and four *valence*; and four items were from Propensity to Trust.

This model relied more than the others on the researcher's decisions for eliminating items given the high number of items in the first iteration and the quantity (28) of iterations. To illustrate the impact of researcher decisions, there were 26 item pairs with modification indices  $> 40$  and there were 57 item pairs with modification indices  $> 20$ . The first iteration removed items based on high modification indices and item frequency in the high modification indices pairs.



The next set of iterations continued this process while also evaluating standardized residual covariances for items with  $>3$  results. One item was removed based on a high standardized residual covariance=7.5 and the final model retained two items with loadings under .60.

After extraction the researcher must decide how many factors to retain for rotation. Both over-extraction and under-extraction of factors retained for rotation can have deleterious effects on the results (Costello & Osborne, 2005). This is relevant for the one-factor model in which extraction decisions impacted the final model. Based on this analysis, the unidimensional model has a degree of variation in the final model due to the high volume of items. In addition, the correlations between factors in the two-factor and three-factor model are not high enough to indicate a unidimensional model. The results of this analysis indicate there is no clear one-dimensional factor solution based on this data set, narrowing down the item pool in the future may improve model decisions and model fit relative to a single factor solution.

### **Research Question 5**

Research question 5 asked, *How are the subscales that emerged from factor analyses of the items designed to measure propensity, motivation, and ability to trust related to these theoretical concepts?* This question asked in what way do the subscales that emerged from factor analyses of the items designed to measure Propensity to Trust, Motivation to Trust, and Ability to Trust relate to these theoretical concepts? Since I could only substantiate the two factor model, the testing of this research question should be suspended and conducted in a new and broader sample of participants, as should the two and three factor model.

## **Chapter 4 Summary**

Factor analysis was conducted to validate a scale to measure the Developmental Readiness to Trust construct. The first step entailed using PCA and CFA to produce a model. Next, the model was examined using the two concepts of ability and motivate to frame the factor analysis. A two-factor scale was produced for measuring the construct Developmental Readiness to Trust, with two components, one related to ability and the other related to motivation. The motivation component included items designed to measure propensity.

## **Chapter V: Discussion of Findings**

This study was designed to fill a gap in research on an individual's self-perception of how they trust others by demonstrating that developmental readiness to trust is a construct at the individual level of analysis. Identifying this new construct was accomplished by exploring through factor analysis the dynamics of an individual's motivation to trust, including disposition; and an individual's ability to trust, specifically benevolence, integrity, and competence. The focus of this study was to determine if there was evidence at the individual level of analysis and test whether items designed to measure the three theoretical concepts, motivation, propensity, and ability to trust, reliably measured their respective dimensions and constituted a validated scale. This chapter begins with an interpretation of the results of the research included in this study along with a brief description of the analyses conducted to refine the findings. Identification of the results is followed by discussions of study limitations, contributions to research, recommendations for future research, implications for practice, and concluding remarks.

### **Summary of Key Findings**

I found that the developmental readiness to trust others construct is a factor-validated construct, with Ability to Trust and Motivation to Trust as the two overarching components. The two dimensions that were shown to represent this new construct are identified in Figure 5.1, these components are labeled Motivate 1 and Ability 2.

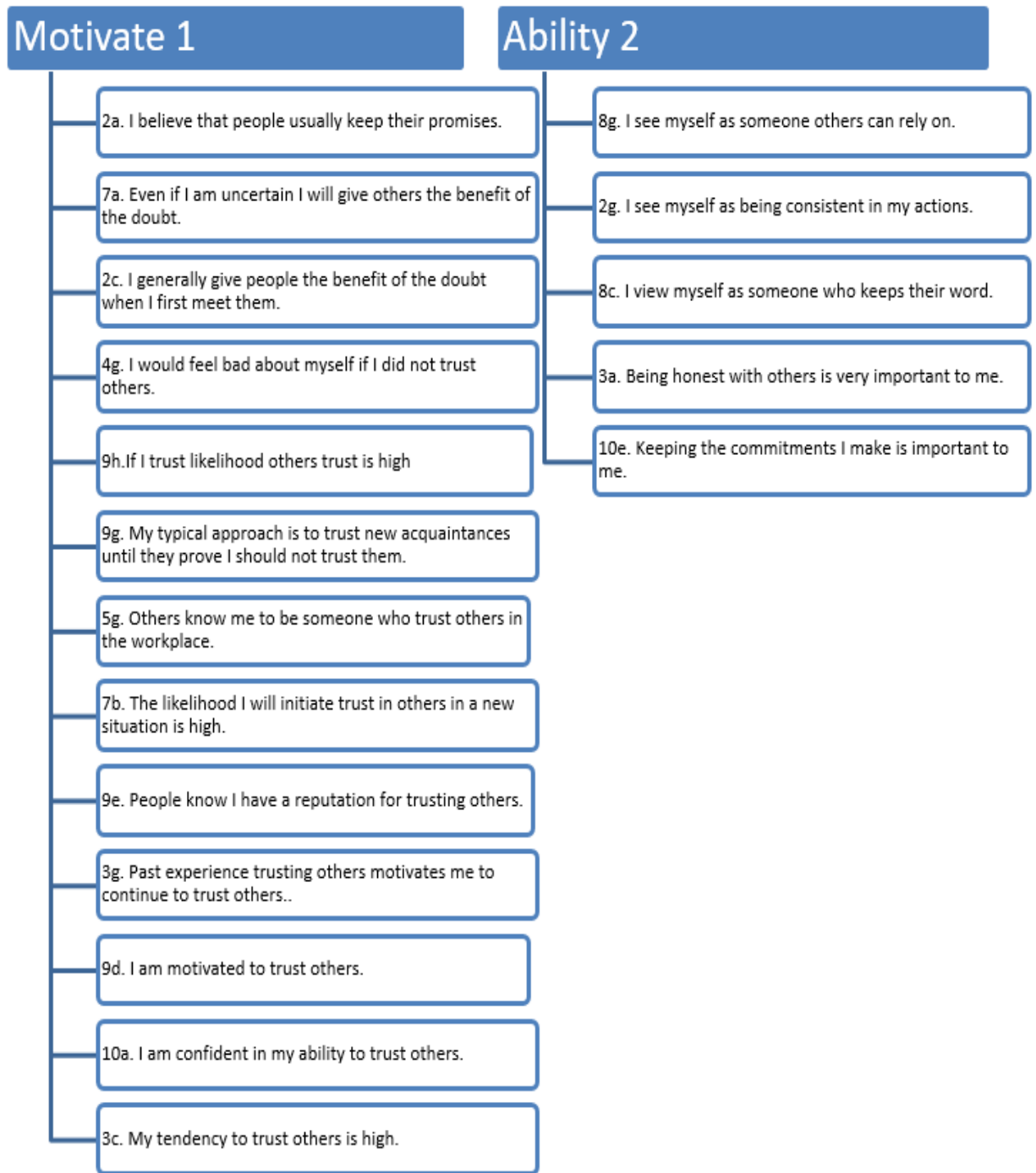
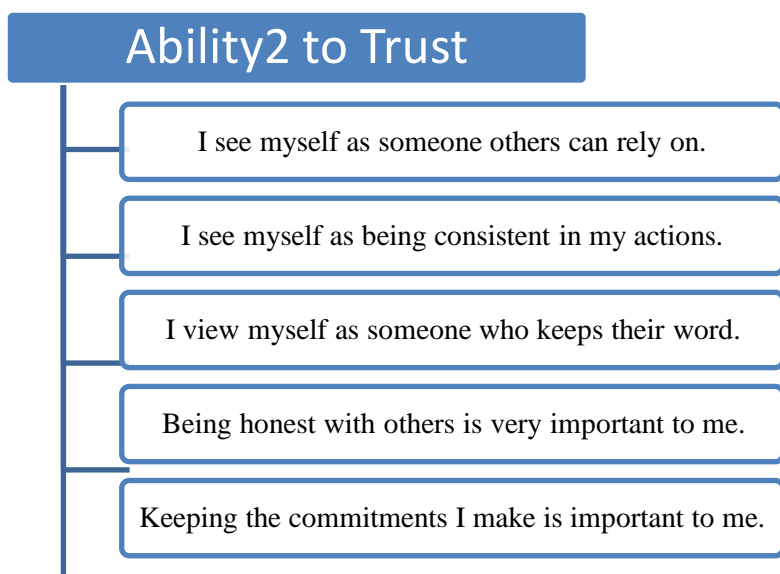


Figure 5.1 Two-factor model developmental readiness to trust others

### Ability Subscale

Ability to trust is defined in Chapter II as an individual's general competency to engage in trust decisions and actions and self-perception of personal benevolence and integrity. Overall, based on previous research, there were four categories of subscales for the Ability to Trust category. The original set of items designed to measure Ability to Trust were identified from the literature reviewed in Chapter II, three based on the antecedents to trust, competency, integrity, and benevolence and a fourth subscale was added to measure an individual's view of trust, trait or state. Two predicted areas for inclusion based on literature were not in the final model and these were view of ability and ability competency as it relates to having expertise in trust. The implication of these results is discussed for future research.



*Figure 5.2 Ability to Trust Items*

**Ability to Trust integrity.** The important role of integrity in beliefs and intentions towards trust is reinforced in this study. Understanding when our judgments of integrity are made and the impact of these judgments is a cognitive process. Researchers Mayer et al. (1995)

argue that ethical reasoning prevails when trusting others and that trust is a decision that one makes, which makes one vulnerable, resulting in judgments of ethics taking precedence over expertise. Poon (2013) states that high integrity supervisors are trusted more than low integrity ones regardless of level of ability.

Interviews conducted during the Phase 1 qualitative study demonstrated the importance of the role of honesty and integrity in making decisions to trust others. Interview narratives and survey participant open-ended comments highlighted the importance of the role of integrity for making trust decisions in the workplace. These narratives described trusting behaviors as being honest, being transparent, and follow through, which are examples of integrity in action. In the final two-factor model the Ability to Trust factor is comprised of four items measuring integrity. These items measure self-perceptions of consistency, reliability, honesty, and commitments, all clearly aligned with integrity. This study substantiates the weight and impact perceptions of integrity have on trust in the workplace and the role of cognition for developing desires to trust others. These five items in this factor were:

- *Integrity Consistency: I see myself as being consistent in my actions*
- *Integrity Reliability: I view myself as someone who keeps their word*
- *Integrity Honesty: Being honest with others is very important to me*
- *Integrity Commitments: Keeping the commitments I make is important to me*
- *Benevolence: I see myself as someone others can rely on*

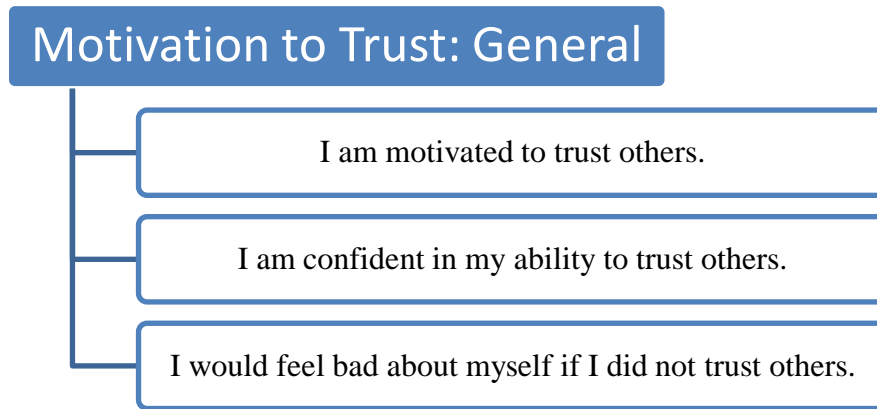
**Ability Benevolence.** Based on study results, the role of benevolence was nebulous (or was not apparent/not evident). Earlier research on ability to trust shows that there may be redundancy between benevolence and integrity. The wording of one item, *I see myself as*

*someone others can rely on*, could leave open to interpretation if it is measuring benevolence or an attribute of integrity. In addition, constraining the model may have impacted this result. While the final two-factor model included this item under the Ability factor intended to measure benevolence, it is not statistically relevant enough to indicate the true impact of benevolence to trust in developmental readiness to trust.

### **Motivation Subscale**

The final survey had six conceptual categories of items grouped under Motivation to Trust: (a) general motivation to trust (b) instrumentality, (c) valence, (d) self-efficacy, (e) likelihood to trust others, and (f) motivation to learn. The Propensity to Trust category used the validated scale (Frazier et al., 2013) of nine items in total from this study for measuring propensity tendencies, humanity, stance, and trust in new situations. The final two-factor model contained 13 items in the Motivate1 factor, five of the nine Propensity to trust items including the two validated items from the Propensity to Trust, and three of the added items. All fell under the Motivate1 factor with the final model containing items from general motivation, instrumentality, valence, self-efficacy, likelihood to trust, and motivation to learn. The Motivate1 factor included four distinct areas: general motivation to trust, outcome oriented trust, propensity to trust, and predicting trust, derived from the final two-factor model.

**General Motivation to Trust.** Three items were associated with an individual's general cognitive and affective trust in the Motivate1 factor. These were:



*Figure 5.3 General Motivation to Trust Items*

The item *I would feel bad about myself if I did not trust others* was adapted from research by Avolio and Hannah for measuring learning goal orientation. While intending to measure learning goal orientation when adapted for trust, this aligns more distinctly to affective trust and how an individual feels regarding trusting others.

- *General Motivation: I am motivated to trust others*
- *Cognitive: I am confident in my ability to trust others*
- *Affective: I would feel bad about myself if I did not trust others*

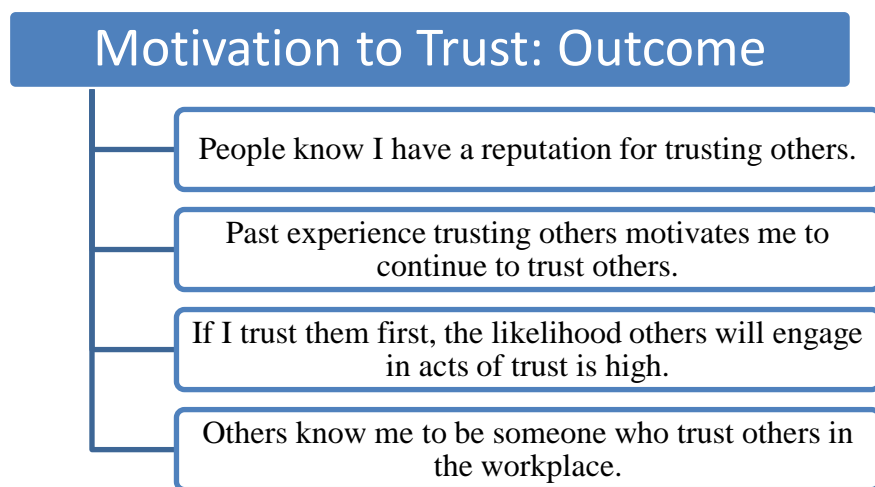
**Self-Efficacy.** Examining self-efficacy in this study was interesting given its role in both ability to trust and in motivating trust. Self-efficacy plays a role with increasing an individual's ability to trust and is included in the definition of ability to trust. While ability to trust is defined as an individual's general competency to engage in trust decisions and actions, self-perception of personal integrity, self-efficacy and awareness of trusting beliefs and actions (Colquitt et al., 2007) self-efficacy is also related to an individual's agentic view of motivation. For this dissertation, self-efficacy was examined as a subscale in the Motivation factor versus in the Ability factor. The rationale is supported by research on individual change readiness (Armenakis



et al., 1993) and on SDT (2000) highlighting the importance of self-efficacy for motivating change. One of eight items created to measure self-efficacy was in the final two-factor model in the Motivation subset, *I am confident in my ability to trust* informed by Mayer and Davis (1999) and Avolio and Hannah (2008; 2009). This item, while intending to measure motivation self-efficacy, could be open to debate as regarding an individual's ability to trust, competency.

Given its alignment in the Motivate1 it is arguable that this reflects individual's cognitive confidence to trust others and represents an individual's general cognitive motivation to trust. Based on the factor analysis I propose these three items represent an individual's general motivation to trust others.

**Motivation Outcome Oriented.** Four items are outcome oriented motivation in terms of expectancy outcomes, instrumentality and valence are in the Motivate1 factor.



*Figure 5.4 Motivate Outcome Oriented Items*

**Expectancy Theory.** Expectancy theory involves effort, instrumentality, and valence and also requires the kind of reasoning involved in achievement motivation (Wigfield & Eccles,

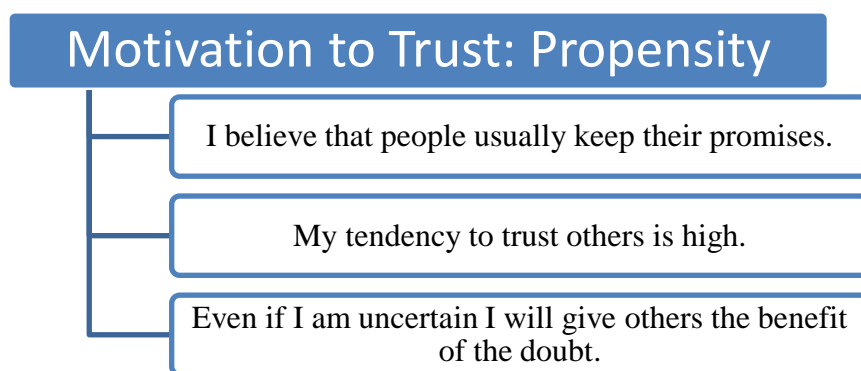
2000). Expectancies of trust and values of trust are influenced by individuals' perceptions of their own previous experience. Two items in the final model intend to measure instrumentality, *People know I have a reputation for trusting others* was developed from research on locus of trust for measuring instrumentality (Jones and Shah, (2016) and *Past experience trusting others motives me to continue to trust others*, was developed to measure perceived instrumentation in trusting others and valence due to outcome. Both items reflect the role of past experience for determining trust outcomes. The third item *If I trust them first, the likelihood others will engage in acts of trust is high*, was developed to measure modeling trust to motivate trust (Nguyen et al., 2010) from a study on trust reciprocity behaviors. In the case of this item motivation to trust is concerned with the outcome of others returning trust. *Others know me to be someone who trusts others in the workplace* was designed to measure ability, competency and it can be argued that this item was interpreted as measuring the perception of previous trust outcomes, valence.

- *Outcome instrumentality: People know I have a reputation for trusting others*
- *Outcome instrumentality: Past experience trusting others motives me to continue to trust others*
- *Outcome valence: If I trust them first, the likelihood others will engage in trust is high*
- *Outcome valence: Others know me to be someone who trust others in the workplace*

**Propensity to Trust.** Theory points to propensity to trust as a central underlying characteristic of trust (Mayer et al., 1995) and in research on locus of trust Jones and Shah (2016) argued that propensity may not be the dominant determinant of trust. This study examined propensity to trust and motivation to trust and the CFA two-factor model indicated that propensity to trust is a subcategory of motivation to trust. The final two-factor model had five

items measuring Propensity to trust, a strong indication of the role of propensity in motivation to trust. This study focused on understanding what if any overlap existed between propensity items and motivation items and in understanding the role of motivation to trust and propensity to trust for predicting trust.

Based on the two-factor model, I propose that Propensity to Trust as measured in this study has two distinctive elements, one is measuring disposition, specifically an individual's tendency, stance, and trust in humanity, and the second is predicting the likelihood to trust. This is supported by (Jayawickreme, Zachry, & Fleenon, 2018), who argued that there are both distinct and connected trait-like tendencies regarding propensity as well as state-like tendencies which operate within the individual. Furthermore, dispositions are activated and maintained by frequency of use (Higgins, E. T., 1996; Webber, 2008). The first, dispositional state of propensity had three items.



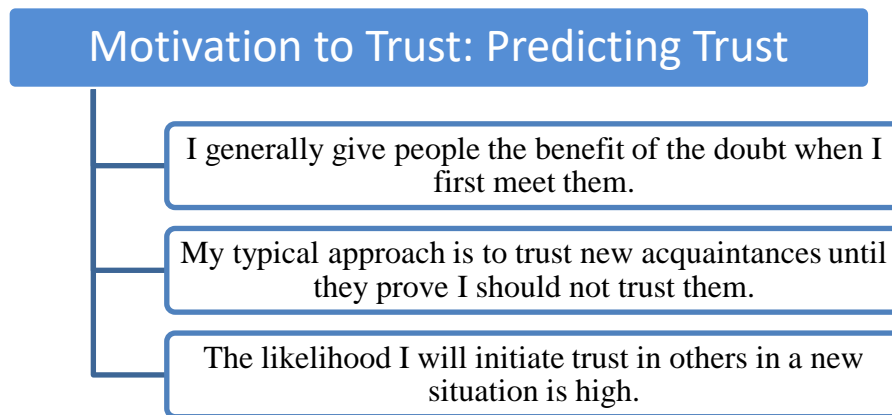
*Figure 5.5 Motivation Propensity to Trust as a disposition items*

This study relied on the validated scale for propensity to trust to measure tendency to trust, trust in new situations, trusting stance, and trust in humanity. The following items were in the two-factor model.

- *Trust in humanity: I believe that people usually keep their promises.*
- *Tendency to trust: My tendency to trust others is high.*
- *Trust stance: Even if I am uncertain I will give others the benefit of the doubt.*

While this model includes the Propensity to Trust items in the Motivate1 factor, this could be due to constraining the model to two factors. The three-factor model had similar results in that Propensity to Trust was not a distinct factor. The number of items could have influenced results given there were more items measuring propensity than in any other subcategory.

**Predicting and Likelihood to Trust.** I was interested in understanding the distinctions between an individual's propensity to trust based on disposition and predicting the likelihood an individual will trust others in the future. Predicting trust relies on the difference between an individual's disposition towards trust versus future decisions to trust based on previous trusting outcomes. Prior research provided theoretical support for assessing locus of trust (Nguyen et al., 2010), is reflected in the four items measuring the likelihood an individual will reciprocate trust; one of these items remained in the final two-factor model, *the likelihood I will initiate trust in a new situation is high (see Jones & Shah, 2016)*. A case could be made that this item overlaps with propensity to trust in new situations. While the word likelihood is intended to measure motivation, this item is closely connected to propensity to trust in humanity.



*Figure 5.6 Motivation Predicting Likelihood to Trust items*

Based on the two-factor solution, I created new subcategories for the motivation to trust component: one for propensity, disposition to trust, the other, motivation and likelihood to trust for predicting trust. The three Propensity to Trust disposition to trust items were discussed above. I combined the fourth area, propensity in new situations with the item for *likelihood to trust* for this next discussion. I propose that the two propensity to trust items and one likelihood to trust item aligns with the subcategory for predicting trust. These items are:

- *Propensity in new situations: I generally give people the benefit of the doubt when I first meet them.*
- *Propensity in new situations validated item: My typical approach is to trust new acquaintances until they prove I should not trust them.*
- *Likelihood to trust: The likelihood I will initiate trust in others in a new situation is high.*

The rationale for distinguishing between disposition and predicting trust is due to an individual's propensity to be influenced by previous experience, which considers trust as a state that can be developed.

The final two-factor model comprises the Ability to Trust factor, which includes subcategories of integrity with a weak connection to benevolence and the Motivation to Trust factor. The final Motivation to Trust factor is comprised of four subcategories, general motivation to trust, outcome motivation, including instrumentality and valence, Propensity to Trust, and motivation and predicting trust with items for initiating and likelihood. Propensity to Trust included tendency, stance, and faith in humanity.

### **Research Limitations**

This research is not without limitations. The majority of the sample was from Mechanical Turk respondents, 80.0%, while the other 20% of the respondents were drawn from my personal network using snowball sampling. Future research could examine the limitations and or differences of Mechanical Turk samples, while also considering using another commercial product for surveying along with Mechanical Turk.

This study was also limited to participants from the United States and did not examine population differences in developmental readiness to trust. In addition, this study was designed for English speaking participants. Understanding if there are differences between gender and benevolence and motivation to trust in the workplace would also be valuable for understanding trust and potential trust interventions. For example women and men can have very different perceptions and experiences of work, with women being more risk adverse when interactions involve social evaluations (Roussin, 2015). This supports the view that women are less likely to perceive good intentions in the early stages of work relationships making early interventions important.

Measuring how an individual perceives their integrity and benevolence is a limitation of this study in that it does not confirm how others see integrity and benevolence for the individual. What has not yet been determined, and should therefore be a subject for further study, is the issue of whether benevolence and integrity are both required or whether a perception of benevolence alone is all that is needed to generate trust.

Another limitation was that this study was not designed to determine the factor structure of this new construct nor the final set of items for validating factor structure. This study was designed to validate the new construct, and was limited in ability to determine the factor structure by the exploratory nature of the design. In addition this study did not examine related constructs such as optimism or agreeableness to establish discriminant and convergent validity.

There is little research on how to create the conditions for developing and increasing trust in the workplace. While this research explores an individual's tendencies and intentions towards trusting others, this dissertation research did not focus on examining trusting actions, which is the manifestation of beliefs and intentions. This study does not assess if developmental readiness to trust results in action to trust.

### **Contributions to Current Research**

The results support that Developmental Readiness to Trust Others is distinct from previous research measuring trust in that it is examining an individual's self-perception of their own trust of others and it expands on existing research on developmental readiness, contributing to research on change, trust development, and developmental readiness. This study contributes to research in three areas. First, this study extends the concept of developmental readiness to the theoretical component of trust, and considers its impact on trust development. Second, by taking

a closer examination of motivation to trust, this study adds to the literature on trust intentions, trust development and trust formation. Third, by examining ability to trust as part of developmental readiness, this study contributes to research on increasing trust. While I acknowledge the importance of follower and peer assessments of trust in prior trust research (Mayer et al., 1995; McAllister, 1995), including trust in new relationships, trust with zero acquaintance (Dunning, Anderson, Schlösser, Ehlebracht, & Fetchenhauer, 2014), and tendency toward trusting others (Heyns & Rothmann, 2015), to date, there has been relatively little research examining an individual's ability and motivation to trust before entering into a relationship.

### **Developmental Readiness to Trust Construct**

This research contributes to the trust literature through a theory-based examination of the nomological network of the developmental readiness to trust construct. To my knowledge no published research has validated a developmental readiness to trust construct examining the relationships between developmental readiness and trust relationships. This study examines what specifically constitutes an individual's self-perception of their ability and motivation to trust others in the workplace.

**Role of Integrity.** This study examined two types of reasoning individuals engage in when making acting decisions, instrumental reasoning and ethical reasoning. Instrumental reasoning focuses exclusively on external outcomes of the action represented and ethical reasoning corresponds to the morality of action wherein the same action can be viewed from both of these perspectives (de Nalda, Guillén, & Gil Pechuán, 2016). Instrumental reasoning judge's achievement and utility, while ethical reasoning is about the extent to which action



contributes to our fulfillment as a person. de Nalda et al. argued that when considering building the trust of others, it is important to understand which reasoning is predominant in the decision to trust. When ethical reasoning is predominant, benevolence and integrity should be present, both being ethical in nature. To expect others to possess integrity and benevolence assumes one is aware of these decisions. In addition, judgements of ethics take precedent over technical ability (de Nalda et al., 2016; Mayer et al., 1995), indicating that ethical reasoning prevails when making decisions to trust. Ethical reasoning regards moral appropriateness and the extent to which action contributes to our fulfillment as humans (de Nalda et al.), and is relevant to understanding interpersonal trust decisions. This dissertation provided evidence of the role of ethical reasoning with the prominence of integrity in the Ability factor.

**Moralistic Nature of Trust.** Moralistic trust is complex and is a humanity orientation towards trust, and it has a relationship between both motivation and ability. Seeing trust as being morally right can act as an intrinsic motivation. The degree to which one sees trust as being morally right may influence motivation to trust others. Our propensity to trust involves tendencies towards faith in humanity and in the stance that others are reliable. In addition there is a relationship between morals and integrity. Moral standards are involved in making decisions and acting with integrity. In research on the decision to trust, researchers posit that the decision to trust is based primarily on points that are personal for the trustor, proposing that ethical reasoning predominates over instrumental reasoning. In other words, if ethical reasoning is predominant in trust measurement, both benevolence and integrity, which are both ethical in nature, should be present as antecedents of trust, and indicate the influence of ability in decisions to trust others.

There is also a connection between ethical reasoning and motivation expectancy theory. Researchers have argued that affective trust is more important for interpersonal trust due to its long term nature - once developed, it persists (Webber, 2008). This study contributed to research on trust with the examination of moralistic trust, propensity to trust, and integrity. The results indicate that individuals see a distinction between propensity to trust in humanity and holding moral beliefs in trust as indicated by the low correlations between these items.

### **Ability to Trust**

This dissertation contributed in the examination of an individual's self-perception of their ability to trust others before entering into a relationship. This is accomplished by examining trust antecedents and their formation and personal view of ability.

**View of ability.** Conceptually, how an individual views their ability to trust was measured in this study, specifically focusing on the personal *view of ability* to trust, trait or state. The three items *I believe I can increase my ability to trust others*, *I view my ability to trust others as something I can increase*, and *I view my ability to trust others as something I was born with* could be viewed as duplicative when compared to motivation items which refer to increasing trust, such as *I am confident in my ability to increase the level of trust others have in me*. The final 2 factor model does not include any *view of ability* items; however, it does include one item for learning orientation and one for self-efficacy. It may be sufficient to measure self-efficacy and or learning orientation towards trust to assess how an individual views their ability to trust others. What is missing and should come next is what specific ability contributes to increasing one's ability to trust as well as readiness to trust.

**Ability Competency.** The absence of any items measuring ability to trust in the Ability factor in the final two-factor model was worth noting. Eight items were developed designed to measure areas prior research indicated could be evaluated for self-perception of ability. These items specifically intended to measure history of trusting, reputation for trusting, view of trust as an asset, success in trusting, and confidence in ability to trust to increase trust. While one of these items is in the final two-factor model under Motivation to Trust, it is absent in the Ability2 factor in the final model.

The analysis of the theoretical model of the four areas including competency, integrity, benevolence, and view of ability has a factor with four items for competency. This would indicate the need to continue to develop and test items to measure competency, and expertise in trusting others given the significant role ability plays in trust in the workplace. Ability's importance as a criterion of trustworthiness (Mayer et al., 1995; McAllister, 1995) and the importance of competence and judgments of trustworthiness (Brockner & Siegel, 1996; Butler, John K., Jr, 1991) are well established in earlier studies.

### **Motivation to Trust**

In addition to developing the item Ability to Trust, this dissertation makes a contribution to existing research on motivation to trust with the examination of an individual's perception of what contributes to motivation to trust others. The perception of intentions is crucial for creating trust, showing that it is important for us to make an effort to communicate what reasons and motives guide our decisions. This study developed the items measuring motivation to trust using previous research on developmental readiness and motivation theory. The literature review on motivation indicated the need to examine motivation from six theoretical lenses. The first lens

was general motivation assessing general motivation to trust, the second and third were expectancy theory, specifically instrumental and valence, the fourth was self-efficacy, the fifth was likelihood to trust in the future, the sixth was learning orientation which involves intrinsic and extrinsic orientation towards motivation. These rely on self-determination theory and intentional change theory for a positive constructionist view of personal agency. This included examination and comparison between motivation to trust and propensity to trust, between propensity to trust in humanity and trust as morally right and a public good, and propensity to trust initially and likelihood to trust, as well as between propensity, expectancy outcome motivation, and self-efficacy.

This study builds on trust research with a deeper examination of the outcome orientation of trust and the relationship between propensity and outcome trust motivators. In addition, the moral aspect of trust motivation is examined with inclusion of a comparison between propensity, faith in humanity, and moral foundations of trust. Finally, the study examined potential tautology issues between predicting the likelihood of trust and propensity to trust.

**Outcome Oriented Motivation.** Research by scholar Bandura (1993) argued that most human motivation is generated cognitively with three theoretical underpinnings which are attribution theory, expectancy theory, and goal theory. He argued that beliefs operate in each form of motivation with beliefs being outcome oriented. This dissertation supported the existence of disposition and outcome-oriented motivation for assessing motivation to trust for developmental readiness purposes.

## **Contributions to Future Research**

There is little to no research conducted on developmental readiness to develop trust, the items to measure motivation were created relying on motivation theory and readiness to change theory. Given the exploratory nature of this dissertation, future research improving the clarity of items and what they measure may have an impact on the sub-category results.

Next steps should include a comparison of my personal network and M-Turk participants, future research could test these measure in different contexts which require a high level of trust among coworkers. For example, A number of studies suggest that the influence of trust antecedents may vary depending on relationship, such as between coworker and between a superior and as subordinate (Butler, John K. & Cantrell, 1984; Colquitt et al., 2007; Gabarro, 1978). Preliminary analysis indicates significant differences between collectors for Motivation to Trust and between Ability to Trust. See Appendix M for preliminary results of analysis between collectors.

Next steps should include the comparison of male and female respondents. Future research could test the influence of gender on developmental readiness to trust. Preliminary analyses indicates no significant difference between male and female for Motivation to Trust and significant differences between Ability to Trust and gender are in Appendix M as well.

The affective and moral nature of trust also warrant future analysis of motivation to trust, focusing on both outcomes and affect. Through the course of this dissertation research, the exploratory nature was revealed in the variance of items across correlation analysis and convergent and divergent test results. There was variance in model dimensions and in items

across the analysis along with tautology issues, which could be improved for the next round of research.

Future research may result in identifying additional items to represent ability or in modifying the factor definition. For example, is someone placing their trust due to instrumental reasons or due to ethical reasons, and what is the weight of each antecedent in the making of the decision to be vulnerable? What reasoning is predominant in the decision to trust? Is it instrumental reasoning with actions the objectives to be achieved along with utility of outcomes? Is ethical reasoning, which is about how appropriate the action, the extent that action contributes to our fulfillment? Are there other types of ability which augment an individual's competency to trust?

### **Factor Structure**

Future research can contribute to trust research by a re-examination of the factor structure and items for the new construct Developmental Readiness to Trust. While this study revealed the validity of this construct, the exploratory nature indicates the need to understand what constitutes the optimal factor structure. The final model results could be influenced by issues of tautology and content adequacy. Future research should consider that ability is typically influenced by external factors, such as training, education, and experience, and typically less by an individual's character or ethics (Frazier et al., 2013). This dissertation research did not include any questions asking if an individual had training and education to learn to trust others.

The questions developed to measure trust may also be biased towards seeing trust as representing an individual's expertise. The questions developed to measure an individual's self-perception of their ability to trust may be better portrayed as an individual's confidence in their

ability to trust based on item wording. These could also be interpreted as measuring valance, which is associated with motivation as opposed to ability.

Future research on readiness to trust might also consider that Ability *Competency* could be better measured by assessing what external factors have influenced an individual's level of mastery for trusting others. Given the importance of judgments of competence as likely to be important predictors of trust (Belkin & Rothman, 2017; Colquitt et al., 2007), future research on the role of being perceived as someone who can trust, and as someone who has expertise in trusting others, is worthy of deeper examination.

**Motivation and Learning Orientation.** In research on leader developmental readiness (2009), Avolio and Hannah note that learning goal orientation represents whether an individual is engaged in tasks to achieve a specific performance, or to learn and develop. Of the 56 final items used in my factor analyses, four items were intended to measure motivation to learn to trust, two measuring intrinsic and two measuring extrinsic motivation. However, only one item measuring intrinsic motivation was retained in the final two-factor model, *I would feel bad if I did not trust others*". The inclusion of this item is supported by Ryan's and Deci's (2000) Self-Determination Theory (SDT) which recognizes the effect of intrinsic and extrinsic motivation. SDT takes into consideration adjustments in awareness, in this case, due to a discrepancy between ideal and actual trusting self. The items from the two-factor model should be retained and new items should be created to capture the areas of readiness not covered or not covered adequately in future research.

**Moral Conation of Trust.** Moral intent is a construct that captures the degree of motivational pull toward a moral judgment, and it requires an individual to prioritize moral

values compared to other competing values (Dedeke, 2015). What is not clear from this dissertation study or previous research is the distinction between moral intention and trust intention from a behavioral point of view. In an effort to explain moral capacities, moral cognition, and moral conation, Hannah and Avolio (2011) define “moral conation as the capacity to generate responsibility and motivation to take moral action in the face of diversity and persevere through challenges.” Hannah and Avolio call out (2011) moral cognition capacities as involving moral maturation, moral meta-cognitive ability, and moral identity and moral potency.

*Moral sensitivity* represent processes related to awareness of a moral problem, as well as interpreting and assessing options to address the problem. *Moral judgment* represents the processes taken to determine what action is the most appropriate. *Moral motivation* entails processes geared toward commitment to a given action along with the weight assigned to specific moral values over other values. Taking appropriate action, involves *moral action*, persistence in a moral task, overcoming fatigue, temptations and challenges to take appropriate action.

Future research should make clear distinctions for understanding moral impact for ability and motivation to trust. While morals are value oriented and related to integrity, understanding how moral capacity moderates or mediates trust intentions and decisions would be useful for increasing the capacity to moral sensitivity and moral motivation as a means of increasing trust readiness development. Future research should develop more items for measuring the moralistic intentions of trust and integrity, trust and benevolence, and morals for motivating trusting itself.

### **Implication for Practice**

Once developmental readiness to trust has been assessed, individuals can reflect and learn from experiences that will promote trust development. This development can be accelerated by



increasing recognition in the role modeling of trusting behaviors through planned intervention methods. Development efforts focused on interventions to increase trust can be designed so as to facilitate learning and practicing positive behaviors. Organizations can implement means to track and monitor development of motivation and ability to trust others reinforcing the desired behavioral changes. Researchers argue that understanding the logic of trust is critical for developing a culture and climate of trust (de Nalda et al., 2016), to explain trust antecedent influence in management and subordinate relationships.

To increase trust between coworkers, team members, teams, and leaders, requires a deeper understanding of how an individual is prepared or ready to trust others. By inaccurately assessing the degree to which they are trusted, individuals may be unable to gauge which behaviors are necessary or required to help maintain or restore trust. Research by Norcross et al. (2011) shows that people in the pre-contemplation and contemplation stages are the most difficult to reach and in the most need of assessment and intervention activities; this poses a challenge for focusing on developing an individual's readiness for change.

### **Increasing Trust**

This research indicated that we should tailor intervention processes to the stages of change. "Treat contemplators gingerly", as imposing action on pre-contemplators will likely drive them away (Norcross et al., 2011, p. 152). In relation to trust, individuals in this stage may not recognize that their behavior may have negative consequences for interpersonal trust. When confronted with relevant scenarios, they may be unable to identify trust issues. Consequently, such individuals may inadvertently hinder effective trust development by failing to engage in trust building behaviors, or perhaps engaging in behaviors that are inappropriate given the actual

level of trust. Thus, focusing on understanding an individual's own trust propensity, trust beliefs, and trust intentions, can help in assessing an individual's ability and motivation to trust others.

**Cognitive Trust Development.** When thinking about trust development in the workplace it is important to consider that the trustor is the dominant locus at the initial stages for trust formation and the reliance on cognitive processes early on (Lewicki & Bunker, 1996; Rousseau et al., 1998). Given the role of the trustor in early, initial stages of trust formation, focusing efforts on readying employees to engage in trust development can accelerate a positive change in the level of trust. Cognitive trust is affected by early interactions of trust and reliability, where high early trust is necessary for reliable performance, and these experiences can increase or decrease cognitive trust. Focusing efforts on trust early and consistently can result in increasing cognitive trust (Webber, 2008).

**Affective Trust development.** This dissertation also demonstrates the importance of both benevolence and integrity for fostering trusting decisions. Once an individual's level of readiness to trust others is examined, activities can be identified for fostering and increasing the motivation to trust others in the workplace. The scales developed in this dissertation research contribute to understanding what trusting beliefs and intentions influence an individual's willingness to trust others at work. While early monitoring of behaviors has a negative impact on cognitive trust, integrity, affective trust, benevolence, is more enduring, with no impact due to monitoring.

Increasing self-awareness of benevolent intentions would include considering others' interests making it important to consider an ethical criterion for evaluating others in the workplace. The positive role of benevolence and context in the workplace requires paying

attention to others' interests. In research on the effect of trust antecedents of ethical reasoning, Knoll and Gill (2011) argue that when placing trust in a coworker, benevolence and integrity are more important than the perception of the coworkers ability, ethical reasoning, while trust in supervisors is based on theoretical reasoning. Benevolence is an affective experience and it is about emotional caring whereby perceptions of benevolence have a direct, positive effect on trust generated by both managers and their followers in the workplace (de Nalda et al., 2016). Also, understanding the affective nature of trust is critical for ensuring the workplace considers feelings when measures are taken to build trust.

Focusing interventions on positive motivation strategies can increase an individual's readiness to develop trust. For example, the self-enhancement motive is defined as "an individual employee's sensitivity to other people's perception of him/her and his/her level of motivation to adapt his/her behavior in order to project a good self-image to others" (Yun, Takeuchi, & Liu, 2007, p. 749). Being explicit regarding the role of trust as important to one's positive self-image to others can affect the exhibiting of behavior that can influence both trusting others and building trust. Previous studies have examined the positive relationship between self-enhancement motives and extra-role behaviors such as OCB (Yun et al.). Left alone individuals may put their efforts into impressing others, including their coworkers and leaders (Bolino et al., 2008) versus increasing self-awareness of trust.

In considering trust propensity an individuals generalized trust (Uslaner, 2012), both faith in humanity and trusting stance, are likely to determine initial trust-related behavior with strangers. However, faith in humanity produces trust-related behavior based upon the expectation that trust will be reciprocated, whereas trusting stance produces trust-related behavior based

upon rules that do not require expectations of reciprocity. As discussed on Chapter II, the spiral reinforcement of trust can be affected by diversity in propensity to trust in group development (Ferguson & Peterson, 2015), reducing levels of trust and having a negative effect on conflict. Focusing intervention efforts on propensity to trust dynamics could serve to avoid negative spiral trust dynamics.

**Transparency and Trust.** Research has shown that trust is related to transparency (Rawlins, B., 2008) with transparency linked to leadership as a component of authentic leadership (Norman, Avolio, & Luthans, 2010), to organizations (Boje, Gardner, & Smith, 2006), ethics (Auger, 2014), employee trust (Jiang & Luo, 2018), and team performance (Palanski, Kahai, & Yammarino, 2011) as examples. In research on political transparency Balkin (1999) identified three types of transparency which were informational, participatory, and accountability and Rawlins (2009) calls out balanced reporting as an important element for transparency. Auger (2014) and Rawlins (2008) argued that communicative transparency has been shown to have a significant impact on reinforcing existing levels of trust and for increasing trust.

Given the importance of the role transparency has for trust, organization and leader intervention strategies should be designed to increase transparency in order to increase trust. Intervention strategies should be designed, implemented, monitored, and measured for increasing transparency within and across organizations. This should include providing objective, balanced reporting of an organization as a high priority where decision making processes are clearly defined, inclusive, and communicated. Strategies which develop and implement decision making processes which are seen as fair and inclusive can contribute to increasing perceptions of procedural justice as well. Operationalizing decision making should allow for disclosure of

decisions made and for holding leaders accountable. Processes for sharing of information that is useful and meaningful for employees should be visible and employees should be invited to participate identifying information they need.

Communication strategies should be designed to be inclusive, open, and relevant providing background on why decisions are made and how they will impact others in a timely manner. Furthermore, organizations and leaders can foster transparency by means of use of the cc (carbon copy) function in email communications (Haesevoets et al., 2019) and in sharing calendar details by using public permission settings so others can see availability as well as subject and location. Effectiveness of transparency intervention strategies can be measure by tracking decisions made and results, tracking frequency, timing, and type of communication, and using feedback from employees on participation, information, and accountability as examples. In addition, survey instruments for transparency and trust such as those developed by Rawlins and Auger can provide means and examples for measuring feedback in these areas of focus. These survey results can be used to compare individuals and leaders who use cc in communications and who have open calendars for assessing effectiveness of open communication strategies and actions for increasing transparency.

**Trust as a Process.** Regarding trust as a process, future work should build on Dietz and Hartog's (2006) model of trust formation to consider developmental readiness to trust before interactions begin. Dietz and Hartog adapted elements from previous research on trust to develop a framework that represents an intra-organizational trust process. Adapting this framework to reflect developmental readiness to trust and an open systems model (input-throughput-output), while overlaying it on the TTM, provides a view of inputs and process that are relevant for

identifying appropriate change initiatives. Dietz and Hartog's (2006) I-P-O model describes an individual progressing from: (a) stage one, pre-contemplative: reflecting a lack of awareness of trust; to (b) stage two, contemplative: where an individual becomes aware of trust inputs and beliefs; and finally moving to (c) stage three, where an individual is ready to trust and an individual increases trusting intentions. This then progresses to making a decision to trust, which then results in an outcome of trusting behavior and trusting actions towards others. Feedback from this experience then acts as a feedback loop, creating a new input for an individual to consider during the next trust exchange.

This framework supports early initiatives focused on creating awareness of the role and importance of trust in the organization targeting the precontemplative stage of change. Increasing awareness allows for shifting to the contemplative stage where an individual thinks about increasing trust of others. Ability to trust and propensity become inputs to the trust process, where beliefs and intentions form the outcome of an individual's willingness to engage in trusting behaviors. Figure 5.11 integrates TTM and I-P-O for demonstrating how the process of inputs-process-outcome can be used for identifying where in developmental readiness to trust state individuals are for designing interventions for increasing desires and intentions to trust others.

Increasing trust requires a deeper understanding of how an individual is prepared or ready to trust others. For example, by inaccurately assessing the degree to which they are trusted, individuals may be unable to gauge which behaviors are necessary or required to help maintain or restore trust. Consequently, such individuals may inadvertently hinder effective trust development by failing to engage in trust building behaviors, or perhaps engaging in behaviors

that are inappropriate given the actual level of trust. Thus, focusing on understanding an individual's own trust propensity, trust beliefs, and trust intentions, can help in assessing an individual's ability and motivation to trust others. The TTM of change indicates that increasing awareness of ability and motivation to trust others will lead to increasing positive beliefs and intentions, leading to action that contributes to a climate high in trust.

### **Early Trust Formation**

Authors Belkin and Rothman indicated that early interventions for developing trust can have a significant impact on the quality of future exchanges indicating that trust exchanges can be fostered early on in relationships, potentially accelerating the development of trust for individuals and teams. Belkin and Rothman (Belkin & Rothman, 2017) argued that initial trust related judgments could alter subsequent exchanges stating, "so there is value in understanding the full spectrum of how initial trust-related judgments are formed, for example, through the interpersonal impact of emotional expressions" (p. 4).

Given the impact of initial trust interventions need to focus on the developmental readiness state of trust. These authors highlighted prior work which links perceptions of morality to likelihood of trust development in social exchanges, where any signal may transmit values thereby increasing trust toward others, which has positive impact. Webber (2008) argued that early trust is reliant on familiarity and knowledge of others reputation. Building a reputation and an individual, as a team, and as an organization can have positive impact on readiness to develop trust in workplaces. Due to the moral nature of trust, being developmentally ready to change should take into consideration change that can occur due to articulating desires around trust and

trusting relationships, provoking intentional change. If such trust is consistent, and with enough reciprocity, then moralistic trust becomes self-reinforcing.

Increasing trusting others in the workplace requires interventions in early stages of team formation as well as on an ongoing basis. Interventions focused on increasing individual awareness of motivation to trust can serve to increase an individual's self-efficacy towards trusting others. Early and regular open discussion in the workplace focused on examination of positive trusting experiences, can support an individual's understanding of why they trust and can identify gaps in their trusting behaviors as a means promoting discrepancies for activating an increase in self-efficacy.

Leaders should engage in reflection exercises on trust and the subsequent impact of trust to build more awareness of trust dynamics in their workplace. Incorporating regular feedback on trust dynamics in project management operations and processes can provide predictable mechanisms for team members to relay how trust is aiding or hindering performance, while also providing remediation for shifting from negative trust to positive trust dynamics. This dissertation research indicates a distinction between propensity tendencies and likelihood for engaging which means that focus needs to be paid on increasing the likelihood others will trust in the future.

**Increasing Self-efficacy.** Drawing on research by Luthans, Avolio, Avey, and Norman (2007) four factors are identified which constitute positive psychological capital, these are hope, self-efficacy, resiliency, optimism. Self-efficacy is a person's beliefs about agentic capabilities (e.g., Bandura, 1986), specifically motivation to see oneself as an agent influencing one's own functioning and environment (Bandura, 2008). Both efficacy and optimism impact trust in the



workplace as internal motivation to trust others. Specifically higher self-efficacy motivates one to be efficacious towards trusting others where “[S]cholars have argued that self-efficacy can exist as an aspect of moral self strength and be an important motivator of moral action” (Jennings, Mitchell, & Hannah, 2015, p. S156), influencing moral intentions. Increasing an individual’s self-efficacy would impact moral conation, trusting others, and motivation demonstrating the complexity self-efficacy plays in understanding one’s readiness to trust others.

**Trust and optimism.** Previous research reveals a connection between trust and optimism, where trust is an element of optimism (Uslaner, 2002), but not the same thing. Hoy, Tarter, and Woolfolk-Hoy (2006) suggest social trust comes from the affective side of optimism. Hence, research reveals that people with high levels of social trust are more likely to be optimistic about the future. Similarly, Uslaner (1999) put forth that social trust is based on optimism and sense of control over one’s own life. Bibi et al. (2017) argued that optimism will positively predict social trust. This is pertinent to understanding the role of optimism in fostering trust in the workplace. Optimism is viewed as a developable state and may be positively associated with seeing others as trustworthy (Higgins, M., Dobrow, & Roloff, 2010). Optimism is a broader construct in that it is defined as a positive view of the world and future, which broadly influences perceptions of others. Optimists are generally positive about all aspects of their life. Whereas, propensity to trust is more narrowly defined in terms of general tendencies in social interactions versus optimism represents a positive worldview. Research on positive psychological capital (Harty, Gustafsson, Björkdahl, & Möller, 2016) proved that group interventions focused on learned optimism were successful indicating that organizations can

develop strategies for increase the development of optimism in the workplace. Increasing positive psychology can and should include sharing positive desires and intentions to trust others.

**Perspective Taking.** Perspective taking, the ability to know and understand the mental states of other people, is the cognitive component of empathy, which allows individuals to experience the feelings of others. The component cited in most theories as being crucial for moral development is perspective taking. Perspective taking is important for moral development in that it allows for the thoughts and feelings of others to be taken into account, when making moral decisions and in deciding whether empathy is warranted.

**Emotional Regulation.** (Dedeke, 2015) posits that the relationship between moral judgment and moral reasoning is moderated by emotional control. Emotional regulation is defined as the set of processes that enables an individual to initiate, maintain and modify the occurrence, intensity, and duration of feeling states (Eisenberg, Fabes, Guthrie, & Reiser, 2000). Research on emotional regulation confirms that people can mitigate the adverse effect of emotions on decision-making, if they are aware of the impact of their emotions and if they create a plan to regulate (Dedeke, 2015).

**Empathy.** Empathy is the main affective process proposed to be important for moral decision-making and moral development. It is proposed that empathy can act as a motivator for moral behavior by Hannah, Avolio, and May (2011). Increasing empathy can serve to increase affective trust processes, which then contribute to positive trust environments.

**Justice.** The role of procedural justice on perceptions of trust ability and motivation (Brockner & Siegel, 1996) may be affected depending on whether the perception is intent-based or ability-based. Understanding this distinction is important in the workplace. “Procedures are

important because they communicate information about a party's motivation and ability to act in a trustworthy fashion" (p. 407). The presence of procedural justice is more connected to perceived intent rather than to perceived ability signaling a desire to and an intention to trust. Procedural attributes may provide information regarding a party's ability to exhibit trusting behaviors. Procedural competence such as decision-making can reflect individual and or team trustworthiness, where trust is garnered due to confidence in the ability of the team regardless of level of motivation. Procedures that are considered fair can symbolize both intent and ability. An example of this is when using data to make decisions, where data accuracy is in itself a competency, which is a demonstration of ability. "The procedures used by individuals and collectives often reflect their motivation and ability to be trustworthy" (Brockner & Siegel, 1996, p. 408).

While my research is not examining the perception of procedural justice in the workplace, it is important to consider that the perception of fair procedural justice and impact on trust dynamics. Perceptions of procedural justice contributes to an individual's sense of existing trust, motivating individuals to trust based on fair decision making process.

**Predicting Trust.** Predicting trust will require the use of frameworks and models for fostering trust between team members, within teams and organizations, and with leaders. What to do, where to focus, and how to start conscious trust building can be guided by research presented in Chapter I and II. Chapter I calls out research by Fishbein and Ajzen's (1975) on planned behavior distinguishing between beliefs and intentions. According to Fishbein and Ajzen (1972) planned behavior is comprised of three types of beliefs, these are behavioral beliefs, normative beliefs, and beliefs about factors related to trust. Creating a climate of trust should be an

imperative given the connection to building and sustaining a climate high in psychological safety.

Messick and Reeder (1972) made a distinction between likelihood and confidence as a means of deepening the understanding of learning goal orientation. In their research the authors drew from Bandura's social learning theory (1989) and Mischel (1977) theory of situational strength, to examine how employees' disposition towards learning goal orientation can predict positive psychological states, such as trust formation. Assessing individual learning orientation could then support furthering our understanding of how learning goals can be used to increase an individual's readiness to trust by predicting trusting intentions.

## **Conclusions**

Earlier research on developmental readiness has set the stage for the importance of the practical implications for increasing the development of trust in others. This dissertation research expanded on literature on trust, motivation, and developmental readiness in validating a new construct call Developmental Readiness to Trust. By assessing an individual's core beliefs regarding trust, and in parallel examining an individual's ideal aspiration towards trusting others, the current research could lead to a better understanding of how to enhance an individual's self-awareness of trust, acting as the catalyst for the pre-contemplative state. Once an individual is more aware they may see discrepancies in their perceptions of trust. In the workplace, this could lead to the development of learning activities focused on exploring a plan for getting from the current state of trust development to getting closer to a desired state of trust development. While this study did not focus on why trust is declining in the workplace, it does contribute to

evaluating where an individual is ready to focus efforts for developing trust, specifically increasing both ability to trust and motivation to trust others

Trust is declining (Uslaner, 2002) and trust is a prerequisite for the presence of psychological safety in the workplace. A recent survey of employees across the world revealed that only 47% characterized their workplace as “a psychologically safe and healthy environment to work in” (Ipsos, 2012). Trust researchers argue that if an employee is in a trusting relationship, then the employee feels safe and positive, which subsequently leads to higher job satisfaction. On the other hand, if there is distrust, an employee is likely to feel anxiety and negative affect, which results in lower job satisfaction (Dirks & Ferrin, 2002; Mayer et al., 1995). Two components of trust consistently emerge in trust research (Cook, J. & Wall, 1980; Cummings & Bromiley, 1996; McAllister, 1995), a cognitive component based on reliability, dependability, and competence and an affective (emotional) component based on close interpersonal relationships. Jones and George (1998) argued for conditional trust based on knowledge and positive expectations of others and unconditional trust based on positive affect.

Trust matters and trust can be learned (Uslaner, 2002). “Because trust links us people who are different from ourselves, it makes cooperation and compromise easier. Trustors are substantially more likely to say that most people are cooperative” (p.190). Promoting behaviors which foster trust such as cooperation, open communication, transparency, justice, and moral and ethical standards are examples of behaviors which can increase development of trust in the workplace. Finally, if there is distrust, employees are likely to feel negative affect and anxiety, lowering job satisfaction. In other words, trust is vital to the presence of psychological safety in the workplace and to how we all work in organizations.

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## Appendix

**Appendix A: Interview IRB Approval**

IRB Approval Interviews

07/13/2017

Dear Molly Breysse Cox,

As Chair of the Institutional Review Board (IRB) for Antioch University Ph.D., I am letting you know that the committee has reviewed your Ethics Application. Based on the information presented in your Ethics Application, your study has been approved.

Your data collection is approved from 07/03/2017 to 07/02/2018. If your data collection should extend beyond this time period, you are required to submit a Request for Extension Application to the IRB. Any changes in the protocol(s) for this study must be formally requested by submitting a request for amendment from the IRB committee.

Any adverse event, should one occur during this study, must be reported immediately to the IRB committee. Please review the IRB forms available for these exceptional circumstances.

Sincerely,  
Lisa Kreeger

## **Appendix B: Email invitations / recruiting for interviews**

### **Background and Introduction:**

I am a PhD candidate for Leadership and Change at Antioch University. As part of this degree, I am examining trust development and formation on teams with the aim of this research to understand an individual's point of view on motivation to trust others at work. I am looking for volunteers to participate in a one (1) hour interview designed to ask questions regarding your personal experience with trusting others in your work groups.

I have a series of open-ended questions I will be asking and the session will be recorded. This is a confidential interview and your name will not be referred to or used and you may discontinue the interview at any time. The information from this interview will be used to assess how to measure an individual's motivation to trust.

If you have at least five (5) years of work experience working in a team with 3 or more team members you can volunteer for this study. Please email me at

[mbreyssecox@antioch.edu](mailto:mbreyssecox@antioch.edu) if you are interested and I will send you a consent form, a requirement for this interview.

Thank you in advance for your interest and support.

Molly Breysse Cox, PhD Candidate

## Appendix C: IRB interview consent form

### CONSENT FORM

This informed consent form is for interview participants, individuals who have a minimum of twelve years of work experience, are currently employed full-time, and are willing to have a conversation about their motivation to trust in the workplace. These participants are invited via a recruiting email sent out using my local professional network and are volunteering, contacting me to be interviewed. They are invited to contribute to my research project titled: The Trust Decoder: An Examination of Developmental Readiness to Trust in the Workplace.

Name of Principle Investigator: Molly Breysse Cox

Name of Organization: Antioch University, PhD in Leadership and Change Program

Name of Project: The Trust Decoder: An Examination of Developmental Readiness to Trust in the Workplace.

*You will be given a copy of the full Informed Consent Form*

### Introduction

I am Molly Breysse Cox, a PhD candidate for Leadership and Change at Antioch University. As part of this degree, I am completing a project to examine an individual's point of view of their motivation to trust. I am going to give you information about the study and invite you to be part of this research. You may talk to anyone you feel comfortable talking with about the research, and take time to reflect on whether you want to participate or not. You may ask questions at any time.

### Purpose of the research

The purpose of this project is to contribute to the mixed methods qualitative research planned for this study focused on gaining a deeper understanding of trust in the workplace. This information may help us to better understand an individual's ability and motivation to trust in workgroups.

### Type of Research Intervention

This research will involve your participation in one of three research interviews designed to get a deeper understanding of your motivation to trust in your work teams. Each of these interviews will be tape recorded solely for research purposes, but all of the participants' contributions will be de-identified prior to publication or the sharing of the research results. These recordings, and any other information that may connect you to the study, will be kept in a locked, secure location.



### Participant Selection

You are being invited to take part in this research because you have at least three years of work experience, are currently employed. You should not consider participation in this research if discussing trust feels risky to you, if you work in organizational development, if you have previously worked for me or an immediate family member, or if you are not currently employed.

### Voluntary Participation

Your participation in this study is completely voluntary. You may choose not to participate. You will not be penalized for your decision not to participate or for anything of your contributions during the study. You may withdraw from this study at any time. If an interview has already taken place, the information you provided will not be used in the research study.

### Risks

No study is completely risk free. However, I do not anticipate that you will be harmed or distressed during this study. You may stop being in the study at any time if you become uncomfortable. If you experience any discomfort as a result of your participation, employee assistance counselors will be available to you as a resource.

### Benefits

There will be no direct benefit to you, but your participation may help others in the future.

### Reimbursements

You will not be provided any monetary incentive to take part in this research project.

### Confidentiality

All information will be de-identified, so that it cannot be connected back to you. Your real name will be replaced with a pseudonym in the write-up of this project, and only the primary researcher will have access to the list connecting your name to the pseudonym. This list, along with tape recordings of the discussion sessions, will be kept in a secure, locked location.

### Limits of Privacy Confidentiality

Generally speaking, I can assure you that I will keep everything you tell me or do for the study private. Yet there are times where I cannot keep things private (confidential). The researcher cannot keep things private (confidential) when:

The researcher finds out that a child or vulnerable adult has been abused

The researcher finds out that that a person plans to hurt him or herself, such as commit suicide,

The researcher finds out that a person plans to hurt someone else,

There are laws that require many professionals to take action if they think a person is at risk for self-harm or are self-harming, harming another or if a child or adult is being abused. In addition, there are guidelines that researchers must follow to make sure all people are treated with respect and kept safe. In most states, there is a government agency that must be told if someone is being abused or plans to self-harm or harm another person. Please ask any questions you may have about this issue before agreeing to be in the study. It is important that you do not feel betrayed if it turns out that the researcher cannot keep some things private.

#### Future Publication

The primary researcher, Molly Breysse Cox, reserves the right to include any results of this study in future scholarly presentations and/or publications. All information will be de-identified prior to publication.

#### Right to Refuse or Withdraw

You do not have to take part in this research if you do not wish to do so, and you may withdraw from the study at any time without your job being affected.

#### Who to Contact

If you have any questions, you may ask them now or later. If you have questions later, you may contact, Molly Breysse Cox, email at: [REDACTED]

If you have any ethical concerns about this study, contact Lisa Kreeger, Chair, Institutional Review Board, Antioch University Ph.D. in Leadership and Change, [REDACTED]

This proposal has been reviewed and approved by the Antioch International Review Board (IRB), which is a committee whose task it is to make sure that research participants are protected. If you wish to find out more about the IRB, contact Dr. Lisa Kreeger.

This proposal has been reviewed and approved by the Antioch International Review Board (IRB), which is a committee whose task it is to make sure that research participants are protected. If you wish to find out more about the IRB, contact Dr. Lisa Kreeger.

#### DO YOU WISH TO BE IN THIS STUDY?

I have read the foregoing information, or it has been read to me. I have had the opportunity to ask questions about it and any questions I have been asked have been answered to my satisfaction. I consent voluntarily to be a participant in this study.

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_  
Day/month/year

DO YOU WISH TO BE AUDIOTAPED IN THIS STUDY?

I voluntarily agree to let the researcher audiotape me for this study. I agree to allow the use of my recordings as described in this form.

Print Name of Participant \_\_\_\_\_

Signature of Participant \_\_\_\_\_

Date \_\_\_\_\_  
Day/month/year

***To be filled out by the researcher or the person taking consent:***

**I confirm that the participant was given an opportunity to ask questions about the study, and all the questions asked by the participant have been answered correctly and to the best of my ability. I confirm that the individual has not been coerced into giving consent, and the consent has been given freely and voluntarily.**

**A copy of this Informed Consent Form has been provided to the participant.**

**Print Name of Researcher/person taking the consent** \_\_\_\_\_  
**Signature of Researcher /person taking the consent** \_\_\_\_\_

**Date** \_\_\_\_\_  
 Day/month/year

## **Appendix D: Interview Protocol and Questions**

Date: June 23, 2017

### Background

I am conducting research that will be used for my PhD dissertation on trust in the workplace. This research is examining trust development and formation in the workplace, specifically focused on understanding what motivates you to trust others in your team at work, including your experience in the past with trust at work. This interview is an opportunity to understand your personal experience with trust in your work groups and to get deeper insight into you as an individual and your motivations for trusting others.

### Interview Information:

I have a series of questions I will be asking and I will be recording our session. This is a confidential interview and your name will not be referred to or used. You may discontinue this interview at any time and no information will be used for this research.

### Interview Introduction:

There are many things which impact our desire and our intentions to trust others in the workplace. I'd like to ask you some questions about how you think about trust and about how you feel about trust. When considering how we feel about feelings keep in mind use surprise as an example. Now, some people don't ever like being surprised. On the other hand, some people love to be surprised and love surprising others. Surprise is a feeling that they like and really enjoy and they want to have more of it in their lives. They go out of their way to have it. So, there's no right or wrong about this. People are just different.

To Begin:

A: In a sentence or two, what comes to mind when you think about trust?

B: Let's think about your ability to trust, on a scale of one to ten, one low, ten high, how would you rate your ability to trust others in your workplace?

C: What are a few things you feel support your ability to trust?

D: What are a few things which hinder your ability to trust?

Let's think about motivation and trust. We have all had times when we have been highly motivated to do something and times when we are less motivated. For example, we know we should get exercise to stay healthy and yet sometimes the internal drive may not be there to get to the gym and we feel a lack of energy, indifference, or even resistance. Other times we may be highly motivated if the exercise includes something we love doing like hiking, and we feel excited, energized, and cannot wait to get out the door. We all have time when we have a difference in our energy, drive, and desire to engage.

F: Now, thinking about your motivation to trust, reflect on a time when you were highly motivated to trust others in your workgroup. Can you identify a time like this? Tell me a little bit about it. What things stand out for you in this situation? What thoughts or feelings clued you in to the fact that you were highly motivated to trust?

G: Think about a time when you were not motivated to trust others in your workgroup. What things stand out for you in this situation? How were the thoughts and feelings in this situation similar or different from the time when you were highly motivated to trust?

H: Think of a time when you were a new member on a team. How long did it take you to trust others in your work team?

What were your thoughts and feeling towards trusting others when you started?

What helped you to trust others in this case?

How would you describe your motivation in this case?

What did you do in this case to build trust others have in you?

**Appendix E: IRB Approval Survey**

November 14, 2017

Dear Molly Breyse Cox,

As Chair of the Institutional Review Board (IRB) for Antioch University Ph.D., I am letting you know that the committee has reviewed your Ethics Application. Based on the information presented in your Ethics Application, your study has been approved.

Your data collection is approved from 11/14/2017 to 11/13/2018. If your data collection should extend beyond this time period, you are required to submit a Request for Extension Application to the IRB. Any changes in the protocol(s) for this study must be formally requested by submitting a request for amendment from the IRB committee.

Any adverse event, should one occur during this study, must be reported immediately to the IRB committee. Please review the IRB forms available for these exceptional circumstances.

Sincerely,  
Lisa Kreeger



## **Appendix F: Email invitation to take pilot survey**

Email invitation to pilot survey: This email to be sent to people in my professional network, the goal is to get at least 20 responses to the survey.

### **Background and Call to Action**

As many of you know I am a PhD candidate for Leadership and Change at Antioch University and as part of this degree I have been examining trust development and formation on teams. I believe we would all agree that trust is an important element in how people interact in the workplace. Studies show us that our productivity, our satisfaction, and our relationships are impacted by the positive or negative level of trust in our work environment.

If trust is so important why isn't there more trust and trust building in the workplace? As with implementing transformational change and as with accelerating leadership development is there a need to address readiness and readiness to trust?

Trust can mean different things to different people and it is shaped by our own experiences and actions. I have developed a survey to get a deeper understanding of our own self perception of our ability to trust and our motivation to trust others in teams at work.

Take the Pilot Survey – Please!

I am conducting a pilot for this survey before it the final survey upcoming launch and I would appreciate your support. Please click the link to the survey below if you have at least five (5) years of work experience in a team(s) with at least three (3) members. The survey is confidential and the information is anonymous. You can also forward this invitation to others who might be interested.

Thank you in advance for your help launching my survey.

Molly Breysse Cox, [REDACTED]

## Appendix G: Pilot Survey

The Trust Decoder - Pilot

Introduction

I am conducting dissertation research on trust in the workplace. Studies show us that our productivity, our satisfaction, and our relationships are impacted by the positive or negative level of trust in our work environment. Trust can mean different things to different people and my research is focused on understanding an individual's point of view of trusting in the workplace.

I am inviting you to participate in this survey and I hope you will find that it gives you an opportunity to reflect on your own professional attitudes and practices for trust in your workplace. The survey should take about 15- 20 minutes to complete.

All participation in the survey is completely voluntary and all responses will be kept confidential. No personally identifiable information will be associated with your responses to any reports of these data. The Antioch University Institutional Review Board has approved this survey. Should you have any comments or questions, please feel free to contact me at [REDACTED], if you have any ethical questions or concerns about this project, please contact Dr. Lisa Kreeger, Chair of the Institutional Review Board, Antioch University PhD in Leadership and Change, at [REDACTED]

By clicking "Next" below, you confirm that you are at least 18 years old, have read and understand the survey introduction, and agree to participate in this research study. You will be asked to click "Submit" once you have completed the survey. Please note that for any reason, at any time during the process, you may elect not to click the "Next" or "Submit" button.

The Trust Decoder - Pilot

Eligibility

\* 1. Are you currently employed in a for profit, nonprofit, or government agency?

☐ YES, I work for a for profit corporation
☐ NO, I am self employed

☐ YES, I work for a nonprofit corporation
☐ NO, I am not working right now

☐ YES, I work for a local, state, or national government agency

The Trust Decoder - Pilot

Trust Page 2

\* 2. Thinking about **trust in your workplace**, how strongly do you disagree or agree with each of the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I believe that people usually keep their promises.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I know when to trust people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I give people the benefit of the doubt when I first meet them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I would never knowingly do anything to hurt another person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. It is a struggle for me to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I trust people until they give me a reason not to trust them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I see myself as being consistent in my actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. It is very important to me to be trusted by others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I am motivated to learn how to increase my trust in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I believe that others are likely to return the trust I have placed in them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder - Pilot

Trust Page 3

\* 3. Thinking about **trust in your workplace**, how strongly do you disagree or agree with each of the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. Being honest with others is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Other's needs and desires are very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. My tendency to trust others is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Learning to trust others is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting others is difficult for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I view my ability to trust others as something I was born with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I go out of my way to help others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I am seldom wary of trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I often work around others to get things done the way I want them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I am motivated to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I am confident I have the ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder - Pilot

Trust Page 4

\* 4. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat agree	Agree	Strongly agree
a. I am seen as someone who avoids trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. If I initiate trusting others, the likelihood others will trust me is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I see actions I can take to increase the trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I am seen as someone who increases the level of trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting others increases my chances of their trusting me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. Past experience trusting others motivates me to continue to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I would feel bad about myself if I did not trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Whether or not others trust me depends on my own trustworthiness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I view myself as someone who keeps their word.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. If another person initiates a sense of trust in me, I am likely to return it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I am confident that I can increase my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder - Pilot

Trust Page 5

\* 5. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. It is easy for me to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I see no benefit in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I believe I can increase my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I feel that trusting others is very important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I have low motivation to increase my trust in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I believe others will engage in acts of trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Others know me to be someone who trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I believe building trust is morally right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. The reason I broaden my ability to trust others is because it is important to me to build trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I see myself as someone others can rely on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 6. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I understand what is involved in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I have a low tolerance for working with others who don't trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I hold back on trusting others until I know them well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I see the benefits of trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I feel that trusting others is important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I see myself as someone who trusts others as I would like to be trusted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I am confident in my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. Trust is a very important personal value for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I see little benefit in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I have a successful track record for trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. Keeping the commitments I make is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder - Pilot

Trust Page 7



\* 7. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. Even if I am uncertain I will give others the benefit of the doubt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The likelihood I will initiate trust in others in a new situation is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I often reflect on how the level of trust others have in me is linked to my actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I have low confidence in my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. It is easy for me to care about the welfare of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I am confident in my ability to increase the level of trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I see my ability to trust others as an asset.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I have many successful relationships in the workplace based on trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. I look out for the needs of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. People know I have a reputation for trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
k. I believe trust is a public good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder - Pilot

Trust Page 8

\* 8. Thinking about **trust in your workplace**, how strongly do you disagree or agree to the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. My tendency to trust others is low.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I say trusting others is important to me because other would think badly of me if I did not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I am motivated to learn how to increase the trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I view my ability to trust others as something I can increase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting another person is not difficult for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I feel that trusting others is of little importance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. My typical approach is to trust new acquaintances until they prove I should not trust them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I try hard to be fair in my dealings with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
i. If I trust them first, the likelihood others will engage in acts of trust is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
j. I try hard to be fair in my interactions with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### The Trust Decoder - Pilot

### Demographic Questions

**Thank you in advance for providing some details about yourself.**

9. How long have you been working ?

- ☐ Less Than 1 Year
 ☐ 12 Years - 25 Years  
☐ 1 Year - 5 Years
 ☐ More than 25 Years  
☐ 6 Years - 11 Years

10. What is your current role?

- ☐ Individual contributor
 ☐ manager  
☐ supervisor, line manager
 ☐ organizational leader  
☐ Other (please specify)

11. What is the highest level of school that you have completed?

- ☐ Some high school, a high school diploma (or GED) or less    ☐ 4-year college degree
- ☐ Some college, but no degree    ☐ Graduate-level degree/courses
- ☐ 2-year college degree    ☐ None of the above

12. Which race/ethnicity best describes you? (Please choose only one.)

- ☐ American Indian or Alaskan Native    ☐ Hispanic
- ☐ Asian / Pacific Islander    ☐ White / Caucasian
- ☐ Black or African American
- ☐ Multiple ethnicity / Other (please specify)

13. Gender?

- ☐ Female
- ☐ Male
- ☐ Transgender
- ☐ Other gender identity

14. Which of the following best describes the principal industry of your organization?

15. Do you have any other thoughts about trust in your workplace that you would like to share?

The Trust Decoder - Pilot

Last Page

**Thank you for your time!**

**Appendix H: Invitation to Final Survey**

Email communication two weeks prior to final research survey

**Background and Call to Action**

As many of you know I am a PhD candidate for Leadership and Change at Antioch University and as part of this degree I have been examining trust development and formation on teams. I believe we would all agree that trust is an important element in how people interact in the workplace. Studies show us that our productivity, our satisfaction, and our relationships are impacted by the positive or negative level of trust in our work environment.

If trust is so important why isn't there more trust and trust building in the workplace? As with implementing transformational change and as with accelerating leadership development is there a need to address readiness and readiness to trust?

Trust can mean different things to different people and it is shaped by our own experiences and actions. I have developed a survey to get a deeper understanding of our own self perception of our ability to trust and our motivation to trust others in teams at work.

I will be launching this survey on March 11, 2017 focused on developing a scale to measure an individual's readiness to trust others in the workplace. I am emailing you in advance to ask for

your help and supporting getting people to take this survey, including yourself! My goal is at least 300 participants to take the survey.

I will be sending out an email invitation to this survey and I ask that you click the survey link yourself and that you send this email to others in your network. Anyone with at least five (5) years of work experience in a team(s) with at least three (3) members can take this survey. The survey is confidential and the information is anonymous.

Thank you in advance for your help launching my survey.

Molly Breyse Cox, [REDACTED]

## Appendix I: Final Survey

### The Trust Decoder

#### Introduction

I am conducting dissertation research on trust in the workplace. Studies show us that our productivity, our satisfaction, and our relationships are impacted by the positive or negative level of trust in our work environment. Trust can mean different things to different people and my research is focused on understanding an individual's point of view of trusting in the workplace.

I am inviting you to participate in this survey and I hope you will find that it gives you an opportunity to reflect on your own professional attitudes and practices for trust in your workplace. The survey should take about 10 - 15 minutes to complete.

All participation in the survey is completely voluntary and all responses will be kept confidential. No personally identifiable information will be associated with your responses to any reports of these data. The Antioch University Institutional Review Board has approved this survey. Should you have any comments or questions, please feel free to contact me at [REDACTED]. If you have any ethical questions or concerns about this project, please contact Dr. Lisa Kreeger, Chair of the Institutional Review Board, Antioch University PhD in Leadership and Change, at [REDACTED].

By clicking "Next" below, you confirm that you are at least 18 years old, have read and understand the survey introduction, and agree to participate in this research study. You will be asked to click "Submit" once you have completed the survey. Please note that for any reason, at any time during the process, you may elect not to click the "Next" or "Submit" button.

### The Trust Decoder

#### Eligibility

\* 1. Are you currently employed in a for profit, nonprofit, or government agency or are you self-employed?

- ☐ YES, I work for a for profit corporation
 ☐ YES, I am self employed  
☐ YES, I work for a nonprofit corporation
 ☐ NO, I am not working right now  
☐ YES, I work for a local, state, or national government agency

### The Trust Decoder

#### Trust Page 2

\* 2. Thinking about **trust in your workplace**, how strongly do you disagree or agree with each of the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I believe that people usually keep their promises.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I know when to trust people.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I generally give people the benefit of the doubt when I first meet them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I would never knowingly do anything to hurt another person.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. It is a struggle for me to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I believe that building trust is morally right.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I see myself as being consistent in my actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

### The Trust Decoder

### Trust Page 3

\* 3. Thinking about **trust in your workplace**, how strongly do you disagree or agree with each of the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. Being honest with others is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. Other's needs and desires are very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. My tendency to trust others is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Learning to trust others is very important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting others is difficult for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I am seldom wary of trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Past experience trusting others motivates me to continue to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## The Trust Decoder

## Trust Page 4

\* 4. Thinking about trust in your workplace, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat agree	Agree	Strongly agree
a. I am seen as someone who avoids trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. If I initiate trusting others, the likelihood others will trust me is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I see actions I can take to increase the trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I try hard to be fair in my interactions with others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting others increases my chances of their trusting me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I go out of my way to help others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I would feel bad about myself if I did not trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I am confident in my ability to increase the level of trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

## The Trust Decoder

## Trust Page 5



\* 5. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. It is easy for me to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I see no benefit in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I believe I can increase my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I feel that trusting others is very important.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I have low motivation to increase my trust in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I believe others will engage in acts of trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. Others know me to be someone who trust others in the workplace.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder

Trust Page 6

\* 6. Thinking about **trust in your workplace**, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I understand what is involved in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I have a low tolerance for working with others who fail to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I hold back on trusting others until I know them well.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I see the benefits of trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trust is a very important personal value for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I see myself as someone who trusts others as I would like to be trusted.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I am seen as someone who increases the level of trust others have in me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder

4

Trust Page 7

\* 7. Thinking about trust in your workplace, how strongly do you disagree or agree with the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. Even if I am uncertain I will give others the benefit of the doubt.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. The likelihood I will initiate trust in others in a new situation is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I often reflect on how the level of trust others have in me is linked to my actions.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I have low confidence in my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. It is easy for me to care about the welfare of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. If another person initiates a sense of trust in me, I am likely to return it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I see my ability to trust others as an asset.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I have many successful relationships in the workplace based on trust.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

The Trust Decoder

Trust Page 8

\* 8. Thinking about **trust in your workplace**, how strongly do you disagree or agree to the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. My tendency to trust others is low.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I say trusting others is important to me because other would think badly of me if I did not.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I view myself as someone who keeps their word.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I view my ability to trust others as something I can increase.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Trusting another person is not difficult for me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. The reason I broaden my ability to trust others is because it is important for me to learn about trust	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. I see myself as someone others can rely on.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. I have a successful track record for trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

\* 9. Thinking about **trust in your workplace**, how strongly do you disagree or agree to the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I am motivated to learn how to increase my level of trust in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I believe others are likely to return the trust I have placed in them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I often work around others to get things done the way I want them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I am motivated to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. People know I have a reputation for trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I feel that trusting others is of little importance.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. My typical approach is to trust new acquaintances until they prove I should not trust them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
h. If I trust them first, the likelihood others will engage in acts of trust is high.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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\* 10. Thinking about **trust in your workplace**, how strongly do you disagree or agree to the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. I am confident in my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I view my ability to trust others as something I was born with.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. It is very important to me to be trusted by others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. I trust people until they give me a reason not to trust them.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. Keeping the commitments I make is important to me.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I am motivated to learn how to increase my trust in others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
g. People know I have a reputation for trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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\* 11. Thinking about **trust in your workplace**, how strongly do you disagree or agree to the following statements?

	Strongly Disagree	Disagree	Somewhat Disagree	Neither Agree nor Disagree	Somewhat Agree	Agree	Strongly Agree
a. If another person initiates trust in me, I am likely to return it.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
b. I am confident that I can increase my ability to trust others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
c. I believe that trust is a public good.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
d. Whether or not others trust me depends on my own trustworthiness.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
e. I see little benefit in trusting others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
f. I look out for the needs of others.	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

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8

## Demographic Questions

**Thank you in advance for providing some details about yourself.**

12. How long have you been working ?

- ☐ Less Than 1 Year
 ☐ 12 Years - 25 Years  
☐ 1 Year - 5 Years
 ☐ More than 25 Years  
☐ 6 Years - 11 Years

13. What is your current role?

- ☐ Individual contributor
 ☐ Manager  
☐ Supervisor, line manager
 ☐ Organizational leader  
☐ Other (please specify)

14. What is the highest level of school that you have completed?

- ☐ Some high school, a high school diploma (or GED) or less
 ☐ 4-year college degree  
☐ Some college, but no degree
 ☐ Graduate-level degree/courses  
☐ 2-year college degree
 ☐ None of the above

15. Which race/ethnicity best describes you? (Please choose only one.)

- ☐ American Indian or Alaskan Native
 ☐ Hispanic  
☐ Asian / Pacific Islander
 ☐ White / Caucasian  
☐ Black or African American  
☐ Multiple ethnicity / Other (please specify)

16. Gender?

- ☐ Female  
☐ Male  
☐ Transgender  
☐ Other gender identity

17. Which of the following best describes the principal industry of your organization?

18. Do you have any other thoughts about trust in your workplace that you would like to share?

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**Thank you for your time!**  
**MT Confirmation code 121222**

## Appendix J: Permissions Propensity to Trust Scale

Frazier, M. Lance, Johnson, P., Fainshmidt, S., Development and validation of a propensity to trust scale. Journal of Trust Research, 2013, 3(2), 76-97. doi: [10.1080/21515581.2013.820026](https://doi.org/10.1080/21515581.2013.820026)




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**Title:** Development and validation of a propensity to trust scale

**Author:** M. Lance Frazier, Paul D. Johnson, Stav Fainshmidt

**Publication:** Journal of Trust Research

**Publisher:** Taylor & Francis

**Date:** Oct 1, 2013

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## Appendix K: Final 56 Items

Table K1: Final 56 Items

Item	Factor	Component	Measure Description	Item	Based on
<b>2.d</b>	Ability	Benevolence	Caring	I would never knowingly do anything to hurt another person.	Based on Mayer & Davis, 1999
<b>3.b</b>	Ability	Benevolence	Caring	Other's needs and desires are very important to me.	Based on Mayer & Davis, 1999
<b>4.f</b>	Ability	Benevolence	Caring	I go out of my way to help others	Based on Mayer & Davis, 1999
<b>7.e</b>	Ability	Benevolence	Caring	It is easy for me to care about the welfare of others.	Based on Mayer & Davis, 1999
<b>8.g</b>	Ability	Benevolence	Supportive	I see myself as someone others can rely on.	Based on Mayer & Davis, 1999
<b>11.f</b>	Ability	Benevolence	Caring	I look out for the needs of others.	Based on Mayer & Davis, 1999
<b>2.b</b>	Ability	Competency	My perception of capability to trust	I know when to trust people.	Based on Mayer & Davis, 1999
<b>5.g</b>	Ability	Competency	Reputation	Others know me to be someone who can trust others in the workplace.	Based on Mayer & Davis, 1999
<b>6.a</b>	Ability	Competency	Understanding	I understand what is involved in trusting others.	Based on Mayer & Davis, 1999
<b>6.g</b>	Ability	Competency	History	I am seen as someone who increases the level of trust others have in me.	Based on Mayer & Davis, 1999
<b>7.g</b>	Ability	Competency	View of Ability	I see my ability to trust others as an asset.	Based on Mayer & Davis, 1999

<b>7.h</b>	Ability	Competency	Success	I have many successful relationships in the workplace based on trust.	Based on Mayer & Davis, 1999
<b>11.b</b>	Ability	Competency	Confidence in my ability to trust	I am confident that I can increase my ability to trust others.	Based on Mayer & Davis, 1999
<b>2.g</b>	Ability	Integrity	Consistency	I see myself as being consistent in my actions.	Based on Mayer & Davis, 1999
<b>3.a</b>	Ability	Integrity	Honesty	Being honest with others is very important to me.	Based on Mayer & Davis, 1999
<b>4.d</b>	Ability	Integrity	Trustor's sense of personal fairness towards others	I try hard to be fair in my interactions with others.	Based on Mayer & Davis, 1999
<b>6.e</b>	Ability	Integrity	Value congruence	Trust is a very important personal value for me.	Based on Mayer & Davis, 1999
<b>8.c</b>	Ability	Integrity	Reliability	I view myself as someone who keeps their word.	Based on Mayer & Davis, 1999
<b>10.e</b>	Ability	Integrity	Commitments	Keeping the commitments I make is very important to me.	Based on Mayer & Davis, 1999
<b>5.c</b>	Ability	View of Ability	Incremental view of trust ability	I believe I can increase my ability to trust others.	Based on Dweck & Leggett, 1988
<b>8.d</b>	Ability	View of Ability	Incremental view of trust ability	I view my ability to trust others as something I can increase.	Based on Dweck & Leggett, 1988
<b>10.b</b>	Ability	View of Ability	Trait view of trust ability	I view my ability to trust others as something I was born with.	Based on Dweck & Leggett, 1989
<b>3.g</b>	Motivation	Instrumentality	Past experience of perceived valence of trusting others	Past experience trusting others motivates me to continue to trust others.	Based on Jones & Shah 2016

<b>4.e</b>	Motivation	Instrumentality	Perceived instrumentality due to valence of trusting others	Trusting others increases my chances of their trusting me.	Based on Mayer & Davis, 1999
<b>9.e</b>	Motivation	Instrumentality	Reputation for trusting others	People know I have a reputation for trusting others.	Based on Jones & Shah 2016
<b>11.d</b>	Motivation	Instrumentality	Perceived instrumentality of trusting others	Whether or not others trust me depends on my own trustworthiness	Based on Mayer & Davis, 1999
<b>4.b</b>	Motivation	Likelihood to Trust	How likely are others to trust you without you initiating trust earlier?	If I initiate trusting others, the likelihood others will trust me is high.	Based on Nguyen et al. 2010
<b>4.h</b>	Motivation	Likelihood to Trust	How likely are you to return trust if someone else initiates?	If another person initiates a sense of trust in me, I am likely to return it.	Based on Nguyen et al. 2010
<b>7.b</b>	Motivation	Likelihood to Trust	Trust initiating behavior in a new situation?	The likelihood I will initiate trust in others in a new situation is high.	Based on Nguyen et al. 2010
<b>3.d</b>	Motivation	Learn to Trust	Learning goal orientation	Learning to trust others is very important to me.	Based on Avolio & Hannah, 2015
<b>4.g</b>	Motivation	Learn to Trust	Learning goal orientation	I would feel bad about myself if I did not trust others.	Based on Avolio & Hannah, 2015
<b>8.f</b>	Motivation	Learn to Trust	Learning goal orientation	The reason I broaden my ability to trust others is because it is important for me to learn about trust.	Based on Avolio & Hannah, 2015
<b>5.d</b>	Motivation	General Motivation	Self-reflection on feelings about trust	I feel that trusting others is very important.	Based on Tyler & Kramer, 1996
<b>8.h</b>	Motivation	General Motivation	Perceived motivation to trust others based on previous experience	I have a successful track record for trusting others.	Based on Jones & Shah 2016 / Mayer & Davis 1999

<b>9.d</b>	Motivation	General Motivation	Motivation to trust others	I am motivated to trust others.	Based on Hannah & Lester, 2009
<b>10.c</b>	Motivation	General Motivation	Self-reflection on feelings about trust	It is very important to me to be trusted by others.	Based on Tyler & Kramer, 1996
<b>6.f</b>	Motivation	Self-Efficacy	Between my actions and my values of trust	I see myself as someone who trusts others as I would like to be trusted.	Based on Armenakis, Harris, & Mossholder 1993
<b>9.h</b>	Motivation	Self-Efficacy	Modeling trust to motivate others	If I trust them first, the likelihood others will engage in acts of trust is high.	New
<b>4.c</b>	Motivation	Self-efficacy	Confidence in my ability to increase trust	I see actions I can take to increase the trust others have in me.	Based on Avolio & Hannah, 2015
<b>7.c</b>	Motivation	Self-efficacy	Self-reflection on trust actions	I reflect on how the level of trust others have in me is linked to my actions	Based on Vincent, Denson, & Ward, 2015
<b>7.f</b>	Motivation	Self-efficacy	Level of others trust in me	I am confident in my ability to increase the level of trust others have in me	Based on Cook & Artino Jr., 2016
<b>10.a</b>	Motivation	Self-efficacy	Confidence in ability	I am confident in my ability to trust others.	Based on Mayer & Davis 1999
<b>6.d</b>	Motivation	Valence	Perceived valence of trusting others	I see the Benefits in trusting others.	Based on Holt & Vardaman, 2013, and Jones & Shah, 2016
<b>5.f</b>	Motivation	Valence	Others will engage in trusting actions	I believe others will engage in acts of trust.	Based on Nguyen et al. 2010 / Holt et al. 2007
<b>11.c</b>	Motivation	Valence	Belief that trust is good	I believe that trust is a public good.	Lewis & Weigert, 1984 / Uslaner 2002
<b>9.b</b>	Motivation	Valence	Others will engage in trusting actions	I believe others are likely to return the trust I have placed in them.	Based on Nguyen et al. 2010

<b>2.f</b>	Motivation	Valence	Belief that trust is morally right	I believe that building trust is morally right.	Based on Uslander 2002
<b>9.g</b>	Propensity*	In new situations	Trusting in new situations	My typical approach is to trust new acquaintances until they prove I should not trust them.	From Frazier et al. 2013
<b>2.c</b>	Propensity	In new situations	Trusting in new situations	I generally give people the benefit of the doubt when I first meet them.	From Frazier et al. 2013
<b>3.c</b>	Propensity*	Tendency	Level of trust tendencies	My tendency to trust others is high.	From Frazier et al. 2013
<b>3.f</b>	Propensity	In Humanity	Ease of trusting others	I am seldom wary of trusting others.	From Frazier et al. 2013
<b>5.a</b>	Propensity*	Tendency	Usual tendency to trust	It is easy for me to trust others.	From Frazier et al. 2013
<b>7.a</b>	Propensity	Stance	Usual tendency to trust	Even if I am uncertain, I will generally give others the benefit of the doubt.	From Frazier et al. 2013
<b>2.a</b>	Propensity	In Humanity	Ease of trusting others	I believe that people usually keep their promises.	From Frazier et al. 2013
<b>8.e</b>	Propensity*	In Humanity	Ease of trusting others	Trusting another person is not difficult for me.	From Frazier et al. 2013
<b>10.d</b>	Propensity	Stance	Usual tendency to trust	I trust people until they give me a reason not to trust them.	From Frazier et al. 2013

## Appendix L: Unidimensional Model CFA

Table L1: Unidimensional Pattern Matrix

*Constrained One-Factor Loading for the Developmental Readiness to Trust Scale*

Category	Subcategory	Item Description	Loadings
Propensity	Humanity	2a. I believe that people usually keep their promises.	0.618
Propensity	New situations	2c. I generally give people the benefit of the doubt when I first meet them.	0.652
Motivation	Valence	2f. I believe that building trust is morally right.	0.558
Ability	Integrity	2g. I see myself as being consistent in my actions.	0.503
Ability	Integrity	3a. Being honest with others is very important to me.	0.500
Ability	Benevolence	3b. Other's needs and desires are very important to me.	0.593
Propensity*	Tendency	3c. My tendency to trust others is high.	0.715
Motivation	Learn to Trust	3d. Learning to trust others is very important to me.	0.684
Motivation	Instrumentality	3g. Past experience trusting others motivates me to continue to trust others.	0.674
Motivation	Likely to Trust	4b. If I initiate trusting others, the likelihood others will trust me is high.	0.503
Motivation	Self-Efficacy	4c. I see actions I can take to increase the trust others have in me.	0.531
Motivation	Instrumentality	4e. Trusting others increases my chances of their trusting me.	0.630
Ability	Benevolence	4f. I go out of my way to help others.	0.544
Motivation	Self-Efficacy	4h. I am confident in my ability to increase the level of trust others have in me.	0.675
Propensity	Tendency	5a. It is easy for me to trust others.	0.730
Ability	View of Ability	5c. I believe I can increase my ability to trust others.	0.633
Motivation	General	5d. I feel that trusting others is very important.	0.793
Motivation	Valence	5f. I believe others will engage in acts of trust.	0.690
Ability	Competency	5g. Others know me to be someone who trust others in the workplace.	0.768
Ability	Competency	6a. I understand what is involved in trusting others.	0.554
Motivation	Valence	6d. I see the benefits of trusting others.	0.670

Ability	Integrity	6e. Trust is a very important personal value for me.	0.677
Motivation	Self-Efficacy	6f. I see myself as someone who trusts others as I would like to be trusted.	0.796
Ability	Competency	6g. I am seen as someone who increases the level of trust others have in me.	0.705
Propensity	Stance	7a. Even if I am uncertain I will give others the benefit of the doubt.	0.607
Motivation	Likely to Trust	7b. The likelihood I will initiate trust in others in a new situation is high.	0.712
Ability	Benevolence	7e. It is easy for me to care about the welfare of others.	0.557
Motivation	Likely to Trust	7f. If another person initiates a sense of trust in me, I am likely to return it.	0.733
Ability	Competency	7g. I see my ability to trust others as an asset.	0.768
Ability	Competency	7h. I have many successful relationships in the workplace based on trust.	0.753
Ability	View of Ability	8d. I view my ability to trust others as something I can increase.	0.540
Propensity*	Humanity	8e. Trusting another person is not difficult for me.	0.607
Motivation	Learn to Trust	8f. The reason I broaden my ability to trust others is because it is important for me to learn about trust	0.505
Ability	Benevolence	8g. I see myself as someone others can rely on.	0.515
Motivation	General	8h. I have a successful track record for trusting others.	0.797
Motivation	Valence	9b. I believe others are likely to return the trust I have placed in them.	0.746
Motivation	General	9d. I am motivated to trust others.	0.783
Motivation	Instrumentality	9e. People know I have a reputation for trusting others.	0.763
Propensity*	New situations	9g. My typical approach is to trust new acquaintances until they prove I should not trust them.	0.653
Motivation	Valence	9h. If I trust them first, the likelihood others will engage in acts of trust is high.	0.708
Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.	0.797
Motivation	General	10c. It is very important to me to be trusted by others.	0.627
Propensity*	Stance	10d. I trust people until they give me a reason not to trust them.	0.705
Ability	Integrity	10e. Keeping the commitments I make is important to me.	0.521
Ability	Competency	11b. I am confident that I can increase my ability to trust others.	0.614

Motivation	Valence	11c. I believe that trust is a public good.	0.699
Motivation	Instrumentality	11d. Whether or not others trust me depends on my own trustworthiness.	0.516
Ability	Benevolence	11f. I look out for the needs of others.	0.564

---

\*Validate Propensity item



## Unidimensional general factor results

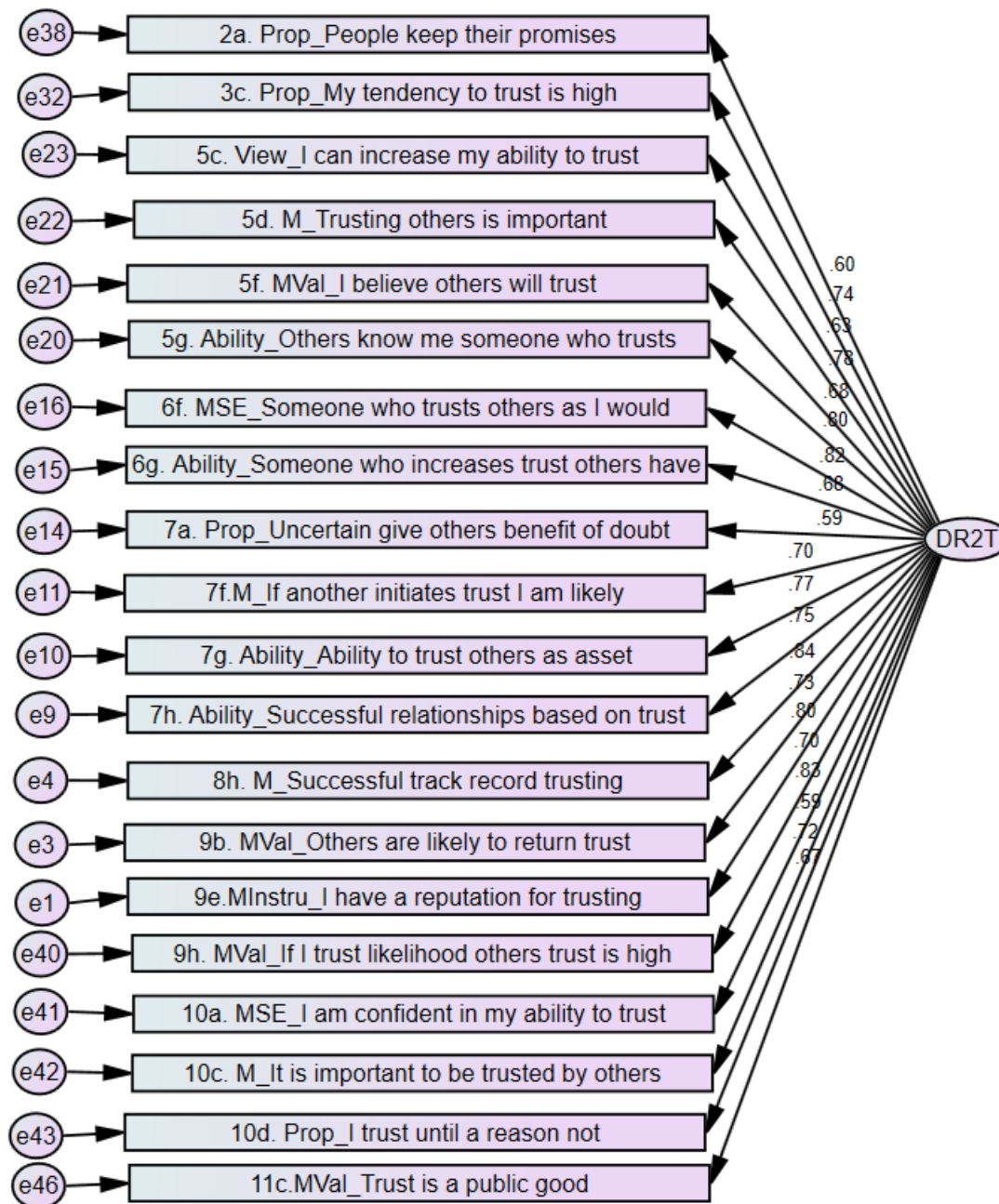


Figure 11: Unidimensional general factor results

Table L2: Unidimensional Model Items

*Items for Unidimensional General Factor*

Category	Subcategory	Item Description
Propensity	Humanity	2a. I believe that people usually keep their promises.
Propensity	Tendency	3c. My tendency to trust others is high.
Ability	View of Ability	5c. I believe I can increase my ability to trust others.
Motivation	General	5d. I feel that trusting others is very important.
Motivation	Valence	5f. I believe others will engage in acts of trust.
Ability	Competency	5g. Others know me to be someone who trust others in the workplace.
Motivation	Self-Efficacy	6f. I see myself as someone who trusts others as I would like to be trusted.
Ability	Competency	6g. I am seen as someone who increases the level of trust others have in me.
Propensity	Stance	7a. Even if I am uncertain I will give others the benefit of the doubt.
Motivation	Likely to Trust	7f. If another person initiates a sense of trust in me, I am likely to return it.
Ability	Competency	7g. I see my ability to trust others as an asset.
Ability	Competency	7h. I have many successful relationships in the workplace based on trust.
Motivation	General	8h. I have a successful track record for trusting others.
Motivation	Valence	9b. I believe others are likely to return the trust I have placed in them.
Motivation	Instrumentality	9e. People know I have a reputation for trusting others.
Motivation	Valence	9h. If I trust them first, the likelihood others will engage in acts of trust is high.
Motivation	Self-Efficacy	10a. I am confident in my ability to trust others.
Motivation	General	10c. It is very important to me to be trusted by others.
Propensity	Stance	10d. I trust people until they give me a reason not to trust them.
Motivation	Valence	11c. I believe that trust is a public good.

## Results from Model Fit Analysis for Unidimensional Factor

Table L3: *Results from Model Fit Analysis for Unidimensional Factor*

Iteration	$\chi^2$	$\alpha$	Df	CMIN/DF	GFI	CFI	RMSEA	Change
Start	4790.00	0.970	1080	4.435	0.56	0.73	0.091	
1	4517.65	0.970	1034	4.369	0.58	0.74	0.090	4f
2	4232.79	0.969	989	4.280	0.60	0.74	0.089	5a
3	3928.40	0.968	945	4.157	0.61	0.76	0.087	11f
4	3691.74	0.968	902	4.093	0.62	0.77	0.086	8d
5	3465.11	0.968	860	4.029	0.64	0.78	0.085	3a
6	3293.50	0.967	819	4.021	0.65	0.78	0.085	6a
7	3132.16	0.967	779	4.021	0.66	0.79	0.085	8e
8	2944.40	0.967	740	3.979	0.68	0.80	0.085	2g
9	2768.90	0.966	702	3.944	0.69	0.81	0.084	8g
10	2615.00	0.966	685	3.932	0.70	0.81	0.084	7e
11	2437.10	0.965	629	3.875	0.71	0.82	0.083	2c
12	2273.52	0.965	594	3.827	0.72	0.83	0.082	4b
13	2154.69	0.964	560	3.848	0.73	0.83	0.083	2f
14	2000.64	0.964	527	3.796	0.74	0.84	0.082	11b
15	1839.91	0.963	495	3.717	0.75	0.85	0.081	9g
16	1684.80	0.962	464	3.631	0.76	0.86	0.080	4h
17	1563.41	0.962	434	3.602	0.77	0.87	0.079	4c
18	1416.22	0.961	405	3.497	0.79	0.88	0.073	10e
19	1319.70	0.961	377	3.501	0.80	0.88	0.078	6d
20	1212.40	0.959	350	3.464	0.81	0.89	0.077	6e
21	1109.91	0.958	324	3.425	0.82	0.89	0.076	7b
22	990.30	0.956	299	3.312	0.83	0.90	0.075	4e
23	889.50	0.956	275	3.235	0.85	0.91	0.073	3g
24	785.29	0.954	252	3.116	0.86	0.92	0.071	8f
25	703.80	0.952	230	3.060	0.87	0.92	0.070	3d
26	668.20	0.952	209	3.197	0.87	0.92	0.073	11d
27	600.00	0.949	189	3.176	0.87	0.93	0.072	9d
28	510.79	0.948	170	3.005	0.88	0.94	0.069	3b

### Appendix M: Collector and Demographic Analysis

Further participant analysis showed that 22.3% of women had graduate level degrees or courses as compared to 13.3% of men.

Table M1

Education	# Female	% Female	# Male	% Male	# Variance Female - Male	% Variance Female - Male
Some HS, HS diploma, or GED, or less	13	5.6	18	10.0	-5.0	-4.4
Some college, but no degree	48	20.6	33	18.3	15.0	2.3
2-year college degree	32	13.7	28	15.6	4.0	-1.8
4-year college degree	88	37.8	77	42.8	11.0	-5.0
Graduate-level degree/courses	52	22.3	24	13.3	28.0	9.0
Total	233	100.0	180	100.0	53.0	0.0

Demographic analysis was conducted in two areas, first was T-Test results between participants responding from my professional network compared to M-Turk participants and second was comparing gender differences. These are discussed under Research Question 2 and factor analysis results.

**Demographic analysis.** Two analysis were conducted on the two-factor results for this research, comparative analysis was conducted using SPSS independent sample *t*-tests for collector results and for gender and one-way ANOVA tests for both variables for examining metric invariances. See Tables M1, M2, M3, and M4 for results.

Table M2

*Descriptives comparing Factors and Collectors*

Factor	Collector	N	Mean	Std. Deviation	Std. Error Mean
Motivate1	Professional Network	50	5.311	0.7877	0.111
	M-Turk	367	4.983	0.9992	0.052
Ability2	Professional Network	50	6.360	0.4020	0.057
	M-Turk	367	6.081	0.6860	0.036

The Independent t-test which compared the means between responses from my professional network participants and M-Turk participants are in Table 4.x, providing the descriptive statistics for these two groups. These data indicates that the mean for my professional network participants is higher for both Motivate1 and Ability2 factors as compared to M-Turk, with the mean for my professional network of 5.311 for Motivate1 compared to 4.93 for M-Turk, and Ability2 is 6.360 compared to M-Turk 6.081.

Table M3

*Independent Samples t-test for Collectors*

		F	Sig.	t	df	Sig. (2-tailed)
Motivate1	Equal variances assumed	5.437	0.020	2.225	415	0.027
	Equal variances not assumed			2.663	72.369	0.010
Ability2	Equal variances assumed	9.071	0.003	2.807	415	0.002
	Equal variances not assumed			4.149	93.617	0.000

For both factors group ANOVA results indicated significant differences between M-Turk and my professional network, with  $p = <.05$  in both cases, Motivate1 = 0.027 and 0.010 and Ability2 = 0.002 and 0.000. Gender results showed significantly less variance in means between Motivate1 and Ability2 than with collector means, Table M4.

Table M4

*Descriptives comparing Factors and Gender*

Factor	Gender	N	Mean	Std. Deviation	Std. Error Mean
Motivate1	Female	233	5.0126	1.02303	.06702
	Male	180	5.0407	.93255	.06951
Ability2	Female	233	6.1983	.61307	.04016
	Male	180	6.0111	.71308	.05315

For Gender, there is a significant variance for the Ability factor, with  $p <.05$ , with  $p = 0.004$  and  $0.005$  for this factor.

Table M5

*Independent Samples t-test for Gender*

		F	Sig.	t	df	Sig. (2-tailed)
Motivate1	Equal variances assumed	1.236	.267	-.288	411	.773
	Equal variances not assumed			-.292	399.879	.771
Ability2	Equal variances assumed	3.760	.053	2.864	411	.004
	Equal variances not assumed			2.810	352.992	.005