

TRUST ME! EXAMINING HOW GROUP MEMBERSHIP AND SELF-DISCLOSURE
AFFECTS TRUST PERCEPTIONS BETWEEN STRANGERS

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ABSTRACT

In this study, group membership and self-disclosure intimacy were manipulated to examine if they impacted participants' perceptions of trust in a stranger. It was hypothesized that ingroup strangers and intimate self-disclosers would garner more trust and be more likely to receive a reciprocal self-disclosure than outgroup strangers and those who did not self-disclose intimately. In an experiment, participants ($n = 184$) were asked to report their perceptions of a stranger they read about in two contexts where group membership was determined by either geographic origin or age. Findings showed that ingroup intimate self-disclosers elicited significantly more trust when compared to ingroup non-intimate self-disclosers. When geographic origin was the criterion for group membership, ingroup intimate self-disclosers were more likely than non-intimate self-disclosers to receive a reciprocal self-disclosure. Also, when age was the criterion for group membership, ingroup intimate self-disclosers received significantly more intimate reciprocal self-disclosures than outgroup members or non-intimate self-disclosers. These findings support the idea that group membership and self-disclosure intimacy can impact perceptions of trust in and communicative behaviors towards others.

Keywords: trust, communication, social identity approach, risk, social penetration theory

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The idea of *trust* has been examined and invoked in many studies across a myriad of fields and disciplines. Trust is an important part of human interaction (Alarcon, Lyons, & Christensen, 2016; Butler, 1991; Evans & Krueger, 2011) and a cornerstone in the development of personal and intimate relationships (Deutsch, 1958; Miller & Rempel, 2004; Zand, 1972). The development or perceived existence of trust between two people has been shown to influence interpersonal communication (Benbenishty & Hannink, 2015; Couch & Jones, 1997; Giffin, 1967). Indeed, trust seems to be an important factor influencing how humans exchange information (Rotter, 1971).

Although much previous research on the subject has already been done, there are still important questions surrounding trust. In particular, there is a dearth of information regarding trust in its infancy, when interpersonal trust first begins to develop, or how that burgeoning trust affects specific communication behaviors. The literature on trust also does not address how trust development is impacted by interactions of variables like salient social group membership and self-disclosures of personal information. To this end, the goal of this study is to examine whether or not, and if so to what extent, receiving an intimate or non-intimate self-disclosure from an ingroup or outgroup stranger affects perceptions of trust towards that stranger. In this, important components of the concept of trust will be identified and explored. Based on the frameworks of the social identity approach (SIA) and social penetration theory (SPT), which will be discussed in the following sections, it was predicted that the two aforementioned variables will have a positive impact on perceived trust.

Social Identity Approach

The SIA is comprised of two theories: self-categorization theory (SCT) and the social identity theory (SIT). Each component of the SIA examines the communication behavior of an

individual in terms of how they perceive themselves as part of a group rather than strictly as an individual. As will be described in the following sections, group norms and perceptions of social identity help to explain why an individual may make certain assumptions about others or themselves, or make specific decisions, like disclosing personal information. Also, perceptions of group memberships have been shown to influence trusting feelings (Yamagishi & Kiyonari, 2000), suggesting that membership is important when examining how and why trust develops.

Social Identity Theory

Tajfel and Turner (1986) described groups as being categorical representations of perceived shared traits between individuals, and a method people use to understand how society is organized. A group is comprised of individuals who share emotional or cognitive similarities, self-perceptions, or worldviews that are in some way meaningful to its members (Tajfel & Turner, 1986). Further, individuals conceive groups to be divided into *ingroups* and *outgroups* (Tajfel & Turner, 1986). An ingroup is comprised of ourselves and all perceived members of that same salient group, while an outgroup is made up of all individuals not in the ingroup (Tajfel & Turner, 1986). Outgroup members are defined primarily in terms of between-group differences (Tajfel & Turner, 1986). SIT also involves the recognition of a social hierarchy with different groups perceived as holding more or less value than others (Tajfel & Turner, 1986). Tajfel and Turner's (1986) concept of a social hierarchy also includes the idea that a person may or may not believe they have the capacity to move between levels and groups within the hierarchy.

According to the SIT, social group membership is fundamental in a person's perceptions of self and in the idea of *self-concept*, a term which refers to how a person perceives themselves. It has been argued that an individual has both a personal and a social identity (Dragojevic &

Giles, 2014). Someone's personal identity revolves around defining themselves as a unique individual, while a person's social identity is comprised of meaningful aspects of the social categories or groups that they perceive themselves to be a part of (Tajfel & Turner, 1986). As will be discussed, one of these identities may predominate depending on the context and external cues.

Individuals are innately motivated to retain a positive sense of self and social identity and, as such, tend to perceive themselves and their ingroup(s) favorably (Tajfel & Turner, 1986). Recognition of one's social identity often involves positively distinguishing themselves when compared to those in relevant outgroups (Tajfel & Turner, 1986). Having a favorable view of an ingroup and its members is one tool an individual may employ as a way of maintaining or bolstering their self-esteem (Tajfel & Turner, 1986). Perceived group membership may also influence how an individual treats members of their ingroup and those of relevant outgroups (Tajfel & Turner, 1986). These perceptions may manifest in behaviors that portray ingroup bias, which refers to the preferential treatment of ingroup members (Dragojevic & Giles, 2014; Tajfel & Turner, 1986). Ingroup bias and favoritism may be a mechanism for retaining or gaining resources or achieving perceived joint group goals (Tajfel & Turner, 1986). Thus, when individuals see themselves as a representative of a salient group, they seek to maintain a positive sense of self as well as that of the group they represent.

However, ingroup bias can also lead to the prejudicial treatment of those in the outgroups (Dragojevic & Giles, 2014; Tajfel & Turner, 1986). Drawing out distinctions between oneself and others may affect communication and how social rewards or punishments are applied to in- and outgroup members (Tajfel & Turner, 1986). Such discriminating behaviors could also include attributing negative qualities or socially undesirable characteristics to outgroup members

(Dragojevic & Giles, 2014). This differential treatment of in- and outgroup members is done by virtue of social comparisons based on the perceived value of social groups; SIT argues that people innately seek to negatively differentiate outgroups from their ingroup (Tajfel & Turner, 1986). As such, identifying with an ingroup has been shown to motivate discriminating behavior of outgroup members (Dragojevic & Giles, 2014; Tajfel & Turner, 1986). In sum, individuals tend to place more value and look more favorably on their ingroups when compared to their outgroups (Tajfel & Turner, 1986).

Self-Categorization Theory

SCT is a theory that is built on the idea that we categorize ourselves (*self-categorization*) and those around us into meaningful social groups (Dragojevic & Giles, 2014). This categorization occurs as a result of cognitively processing external cues or adapting or responding to a specific social context (Dragojevic & Giles, 2014; Turner, Hogg, Oakes, Reicher, & Wetherell, 1987). SCT aims to explain how behaviors change based on when and how we perceive ourselves as members of a given group (Hornsey, 2008; Turner et al., 1987). Also, SCT outlines the process by which a person changes from thinking of themselves and behaving on an individual level to doing so on a group or social level due to these categorizations (Turner et al., 1987).

SCT argues that individuals perceive social identities in terms of *prototypes* based on group characteristics (Hornsey, 2008). A person is thought to have a number of social identities, with each identity associated with a certain group membership or social context (Turner et al., 1987). Prototypes can be thought of as fuzzy models that change based on context, which represent the most evident or accessible characteristics of a given group (Dragojevic & Giles, 2014; Hornsey, 2008). Any one of a person's social identities may be "switched-on" by

environmental or social cues, that trigger a specific group membership to become salient (Dragojevic & Giles, 2014; Turner et al., 1987). It is important to note that often in the literature the two terms “prototype” and “stereotype” are used interchangeably. Scholars have argued that perceiving others as individuals is cognitively demanding and that categorizing the people we interact with may be easier and less time consuming (Macrae, Milne, & Bodenhausen, 1994). In this, stereotyping has been seen as a useful energy-saving device for information processing and a way of simplifying the constant barrage of external stimuli received (Macrae et al., 1994). The ease of which a person’s social identity becomes salient is referred to in SCT as *accessibility*.

When one of a person’s social identities becomes activated, it stimulates that person to recognize similarities with and differences between themselves and those around them (Turner et al., 1987). In fact, SCT posits that when a group membership becomes salient and when the associated social identity becomes activated, a person sees intergroup differences more readily than intragroup differences (Turner et al., 1987). In other words, when a group membership is activated, an individual sees their ingroup members as more similar to themselves than different, and outgroup members as more different than similar (Turner et al., 1987).

A hallmark of SCT is the argument that when a context causes a person’s ingroup to become salient, they begin to see themselves more as a prototype of that group and less as an individual (Dragojevic & Giles, 2014; Hornsey, 2008). As such, contextual cues will sometimes make a particular social identity more accessible than others (Dragojevic & Giles, 2014). The appropriateness of a social identity for a given context is referred to as *fit* in SCT literature (Dragojevic & Giles, 2014). If the scenario an interaction takes place in is such that there is high accessibility and fit of a specific social identity, a person can *depersonalize* themselves (Dragojevic & Giles, 2014; Turner et al., 1987). This means they will move away from a self-

concept wherein they are a unique and autonomous individual and towards a self-concept wherein they are an exemplar of a stereotype they associate with the presently relevant ingroup (Turner et al., 1987). For example, a contextual cue may make a category like gender or age more immediately accessible and salient than other categories, leading an individual to see themselves – in that moment – more as a representative of that social category than as a unique individual.

Further, like SIT, SCT also argues that a person is motivated to see themselves and their ingroup as being distinct from others (Dragojevic & Giles, 2014; Turner et al., 1987). The underlying idea here is that a person seeks to see their group as *distinctly different* from others, and that this distinction is bound by dimensions like context, stereotypes, and reality (Tajfel, 1982). Cognitively, when an individual categorizes themselves and others and is cued to think of themselves more in terms of being a member of a group and less as an autonomous being, they are predisposed to more readily recognize intragroup similarities and intergroup differences (Turner et al., 1987). These distinctions lead to social comparisons which favor the ingroup, the result of which is termed “positive distinctiveness” (Turner et al., 1987). Thus, ingroup members may be evaluated as being more intelligent, competent, attractive and liked than outgroup members when social identity activation leads to stereotype activation and depersonalization (Turner et al., 1987). This represents the same type of ingroup bias and intergroup favoritism that SIT also describes.

As described here, SCT offers a way of understanding how and why cognitive shifts occur in regard to an individual’s perception of themselves and others. Crucially, the shift from an individual self-concept to a group-based self-concept corresponds to an important shift in *norms*. Norms, it should be noted, are generally thought of as being the standards for behavior or

thought that a particular group applies to and expects from their members (Chaikin & Derlega, 1974a). Typically, the desire to follow a norm is driven by the desire to avoid a social punishment that comes along with breaking the norm (Chaikin & Derlega, 1974a). In the process of depersonalization, an individual will adopt social and group norms associated with the relevant ingroup (Tajfel & Turner, 1986; Turner et al., 1987). This is done in an effort to adhere to group behavior standards and role expectations, to prevent social punishment and, to retain a sense of group distinctiveness (Turner et al., 1987). So, the shift in perceptions that SCT outlines also helps to explain certain changes in behavior an individual may make.

Social Penetration Theory

Social penetration theory (SPT) was conceived as a way to predict and explain how interpersonal behaviors change as a result of the evolution of a relationship (Taylor & Altman, 1975). In contrast to the SIA, SPT does not take into account perceptions of social groups and how individuals may think of themselves in terms of stereotypes. SPT deals with relationship development over time and as a continuing process that is rooted in the mutual, reciprocal sharing of information (Chaikin & Derlega, 1974b; Taylor, 1968). Finally, SPT is founded on a basic premise that as a relationship grows, two key facets of the relationship will begin to change: perceived intimacy and the nature and topic of disclosures shared.

The relationships SCT describes are characterized by the emergence and development of feelings of *intimacy* (Carpenter & Greene, 2016; Chaikin & Derlega, 1974b; Taylor, 1968). SPT generally refers to intimacy as a subjective level of closeness to another person (Carpenter & Greene, 2016; Taylor, 1968; Taylor & Altman, 1975). SPT studies will often measure intimacy by examining the quality and/or quantity of the information exchanged between people (Chaikin & Derlega, 1974a; Chaikin & Derlega, 1974b; Taylor, 1968; Taylor & Altman, 1975). The

terms *depth* and *breadth* are used in SPT to quantify and categorize the types of information exchanged with depth referring to the privacy of the content of a disclosure and breadth referring to the range of topics discussed (Chaikin & Derlega, 1974b).

SPT also focuses on how the nature of self-disclosures will evolve over time (Carpenter & Greene, 2016; Greene, Derlega, & Mathews, 2006). Interpersonal relationships are thought to be built on a mutual exchange of information and it is often hypothesized that a relationship will cease to develop if this flow of information is halted (Carpenter & Greene, 2016). However, if a relationship continues to grow and greater levels of intimacy are realized between partners, personal disclosures are predicted to increase in topic depth as well as in topic breadth (Carpenter & Greene, 2016; Taylor, 1968). Importantly, this reciprocal exchange of disclosures is based on the idea that information has an *inherent value* and that exchanging personal information is akin to exchanging social value between partners in a dyad (Taylor, 1968). This is gradual process, which is thought to depend on a careful and judicious selection of what information to share at each stage of interpersonal bonding (Carpenter & Greene, 2016).

Reciprocity is another important factor of SPT. According to this theory, communication partners must carry out an equitable exchange of information in order for intimacy to grow, uncertainty to be reduced, and the relationship to progress (Carpenter & Greene, 2016; Taylor & Altman, 1975). Maintaining a sense of equity is thought to be a fundamental and important part of the process of building meaningful relationships (Chaikin & Derlega, 1974a; Jiang, Bazarova, & Hancock, 2013). Behaving reciprocally, as in the case of making reciprocal self-disclosures, is often thought to be a way of sustaining this equity or fairness in a relationship (Chaikin & Derlega, 1974a). In light of this, scholars often think of this reciprocal exchange as a transactional process based on the perceptions one individual has that the other will refrain from

misusing or abusing what is shared (Derlega, Winstead, & Greene, 2018). Making reciprocal personal disclosures is an important and, likely, necessary way to adjust privacy boundaries of information shared, as well as mark transitions in interpersonal relationships (Derlega et al., 2018). It is for reasons such as these that reciprocity and disclosure making have been thought of as being representative of mutually-satisfying relationships, equitable in nature (Taylor, 1968).

Trust – A Conceptual Understanding

This study is concerned specifically with trust as it relates to group memberships and the sharing of information in interactions between strangers. To that end, four components appear to be influential in conceptualizing trust: perceived risk of harm associated with undertaking a behavior, willingness to perform a potentially risky behavior, optimism, and expectations of reciprocity. To date, no universally-accepted definition or conceptualization of trust exists, and trust is often treated as a primitive term. That said, the aforementioned components regularly appear in the literature, suggesting their potential importance. In what follows, I explain each of these four conceptual components, which form the basis for my working definition of trust.

Trust and Perceived Risk

Risk is defined as the “possibility of loss or injury” (Risk, n.d.). *Perceived* risk has been thought of as a crucial component to trust development by many scholars (Cook et al., 2005; Currall & Judge, 1995; Evans & Krueger, 2011; Mayer, Davis, & Schoorman, 1995; Rempel, Holmes, & Zanna, 1985; Rousseau, Sitkin, Burt, & Camerer, 1998; Sánchez-Franco & Roldán, 2015; Zand, 1972). Scholars argue that trust only appears when there is a potential for injury, when one individual becomes vulnerable to another (Giffin, 1967; Mayer et al., 1995), and when assumed risk of injury is outweighed by expected relational benefits (Sánchez-Franco & Roldán, 2015). In the security of a risk-free environment, trust is not necessary because in that context

there exists no potential for loss or harm (Hall, Dugan, Zheng, & Mishra, 2001; Mayer et al., 1995). Mutual risk-taking between two individuals where trust is given by each and betrayed by neither is seen as indicative of healthy interpersonal interactions (Cook et al., 2005). Such risk-taking includes making personal disclosures and sharing personal information as a way to reduce uncertainty and encourage relational growth (Derlega et al., 2018), even when no previous relationship between individuals is present (Cook et al., 2005).

Scholars, however, do not all agree on the nature or directionality of the relationship between perceived risk and trust. Some suggest that perceptions of risk may precede the development of trusting feelings (Hall et al., 2001; Rousseau et al., 1998; Mayer & Davis, 1999). These scholars highlight how humans tend to use immediately-accessible heuristics such as demographic-based stereotyping and nonverbal cues, as indicators of potential threat or similarity, and therefore risk (Levin, Whitener, & Cross, 2006; Yamagishi, Cook, & Watabe, 1998). There is evidence that individuals may have greater amounts of trust in those who they feel have similar goals or perspectives (Levin et al., 2006). These perceived threats or similarities are based on initial observations that may indicate group membership (Levin et al., 2006). Since we tend to trust those who are similar to us more than those who are not, perceiving someone as a member of our ingroup could result in having more trust in them even before direct interactions take place.

However, other researchers write about how trust and risk can develop side by side, in a longitudinal fashion (Butler, 1991; Levin et al., 2006; Mayer & Davis, 1999). Perceived risk is often affected by the outcomes of previous interactions (Mayer & Davis, 1999; Rempel et al., 1985). The more interactions that take place between two people, the more information is exchanged between them, allowing each individual to better predict risk associated with future

interactions (Levin et al., 2006). As a relationship evolves, so too will the perceived risk and trust one person feels towards the other (Rousseau et al., 1998) and there may be an inverse relationship between trust and perceived risk (Sánchez-Franco & Roldán, 2015). This speaks to the idea that trust can be built from observations over time and how the information one person has about another can shape the development of trust (Levin et al., 2006).

It is important to note that perceptions of shared group membership are not necessarily dependent on repeated interactions. Research shows that perceived shared group membership, even on the basis of seemingly trivial factors, can result in feelings of familiarity and trust in an otherwise unfamiliar person (Yamagishi & Kiyonari, 2000). Therefore, an individual will likely feel less perceived risk interacting with, as well as greater familiarity and trusting feelings towards, a perceived ingroup stranger when compared to an outgroup stranger (Foddy, Platow, & Yamagishi, 2009).

Further, trust development may be correlated to the quality of personal disclosures individuals make with one another. The process of building interpersonal intimacy has been thought of as being an inherently risky affair because it involves reciprocal risk-taking and personal disclosure-making (Collins & Miller, 1994). By disclosing personal information, a person demonstrates their willingness to open themselves up to injury and make themselves vulnerable to the receiver of that information (Chaikin & Derlega, 1974a). The act of intimately self-disclosing tends to engender trust and increases perceived warmth and liking in the discloser (Collins & Miller, 1994). Increased positive feelings like these toward someone who discloses intimate information may reduce perceptions of risk in reciprocating. This is of particular interest to this study, as it suggests there is a link between perceived risk and trusting feelings through sharing intimate self-disclosures.

Trust and the Willingness to Risk

The second component of trust that frequently appears in the literature is a *willingness* to carry out potentially risky behaviors or actions. Many actions an individual takes are preceded by behavioral intentions and, as trust scholars will argue, behavioral intentions that lead to risky actions serve as conduits through which trust can be communicated (Morgan & Hunt, 1994). When it is believed that another person is willing to undertake potentially risky social interactions, especially when it could be for the benefit of another, that willing person tends to engender trust quickly (Foddy et al., 2009). Willingness to make oneself vulnerable often comes from a belief that the other person is trustworthy and will not betray the trust given to them (Gefen, 2000; Giffin, 1967). The willingness to act must come from a desire to achieve a specific goal that has meaning in a situation where the outcome is not certain (Giffin, 1967).

It is important to recognize that many scholars believe there is an inescapable behavioral component to the concept of trust (Gambetta, 2000; Ganesan, 1994; Giffin, 1967; Mayer & Davis, 1999; Mayer et al., 1995; Rousseau et al., 1998; Sánchez-Franco & Roldán, 2015). In this, trust often manifests through choices made (Thielmann & Hibig, 2015). As will be discussed in other sections of this paper, certain communication behaviors like making personal self-disclosures are often perceived as inherently risky. For my purposes, I will refer to these willingly-undertaken, risky behaviors as *trusting behaviors*.

Trust and Optimism

According to scholars, trust is characterized by a reasonable expectation of a positive reaction from another person (Ermisch, Gambetta, Laurie, Siedler, & Uhrig, 2009; Evans & Revelle, 2008; Rousseau et al., 1998). Research shows that the more optimistic someone is about the outcome of interacting with a person, the more trust someone has in that person

(Platow, Foddy, Yamagishi, Lim, & Chow, 2011). Previous research recognizes that this confidence in an outcome is different from the concept of “blind faith,” wherein the actor may not have reason to believe that a positive outcome is probable (Giffin, 1967). Deutch (1958) highlighted this distinction by comparing trusting behavior and the practice of gambling. He stated that trusting behaviors are undertaken with the belief that the chances of a positive outcome outweigh those of a negative one. Gambling, on the other hand, is done so with the expectation that there is a high probability of a negative outcome (Deutch, 1958). Thus, trust formation and development necessitate having an amount of confidence that the end result of an event will be desired and positive in some way (Deutch, 1958; Giffin, 1967). This expectation of a positive outcome may form the basis for motivating someone’s willingness to undertake a risky action.

Trust and Reciprocity

The fourth and final component of trust is that it necessitates an expectation of reciprocal behavior. Trust is often built on the understanding that interactions will be fair and that favorable gestures made by one individual will be reciprocated by the other (Altman, 1973; Zand, 1972). Trust has been conceptualized as being implicitly linked to the expectations an individual can make regarding the response from another (Gefen, 2000). Individuals are more likely to engage in trusting behaviors when they believe there will be a favorable *reciprocal* action (Gefen, 2000).

Familiarity may play a role in expectations of reciprocity. When a person shares a salient group membership with a stranger, the assumption that group norms will be upheld by the stranger can lead to a sort of familiarity-based expectation of reciprocal behaviors (Yamagishi et al., 1998; Yamagishi & Kiyonari, 2000). This reciprocity is borne of a feeling of generalized

trust in the other (Yamagishi et al., 1998). In other words, a feeling of familiarity with another person can provide confidence in expecting certain outcomes of future interactions with that individual and reciprocal behaviors from them.

Finally, as will be discussed later, the social norm known as the *norm of reciprocity* helps facilitate the development of trust. This is the normative standard set by society that says in interpersonal interactions where information is shared, it should be reciprocated in kind (Lin, Hung, & Chen, 2009). Lin et al. (2009) argued that this allows for the development of trust because each individual expects the other to share equally. Thus, an individual may feel more comfortable trusting another when they believe following the norm of reciprocity is expected in a given interaction (Sánchez-Franco & Roldán, 2015).

Defining Trust

Trust can be conceived as a feeling towards another person, embodied by and manifested in trusting behaviors based on those feelings. Although a universally-accepted definition of trust is still elusive, research shows that the four aforementioned components of trust are important in to the concept. Therefore, for the purposes of this study, I define trust as: *the willingness to engage in potentially risky behaviors with the reasonable expectation of reciprocity and a positive outcome.*

Effects of Perceived Shared Group Membership on Trust

Extant research on social identity and group dynamics have offered some insight into the nature of trust. Perceived shared group membership has previously been theorized to affect both perceptions of trust in others, as well as a person's likelihood to undertake trusting behaviors (Tanis & Postmes, 2005). This is thought to be the case because of factors like perceived similarity (Tanis & Postmes, 2005; Yamagishi & Kiyonari, 2000) and reduced uncertainty

(Foddy et al., 2009), and may be independent of whether the individuals are strangers or not (Platow et al., 2011). In certain contexts, simply knowing another individual's group membership can lead to greater feelings of trust (Tanis & Postmes, 2005; Yamagishi et al., 1998). Research has shown that ingroup members are often trusted more than outgroup members (Dragojevic & Giles, 2014; Foddy et al., 2009; Montoya & Pittinsky, 2011), owing to the idea that perceived shared group membership does have an appreciable effect on interpersonal trust.

One effect is that perceptions of similarities between ingroup members increases the likelihood of trusting behaviors taking place (Tanis & Postmes, 2005). When a social identity is activated, one perceives other ingroup members as being more altruistic and as sharing similar goals (Turner et al., 1987). Under these circumstances, a person may then be more likely to engage in trusting behaviors because they assume that other ingroup members have their best interests at heart and are working towards the same outcomes they are (Turner et al., 1987). As already discussed, groups are often defined by the perceptions of similarities between individuals (Yamagishi & Kiyonari, 2000). However, group membership may influence individuals to be more cooperative with others they see as similar to themselves (Yamagishi & Kiyonari, 2000). Research has shown that trust can emerge or be sustained by these perceptions of similarities between ingroup members (Yamagishi & Kiyonari, 2000). This type of trust is sometimes termed by researchers as *identification-based* trust (Tanis & Postmes, 2005) or *depersonalized trust* (Yamagishi & Kiyonari, 2000) due to its association with perceptions of shared characteristics or personal traits linked with being part of the same group. The result is a potentially greater likelihood of trusting and favorable behaviors occurring bidirectionally between ingroup members (Yamagishi & Kiyonari, 2000). Trust borne of perceived similarities

may manifest in trusting behaviors like providing social support or making personal self-disclosures (Dragojevic & Giles, 2014).

Another effect is that shared group membership affects trusting feelings and behaviors due to a reduction of uncertainty and perceived risk (Foddy et al., 2009; Tanis & Postmes, 2005; Yamagishi et al., 1998). Social uncertainty, or “the risk of being exploited in social interactions” (Yamagishi et al., 1998, p. 170), is felt in greater amounts in those we are unfamiliar with. In response to this, individuals often choose to interact with those of the ingroup because doing so presents less risk and less uncertainty (Yamagishi et al., 1998). This may be because individuals expect a greater level of fairness and generosity from members of their ingroup (Foddy et al., 2009). Also, shared group membership may lead to more trusting behaviors because with less uncertainty there may be an inherent expectation of reciprocity from those within our group (Tanis & Postmes, 2005).

Additionally, previous research shows that shared group membership is associated with increased feelings of trust, even if the other person is a stranger (Foddy et al., 2009; Platow et al., 2011). The strength of shared group membership does not have to be powerful to influence trust – even sharing benign social category memberships can engender trust in two individuals (Yamagishi & Kiyonari, 2000; Platow et al., 2011). This speaks to the idea that two strangers who are part of the same group may be inclined to trust each other more than two who are not. Further, studies show that people tend to want to trust a stranger who is a member of their perceived ingroup even when they have the opportunity to trust no one at all (Platow et al., 2011). Again, this lends credence to the concept of group membership influencing interpersonal trust formation.

The effects that shared group membership has been shown to have on an individual's perceptions of other people are important in understanding how trust develops. Salient shared group membership is likely to affect not only a person's cognition, but their propensity to undertake certain behaviors and a number of effects have been outlined here. First, due to perceived similarities, individuals favor and have more positive perceptions of ingroup members compared with outgroup members. Second, shared group membership can equate to lower perceptions of risk in interacting with another individual. Third, research shows that ingroup members expect greater levels of reciprocity from other ingroup members when compared to outgroup members. Fourth, strangers can garner trust by virtue of shared group membership, regardless of the lack of a pre-existing relationship. These considerations lead to the following hypotheses:

H1: When an individual identifies a stranger as a member of their ingroup, they will report lower perceived risk in making a personal disclosure to that stranger when compared to identifying a stranger as a member of an outgroup.

H2: When an individual identifies a stranger as a member of their ingroup, they will report greater trusting feelings towards that stranger when compared to identifying a stranger as a member of an outgroup.

H3: When an individual identifies a stranger as a member of their ingroup, they will be more likely to make a reciprocal self-disclosure to that stranger when compared to identifying a stranger as a member of an outgroup.

Effects of Self-Disclosures on Trust

Making personal self-disclosures has been shown to affect perceptions of trust both directly and indirectly. The association between trust and self-disclosure has been shown to

increase in strength over time (Larzelere & Huston, 1980). First, it is important to recognize that the very act of self-disclosing is thought of as being a demonstration of interpersonal trust and as a valuable way of establishing the boundaries of trust between individuals (Chaikin & Derlega, 1974a; Derlega et al., 2018; Zand, 1972). Individuals who make personal self-disclosures are often perceived as being more trusting by others (Collins & Miller, 1994).

Another effect of self-disclosure is that both individuals who make them and those who reciprocate are often liked more than those who do not (Chaikin & Derlega, 1974a; Collins & Miller, 1994; Jiang et al., 2013) and liking has been shown to be positively correlated with trust (Nicholson, Compeau, & Sethi, 2001). Studies have found that regardless of whether two individuals are strangers or not, greater self-disclosure is often correlated with greater levels of liking (Collins & Miller, 1994) and positive evaluations from others (Johnson & Dabbs, 1976). The effect that self-disclosing has on liking is bi-directional and stimulates further disclosures from both partners with increasing amounts of intimacy and liking (Collins & Miller, 1994). In short, the more one makes appropriate self-disclosures, the more one is liked (Collins & Miller, 1994) and the more one is liked, the more they will be trusted (Nicholson et al., 2001).

The effect of self-disclosures on liking is also meaningful from an SIA perspective. As discussed previously, SIA argues that an individual seeks to maintain a positive sense of self and status within their ingroup and to be liked by their fellow ingroup members (Montoya & Pittinsky, 2011; Turner et al., 1987). In terms of group dynamics, how much someone in the group is liked can affect how and when others cooperate or share resources with them, among other things (Montoya & Pittinsky, 2011). Therefore, from an SIA standpoint, the fact that making personal self-disclosures can affect liking has potentially important implications not only on perceptions within the group, but on behaviors, as well.

Self-disclosures are also influenced by norms and an individual can use self-disclosures as a way to meet communicative norm expectations. Norms are thought of as being powerful motivators for self-disclosure practices (Chaikin & Derlega, 1974a). The *norm of reciprocity* refers to a general expectation that when one person divulges information about themselves, the other should meet the same standard of disclosure (Carpenter & Greene, 2016; Chaikin & Derlega, 1974a; Jiang et al., 2013; Johnson & Dabbs, 1976). This norm helps to set a mutually-understood standard for maintaining an equitable relationship between two individuals (Chaikin & Derlega, 1974a; Sánchez-Franco & Roldán, 2015). As stated above, personal information is thought to be socially valuable to the individuals comprising the dyad (Taylor, 1968). Thus, disclosing may have an effect of perceived value transference, with one individual benefiting and the other incurring a cost (Taylor, 1968). This may motivate reciprocal behaviors, driving further development of intimacy and relational growth (Taylor, 1968). Research shows that the level of intimacy of a personal-disclosure is often met with, and expected to be met with, the same level of intimacy in a reciprocal disclosure (Carpenter & Greene, 2016; Derlega, Chaikin, & Herndon, 1975; Jiang et al., 2013; Taylor, 1968). In fact, when reciprocal behaviors are not made, it can lead to a feeling of broken trust (Sánchez-Franco & Roldán, 2015).

Finally, individuals who communicate intimate, personal information are seen as being more trustworthy (Collins & Miller, 1994) and the receiver of intimate information often feels specially liked or trusted by the sender (Jiang, Bazarova, & Hancock, 2011). Therefore, making self-disclosures can portray trusting feelings to the other individual (Chaikin & Derlega, 1974b; Collins & Miller, 1994), while also engendering trust in the sender (Jiang et al., 2011). Being intimate and disclosing personal information is seen as a risky behavior (Chaikin & Derlega, 1974b; Collins & Miller, 1994). By making a self-disclosure of personal information, a person

actively opens themselves up to risk and cedes some control of an outcome to their communication partner (Chaikin & Derlega, 1974a). Making disclosures of personal information is indicative of taking a risk and risk-taking is itself a trusting behavior, which encourages others to trust us. Indeed, an individual who is more willing to share information about themselves generally engenders in others greater feelings of trust (Collins & Miller, 1994). These considerations lead to the following hypothesis:

H4: An individual will report greater trusting feelings towards a stranger who makes an intimate self-disclosure than a stranger who does not.

The Intersection of Self-Disclosure and Shared Group Membership

Current research does not address the possibility that group membership status combined with intimate self-disclosure could result in the development of trusting feelings that are stronger than those associated with either of these concepts individually. As described in the previous sections of this paper, literature clearly outlines how shared group membership and perceived similarity/familiarity can positively affect trusting feelings (Nicholson et al., 2001; Yamagishi & Kiyonari, 2000; Yamagishi et al., 1998). Also described above, there is much evidence to show that self-disclosing (and the associated reduction of perceived risk) is positively associated with the development of interpersonal trust (Chaikin & Derlega, 1974a; Collins & Miller, 1994; Larzelere & Huston, 1980). Further, research shows that intimate self-disclosure may have a stronger association with trust development than non-intimate self-disclosure (Larzelere & Huston, 1980). This indicates that as the level of intimacy of a self-disclosure increases, the more interpersonal trust may grow (Larzelere & Huston, 1980). Although research does not explore how group membership combined with self-disclosure may affect trust, current research shows that each of the two concepts independently contribute to the development of trust.

Therefore, because trust is affected independently by how intimate a self-disclosure is, as well as shared group membership, when an intimate self-disclosure is made by an ingroup member, it is reasonable to expect that there may be an additive effect on trust development. As trust may be gauged by the intimacy level of the content of a disclosure, if the result is an additive effect, it is reasonable to expect that any reciprocal disclosure would be more intimate in this condition than it would be in the other three conditions. Thus, I propose the following hypothesis:

H5: When an ingroup stranger makes an intimate self-disclosure, an individual will respond with a reciprocal self-disclosure of greater intimacy than in the other three conditions.

Method

Participants

Participation was open to any person 18 years of age or older enrolled as a student at the University of Hawai'i at Mānoa. Of the original two hundred students who volunteered to participate in this study, one hundred eighty-four were included in data analysis. Three students signed up but did not participate, nine did not meet the threshold of completing at least 70% of the study in order to be included, and an additional four failed both attention checks (see below). Thus, a total of sixteen students were excluded from all analyses. The age of eight participants was either inaccurate or missing. The age of remaining one hundred seventy-six students ranged from 18 to 65 years ($M = 20.57$, $SD = 4.95$). One hundred eighty-three participants provided their gender, with the majority identifying as female (63.8% female, 33.5% male), and most identified as ethnically Asian (50.5% Asian, 18.1%, Caucasian, 16.0%, two or more ethnicities, 6.9% Pacific Islander, 3.7% Hispanic/Latino, 1.1% African American, 1.1% Other).

Design and Procedure

The study was conducted via Qualtrics and utilized a 2x2 factorial, within-subject design (disclosure: intimate vs. non-intimate x group membership: ingroup vs. outgroup status), modeled after Jiang et al. (2011). The study was composed of two sections, each containing a set of questions intended to ascertain participants' relevant group membership, followed by a randomly-assigned vignette consisting of a brief written description of statements made to them by a stranger, followed by a set of questions pertaining to the vignette. Participants completed the two sections consecutively.

The first section consisted of questions focused on a geographically/culturally-based group membership affiliation. Participants were asked to answer questions about the extent to which they would identify themselves as a "Local" of Hawai'i. Based on their answers to these initial questions, participants were later categorized as "Local" or "non-Local" during data analysis.

Next, participants were presented one of four randomly-assigned vignettes containing either an intimate or non-intimate self-disclosure by a person either from Hawai'i (the "Local" condition) or visiting the state for the first time (the "non-Local" condition). At the beginning of the vignette, participants were asked to imagine that they were sitting in an airplane on their way to Hawai'i and a conversation between themselves and the only person seated next to them had just started. The vignette described what the stranger next to them said in this situation.

Ingroup/outgroup status was determined by whether the group membership of the person in the vignette and that of the participant matched. If the participant's group membership matched that of the person in the vignette they read, they would identify the person in the vignette as a member of their ingroup. However, if the group memberships between the two did

not match, the person in the vignette would be identified as a member of the participant's outgroup.

After reading the vignette, participants were given the opportunity to write a short response directed to the person in the vignette. This open-ended question was included for exploratory purposes. After this, participants were asked a series of questions to assess perceptions of the initial discloser, the content of the disclosure they received, as well as the written response they gave. Participants were asked to rate their perceived risk of making a reciprocal disclosure, trusting feelings towards the initial discloser, and the perceived intimacy of the disclosure they received. Next, for descriptive purposes, to assess the strength of group identification, participants were asked about their perceptions of the referent social group ("Locals"). Finally, as an attention check of self-disclosure intimacy, participants were asked to type out important points from the vignette they read.

After these two checks, participants immediately began the second section of the study, which consisted of questions regarding an age/generational group affiliation. Similar to the first section of the study, participants were initially asked to answer questions about the extent to which they would identify themselves as a "Baby-Boomer". As in the first section, based on their answers to these initial questions, the participant was later categorized as a "Baby-Boomer" or "non-Baby-Boomer" during data analysis, which determined ingroup/outgroup status of the person in the vignette if these identities did or did not match.

Then, participants were again presented one of four randomly-assigned vignettes containing either an intimate or non-intimate self-disclosure by a 61 year old person (the "Baby-Boomer" condition) or a 23 year old person (the "non-Baby-Boomer" condition). A contextual prompt asked participants to imagine that they were sitting in Ala Moana shopping center and

someone had sat down next to them and a conversation between the two had just started. The vignette described what the stranger next to them said in this situation. After reading the vignette, participants were again given the opportunity to write a short response directed to the person in the vignette. As in the first section of the study, this question was included for exploratory purposes.

As in the first section, participants were then asked the identical series of questions regarding the disclosure they gave or would give in the situation, that which they received, and their perceptions of trust towards the person in the vignette. Questions checking the strength of group identification and the attention check of intimacy then followed as in the first section of the study, this time referencing the age/generation-related group. Finally, participants were asked to provide demographic data. Two sets of vignettes were used in this study in order to provide more data and test potential generalizability of any findings.

Materials

Vignettes. In each condition (intimate/non-intimate disclosure), four vignettes were used. In each section of the study, two vignettes contained an intimate self-disclosure, while the other two vignettes contained a non-intimate self-disclosure. The “Local/non-Local” vignettes each described a person who was either from Hawai‘i or visiting for the first time (respectively), and contained either an intimate (their mother has cancer) or non-intimate self-disclosure (their relationship to Hawai‘i) about that person. The “Baby-Boomer/non-Baby-Boomer” vignettes each described a person either in their early 60s or 20s (respectively), and contained either an intimate (a good friend of theirs died fighting in a war) or non-intimate self-disclosure (their thoughts about the music playing in the mall at that time) about that person. Conceptual vignette

design was modeled after that which was described in Chaikin and Derlega (1974a) and Jiang et al. (2011).

Participants' group categorization. In both sections of the study, group membership was measured with three items, which asked the participant if they *felt they were a "Local"/"Baby-Boomer,"* whether they were *familiar and comfortable with Local/Baby-Boomer norms and culture,* and if they felt they were *connected to the local community/Baby-Boomer generation in meaningful ways.* Ratings were made on a 6-point scale from "not at all" (1) to "very much" (6).

In the geographic origin context, the three-item scale was found to have acceptable reliability ($\alpha = .817$). However, it was found to have low reliability in the age context ($\alpha = .620$). Therefore, in the age context, the three item scale was modified to omit the question about whether the participant felt they were a "Baby-Boomer," resulting in a two-item scale with acceptable reliability ($\alpha = .736$). In the age context, these two items were retained because they had the strongest inter-item correlation out of the three possible combinations of items.

Participants' answers for these questions were combined and averaged. If a participant's averaged score fell at or below 3.5, they were categorized as "non-Local," or "non-Baby-Boomer." If their average score fell above 3.5, they were categorized as a "Local" or "Baby-Boomer" (for the first and second sections, respectively). Using the same 6-point scale, participants were either asked how "Local" (one item) the person in the vignette was or if they considered them a "Baby-Boomer" (one item) after each vignette.

Likelihood of reciprocally disclosing. A two-item scale was used to assess the likelihood of the participant making a reciprocal disclosure. Participants were asked *how likely it would be that they would reciprocally disclose,* as well as *disclose information equal in privacy*

to that provided by the initial discloser. Participants indicated their response on a 7-point scale from “not likely at all” (1) to “very likely” (7). Participants’ ratings for both items were combined and averaged to produce a single value indicating likelihood of reciprocally disclosing (geographic origin context: $\alpha = .712$; age context: $\alpha = .785$).

Perceived risk. To assess perceived risk of disclosing, a six-item scale was used. Participants were asked how risky they felt sharing private information with the initial discloser was using a 7-point scale from “not at all risky” (1) to “very risky” (7). Participants were also asked to rate how comfortable they felt sharing information with the initial discloser using a 7-point scale from “not comfortable at all” (1) to “very comfortable” (7) (this question was reverse coded). Participants were then asked how likely they thought it was that *the initial discloser will reject them or think poorly of them* based on any information they reciprocated with. They were also asked how likely they thought it was that their reciprocated information would be *kept private* (this question was reverse coded) or *misused*. These were all rated on a 7-point scale from “not likely at all” (1) to “very likely” (7). Participants’ ratings for all six items were combined and averaged to produce a single value indicating perceived risk. This scale was based on Miller and Lefcourt’s (1982) “Miller Social Intimacy Scale.”

The original six item scale was found to have low reliability in both the geographic origin ($\alpha = .589$) and age ($\alpha = .618$) contexts. In each of the contexts, the correlations of both of the reverse-coded questions, as well as the question asking participants how risky they felt sharing private information was, with the other items in the scale were weak ($r < 0.30$). Thus, these three questions were removed, resulting in a final three-item scale with acceptable reliability in both the geographic origin ($\alpha = .862$) and age ($\alpha = .782$) contexts.

Perceived intimacy measures. Perceived intimacy of disclosure received was assessed by one item. This item asked how *private* the participants thought *the information shared with them* was.

Perceived intimacy of the participant's reciprocal disclosure was also assessed by one item. This item asked how *private* the participants thought *the information they shared with the person in the scenario* was. Both items were based on items from Miller and Lefcourt's (1982) "Miller Social Intimacy Scale."

Perceived intimacy attention check. After reading each of the two vignettes in the study, participants were asked to write an open-ended response outlining what important information they read. This single open-ended question was included as a way to check that the participant exposed to the intimate disclosure identified and remembered the disclosure content. Effectiveness of intimacy manipulation was determined by examining what the participant wrote in each of these responses. If a participant explicitly stated the intimate disclosure contained in the vignette, the manipulation was considered to have been effective.

Perceived trust. To assess perceived trust, participants were asked to rate *how much they trusted the initial discloser* using a single item on a 7-point scale from "not at all" (1) to "very much" (7).

Group membership identification. A six-item scale was used as a measure of the degree of a participant's identification with the social group highlighted in the vignette. The first item was an adapted "Inclusion of the Other and the Self" (IOS) scale utilizing a diagram of 7 increasingly overlapping circles as a way for participants to identify perceived similarities between themselves and the person in each of the vignettes. This ranged from (1), where the circles were completely disjointed (representing the fewest perceived similarities between the

participant and the person in the vignette), to (7), where the circles were almost completely overlapped (representing the most perceived similarities between the participant and the person in the vignette). The other five items asked participants if they *felt insulted or embarrassed* when the referent social group was criticized, if they *acted like or exhibited qualities typical of members of the referent group*, and if they *felt personally complimented when the referent social group was praised*. These five questions were all rated on a 7-point scale from “disagree strongly” (1) to “agree strongly” (7). Participants’ ratings for all six items were combined and averaged to produce a single value indicating perceived group membership. This score was used to measure the strength of the participant’s association with a given identity, where (1) was the weakest association and (7) was the strongest. These items were based on those found in Gächter, Starmer, and Tufano (2015) and Greene (1999).

This scale was included to determine the extent to which individuals in each category felt associated with a reference group in each vignette. For the first vignette, all participants were asked about the extent to which they identified as Local. In the age context, participants were asked about the extent to which they identified with either the Baby-Boomer or Generation-Z identities, depending on which vignette they read. All six-items were retained and the final scales used had acceptable reliability in both the geographic origin ($\alpha = .786$) and age (Baby-Boomer: $\alpha = .884$; Generation Z: $\alpha = .782$) contexts.

Demographic information. Demographic information was assessed with three measures. Age was assessed by asking participants how old they were (open-ended question). Ethnicity was assessed by asking participants to make one selection from a list of nine ethnicity options. Gender was assessed by asking participants to choose between identifying as male, female, or outside the gender binary.

Results

Preliminary Analyses

Perceived intimacy. Of the total sample ($n = 184$), in the Local/Non-Local context, ninety were exposed to one of the two intimate self-disclosure vignettes, while ninety-eight were exposed to one of the two non-intimate self-disclosure vignettes. Of the ninety in the intimate self-disclosure condition, when asked to identify important points from the vignette they read, twenty-nine did not explicitly state the intimate disclosure in their open-ended response and, thus, were excluded from all analyses, leaving a total of sixty-one in the intimate condition. In the Baby-Boomer/non-Baby-Boomer context, ninety-three were exposed to one of the two intimate self-disclosure vignettes, while ninety-five were exposed to one of the two non-intimate self-disclosure vignettes. Of the ninety-three in the intimate self-disclosure condition, when asked to identify important points from the vignette they read, twenty-three did not explicitly state the intimate disclosure in their open-ended response and, thus, were excluded from all analyses, leaving a total of seventy in the intimate condition. This left a final sample of one hundred fifty-nine participants in the Local/Non-Local context and one hundred sixty-five participants in the age context.

In the Local/Non-Local context, an independent-samples t -test was conducted to compare perceived intimacy in individuals who were exposed to an intimate self-disclosure ($n = 61$) and individuals who were not ($n = 98$). There was a significant difference in the scores for the intimate ($M = 4.41$, $SD = 1.74$) and non-intimate ($M = 2.72$, $SD = 1.43$) self-disclosure conditions; $t(157) = -6.64$, $p < .001$, $d = 1.06$.

In the Baby-Boomer/non-Baby-Boomer context, an independent-samples t -test was also conducted to compare perceived intimacy in individuals who were exposed to an intimate self-

disclosure ($n = 70$) and those who were not ($n = 95$). There was a significant difference in the scores for the intimate ($M = 4.39, SD = 2.00$) and non-intimate ($M = 2.74, SD = 1.47$) self-disclosure conditions; $t(160) = -6.06, p < .001, d = 0.94$. These results suggest that when either age or geographic origin were the criterion for group membership, there were significant differences in the perceived intimacy of the vignettes between the intimate and non-intimate self-disclosure conditions, consistent with the manipulation.

Participant's group categorization. In the Local context, group membership was determined by the mean score of a three-item scale, while in the age context, group membership was determined by the mean score of a two-item scale. Based on the classification process described above, of the total sample ($n = 184$), one hundred twenty-five individuals self-identified as Local, fifty-nine as non-Local, twenty-five as Baby-Boomers, and one hundred fifty-nine as non-Baby-Boomers.

Group membership identification. In the geographic origin context, those individuals identifying as a Local had a mean group identification score of $M = 3.97, SD = 1.11$; those individuals identifying as a non-Local had a mean group identification score (of identifying as a Local) of $M = 2.77, SD = 0.91$. In the age context, those individuals identifying as a member of Generation Z had a mean group identification score of $M = 3.67, SD = 1.11$; those individuals identifying as a Baby-Boomer had a mean group identification score of $M = 2.16, SD = 1.32$.

Focal Analyses

Perceived risk. In H1, I hypothesized that an individual would report lower perceived risk in making a personal disclosure to an ingroup stranger compared to an outgroup stranger. An analysis of variance (ANOVA) was conducted in which Local/Non-Local group membership and self-disclosure intimacy were factors and perceived risk of making a disclosure to a stranger

was the outcome. This revealed that there was no significant main effect of group membership on perceptions of risk when geographic origin was the criterion for group membership, $F(1, 154) = .009, p = .925, \eta_p^2 < .001$; ingroup strangers $M = 2.07, SD = 1.06 (n = 86)$, outgroup strangers $M = 2.09, SD = 1.16 (n = 72)$. There was not a significant interaction effect of group membership and self-disclosure intimacy on perceived risk of disclosing ($p = .422$).

An ANOVA was then conducted in which age-based group membership and self-disclosure intimacy were factors and perceived risk of making a disclosure to a stranger was the outcome. This revealed that there was no significant main effect of group membership on perceptions of risk when age was the criterion for group membership, $F(1, 159) = 1.36, p = .245, \eta_p^2 = .009$; ingroup strangers $M = 2.14, SD = 1.13 (n = 80)$, outgroup strangers $M = 2.35, SD = 1.28 (n = 83)$. There was not a significant interaction effect of group membership and self-disclosure intimacy on perceived risk of disclosing ($p = .511$). Thus, in both the geographic origin and age contexts, H1 was not supported.

Trust perceptions. To test H2 and H4, two ANOVAs were conducted. In H2, I hypothesized that an individual would report greater trusting feelings towards an ingroup stranger than an outgroup stranger. In H4, I hypothesized that an individual would report greater trusting feelings towards a stranger who makes an intimate self-disclosure than a stranger who does not.

In the first ANOVA, Local/Non-Local group membership and self-disclosure intimacy were factors and perceived trust was the outcome. There was a significant main effect of group membership on perceived trust when geographic origin was the criterion for group membership, $F(1, 155) = 12.96, p < .001, \eta_p^2 = .077$; ingroup strangers $M = 3.80, SD = 1.36 (n = 87)$, outgroup strangers $M = 3.18, SD = 1.26 (n = 72)$. This effect of group status on perceived trust was

qualified by a significant interaction ($p = .010$). Pairwise comparisons revealed that there was a significant difference in perceptions of trust between ingroup ($M = 4.31, SD = 1.15$) and outgroup ($M = 3.00, SD = 1.28$) strangers when an intimate self-disclosure was given ($p < .001$), but not between ingroup ($M = 3.51, SD = 1.40$) and outgroup ($M = 3.30, SD = 1.25$) strangers when a non-intimate self-disclosure was given ($p = .432$).

In terms of H4, there was no significant main effect of disclosure intimacy on perceived trust, $F(1, 155) = 1.41, p = .237, \eta_p^2 = .009$; intimate self-disclosure $M = 3.69, SD = 1.37 (n = 61)$, non-intimate self-disclosure $M = 3.42, SD = 1.33 (n = 98)$. However, there was a significant interaction ($p = .010$), as described above. Pairwise comparisons revealed that there was a significant difference in perceptions of trust between intimate self-disclosers ($M = 4.31, SD = 1.15$) and non-intimate self-disclosers ($M = 3.51, SD = 1.40$) who were ingroup strangers ($p = .006$), but not between intimate self-disclosers ($M = 3.00, SD = 1.28$) and non-intimate self-disclosers ($M = 3.30, SD = 1.25$) who were outgroup strangers ($p = .331$).

A second ANOVA was also conducted in which age-based group membership and self-disclosure intimacy were factors and perceived trust was the outcome. There was not a significant main effect of group membership on trusting feelings when age was the criterion for group membership, $F(1, 158) = 2.65, p = .106, \eta_p^2 = .016$; ingroup strangers $M = 2.69, SD = 1.33 (n = 80)$, outgroup strangers $M = 3.10, SD = 1.57 (n = 82)$. There was, however, a significant interaction effect ($p = .006$). Pairwise comparisons revealed that there was a significant difference in perceptions of trust between ingroup strangers ($M = 2.17, SD = 1.21$) and outgroup strangers ($M = 3.16, SD = 1.50$) who gave a non-intimate self-disclosure ($p = .001$), but there was not a significant difference between ingroup strangers ($M = 3.26, SD = 1.22$) and outgroup strangers ($M = 3.00, SD = 1.69$) who gave an intimate self-disclosure ($p = .438$).

In terms of H4, there was a significant main effect of disclosure intimacy on perceived trust, $F(1, 158) = 4.35, p = .039, \eta_p^2 = .027$; intimate self-disclosure $M = 3.14, SD = 1.45 (n = 70)$, non-intimate self-disclosure $M = 2.71, SD = 1.46 (n = 92)$. As described above, this effect of intimacy on perceived trust was qualified by a significant interaction ($p = .006$). Pairwise comparisons revealed that there was a significant difference in perceptions of trust between intimate self-disclosers ($M = 3.26, SD = 1.22$) and non-intimate self-disclosers ($M = 2.17, SD = 1.21$) who were ingroup strangers ($p = .001$), but there was not a significant difference between intimate self-disclosers ($M = 3.00, SD = 1.69$) and non-intimate self-disclosers ($M = 3.16, SD = 1.50$) who were outgroup strangers ($p = .617$).

Thus, when geographic origin was the criterion for group membership, H2 was supported when the speaker gave an intimate self-disclosure but not when they gave a non-intimate self-disclosure. When age was the criterion for group membership, H2 was not supported. However, an interaction effect between group membership and disclosure intimacy was found, such that when non-intimate self-disclosures were given, outgroup strangers were trusted more than ingroup strangers (but there were no differences in trust for ingroup strangers). When geographic origin was the criterion for group membership, H4 was supported for ingroup strangers but not for outgroup strangers. There was an interaction effect such that ingroup strangers who intimately disclosed elicited more trust than ingroup strangers who did not. When age was the criterion for group membership, the pattern was similar, and H4 was supported for ingroup strangers but not between outgroup strangers: ingroup strangers who intimately disclosed elicited more trust than ingroup strangers who did not.

Likelihood of reciprocal self-disclosure. In H3, I hypothesized that an individual would report greater likelihood of making a reciprocal self-disclosure to an ingroup stranger than to an

outgroup stranger. An ANOVA was conducted in which Local/Non-Local group membership and self-disclosure intimacy were factors and likelihood of making a reciprocal self-disclosure was the outcome. This revealed that there was a significant main effect of group membership on likelihood to reciprocally disclose when geographic origin was the criterion for group membership, $F(1, 155) = 14.95, p < .001, \eta_p^2 = .088$; ingroup strangers $M = 4.01, SD = 1.33 (n = 87)$, outgroup strangers $M = 3.15, SD = 1.51 (n = 72)$. There was not a significant main effect of self-disclosure intimacy on likelihood to reciprocally disclose when geographic origin was the criterion for group membership ($p = .061$). There was not a significant interaction effect of group membership and self-disclosure intimacy on likelihood of reciprocally disclosing ($p = .749$).

An ANOVA was also conducted in which age-based group membership and self-disclosure intimacy were factors and likelihood of making a reciprocal self-disclosure was the outcome. This revealed that there was not a significant main effect of group membership on likelihood to reciprocally disclose when age was the criterion for group membership, $F(1, 159) = 0.14, p = .712, \eta_p^2 = .001$; ingroup strangers $M = 2.41, SD = 1.45 (n = 80)$, outgroup strangers $M = 2.53, SD = 1.40 (n = 83)$. There was not a significant main effect of self-disclosure intimacy on likelihood to reciprocally disclose when age was the criterion for group membership ($p = .238$). However, there was a significant interaction effect of group membership and self-disclosure intimacy on likelihood of reciprocally disclosing ($p = .039$). Pairwise comparisons revealed that there was a significant difference in likelihood to reciprocally disclose between intimate self-disclosers ($M = 2.79, SD = 1.56$) and non-intimate self-disclosers ($M = 2.06, SD = 1.25$) who were ingroup strangers ($p = .022$), but not between intimate self-disclosers ($M = 2.41, SD = 1.56$) and non-intimate self-disclosers ($M = 2.61, SD = 1.29$) who were outgroup strangers

($p = .525$). Pairwise comparisons revealed that there was not a significant difference between ingroup ($M = 2.79, SD = 1.56$) and outgroup ($M = 2.41, SD = 1.56$) strangers who were intimate self-disclosers ($p = .257$), nor between ingroup ($M = 2.06, SD = 1.25$) and outgroup ($M = 2.61, SD = 1.29$) strangers who were non-intimate self-disclosers ($p = .063$).

Thus, in the geographic origin context, H3 was supported, while in the age context, H3 was not supported.

Reciprocal self-disclosure intimacy. For H5, I hypothesized that an individual would respond with a self-disclosure of greater intimacy towards an ingroup stranger who makes an intimate self-disclosure when compared to the other three conditions. An ANOVA was conducted in which Local/Non-Local group membership and self-disclosure intimacy were factors and response intimacy was the outcome. When geographic origin was the criterion for group membership, there was not a significant interaction effect of group membership and self-disclosure intimacy on response intimacy ($p = .783$). There was also no significant main effect of self-disclosure intimacy on response intimacy, $F(1, 155) = .078, p = .780, \eta_p^2 = .001$; intimate self-disclosure $M = 2.15, SD = 1.46 (n = 61)$, non-intimate self-disclosure $M = 2.09, SD = 1.33 (n = 98)$. There was also not a significant main effect of group membership on response intimacy $F(1, 155) = 2.41, p = .123, \eta_p^2 = .015$; ingroup strangers $M = 2.26, SD = 1.37 (n = 87)$, outgroup strangers $M = 1.93, SD = 1.38 (n = 72)$.

An ANOVA was also conducted in which age-based group membership and self-disclosure intimacy were factors and response intimacy was the outcome. There was a significant interaction effect of group membership and self-disclosure intimacy on response intimacy ($p = .030$). Pairwise comparisons revealed that there was a significant difference in response intimacy between intimate self-disclosers ($M = 2.66, SD = 1.86$) and non-intimate self-

disclosers ($M = 1.59, SD = 1.20$) who were ingroup strangers ($p = .002$), but not between intimate self-disclosers ($M = 1.78, SD = 1.52$) and non-intimate self-disclosers ($M = 1.74, SD = 1.31$) who were outgroup strangers ($p = .902$). Further, pairwise comparisons revealed that there was a significant difference in response intimacy between ingroup ($M = 2.66, SD = 1.86$) and outgroup ($M = 1.78, SD = 1.52$) strangers who were intimate disclosers ($p = .014$), but not between ingroup ($M = 1.59, SD = 1.20$) and outgroup ($M = 1.74, SD = 1.31$) strangers who were non-intimate disclosers ($p = .619$).

Finally, an *L*-matrix command was used in SPSS to perform a customized contrast of the ingroup intimate disclosure condition against the combined means of all other conditions (weight of the contrast: -1, -1, -1, 3) when age was the criterion for group membership. This revealed that there was a significant difference in response intimacy from ingroup strangers who received an intimate self-disclosure ($M = 2.66, SD = 1.86$) when compared to participants in all other conditions $F(1, 157) = 12.09, p = .001, \eta_p^2 = .072$ (contrast estimate = 2.87).

There was not a significant main effect of group membership on response intimacy when age was the criterion for group membership $F(1, 157) = 2.35, p = .127, \eta_p^2 = .015$; ingroup strangers $M = 2.10, SD = 1.64$ ($n = 79$), outgroup strangers $M = 1.76, SD = 1.38$ ($n = 82$). There was, however, a significant main effect of self-disclosure intimacy on response intimacy, $F(1, 157) = 5.59, p = .019, \eta_p^2 = .034$; intimate self-disclosure $M = 2.26, SD = 1.76$ ($n = 70$), non-intimate self-disclosure $M = 1.67, SD = 1.26$ ($n = 91$).

Thus, in the geographic origin context, H5 was not supported, while in the age context, H5 was supported.

Discussion

I set out to investigate whether feelings of trust towards strangers were affected by perceptions of shared group membership and/or self-disclosure intimacy. The results from this study show that, under certain circumstances, group membership and the intimacy level of self-disclosures can have an impact on the perceptions of trust people have in strangers.

Group Membership

I predicted that group membership would impact three outcomes, the first of which was perceived risk of disclosing. Group membership was found to have no significant impact on perceived risk of disclosing between any of the conditions. One possible explanation for this is that the very status of being a stranger carries with it an inherent perception of risk that is hard to overcome quickly, regardless of which group that stranger belongs to. It is natural that people feel the need to be cautious when meeting someone new and deciding to disclose to them (Carpenter & Greene, 2016). Yet, the overall results of this study were surprising in that they seem to indicate that it is possible for people to feel increased trust in a stranger without an associated decrease in risk. However, I only asked participants about their perceived risk in relation to one specific trusting behavior, disclosing personal information. It is possible that group membership may impact perceived risk of engaging in other trusting behaviors not explored in this study.

The second outcome I predicted group membership would affect was people's likelihood to reciprocally disclose. Specifically, I predicted that people would be more likely to reciprocally self-disclose to an ingroup stranger than to an outgroup stranger, and this prediction was supported in the geographic origin context but not the age context. In the geographic origin context, these findings are consistent with what previous literature would lead one to expect

would happen. In the age context however, intimacy of disclosure mattered more to people than group membership (and only between ingroup members), which was an unexpected finding. One possibility is that age as a social group membership does not relate to or affect reciprocal self-disclosure in the ways expected. It could be that other communicative behaviors are affected by age as a group membership but that the specific one explored here (reciprocally disclosing) is not. Although literature indicates that shared group membership may be associated with greater expectations of reciprocity (Tanis & Postmes, 2005), perhaps this relationship may not be as strong when age is the defining criterion for group membership.

Another possibility is that there was some quality or qualities of the person in the vignette that led participants to perceive them more as a unique individual and less as a representative of their group in the age context. If this were the case, participants' reciprocity would not be based so much on group membership (as hypothesized), but more on individual qualities of the person in the vignette. In some studies, reciprocity expectations were only affected when an individual was deindividuated (Tanis & Postmes, 2005). In other words, reciprocity was only significantly affected when the person was seen as a representative of their group and not as an individual. Thus, if the person in the age context vignette was perceived more as a unique individual than a representative of their age group, this may explain why likelihood to reciprocally disclose was not affected by group membership in the predicted way.

The third outcome I predicted group membership would affect was perceptions of trust, primarily because shared group membership has been associated with increased perceptions of trust (Dragojevic & Giles, 2014; Foddy et al., 2009; Jiang et al., 2011; Montoya & Pittinsky, 2011; Nicholson et al., 2001; Yamagishi & Kiyonari, 2000; Yamagishi et al., 1998). This prediction was supported when geographic origin was the criterion for group membership but not

when age was. One possible explanation for this could be that the chosen group memberships elicited differing degrees of perceived similarity. Perceived similarity has been thought to be a determinant of group-based trust (Nicholson et al., 2001). If this is indeed the case, it could mean that geographic origin elicited greater feelings of perceived similarities than shared age did. A replication and extension of this study may be merited in order to better discern whether this is occurring. An extension study like this might include a measurement of perceived similarity or other contexts where varying degrees of similarity are used.

Disclosure Intimacy

I predicted that intimate disclosers would elicit more trust than non-intimate disclosers, primarily because those who intimately disclose engender trust (Jiang et al., 2011) and are perceived as trustworthy (Collins & Miller, 1994). This prediction was supported in both the age and geographic origin contexts, but only between ingroup members. In both group membership contexts, the highest scores of perceived trust tended to be among ingroup intimate disclosers. This may be because ingroup members are perceived as more socially valuable (Tajfel & Turner, 1986), and intimate disclosures from those individuals might be considered more valuable than from outgroup members (Taylor, 1968). These findings are consistent with previous literature showing that intimate disclosers engender more trust than non-intimate disclosers, and that self-disclosure intimacy can be an influential factor in the development of interpersonal trust (Collins & Miller, 1994; Larzelere & Huston, 1980; Nicholson et al., 2001).

I also predicted that ingroup intimate self-disclosers would generate reciprocal self-disclosures of greater intimacy than in all other conditions. While this hypothesis was supported in the age context, it was not in the geographic origin context. However, in the latter context, the pattern of scores was consistent with predictions (although the difference in mean scores did not

reach statistical significance): the highest mean scores of intimacy were among ingroup intimate disclosers. These findings are consistent with previous literature that indicates people tend to feel closer to members of their ingroup and to those who are more willing to make themselves vulnerable by sharing personal information. It could be that this sense of closeness potentially translates into a willingness to reciprocally share information more freely with those members.

Other Considerations

The findings in the geographic origin context were largely consistent with expectations, yet in the age context the data revealed an interesting and unexpected trend in the mean scores of the two outcomes of likelihood to reciprocally disclose and perceived trust. This trend was evident when comparing the mean scores of non-intimate self-disclosers. Non-intimate ingroup strangers consistently tended to have *lower* mean scores on trust and likelihood to reciprocally disclose than non-intimate outgroup strangers. It may be that when age is the salient factor for group membership, it is expected that ingroup strangers should share more intimately than outgroup strangers. If this is the case, then when an ingroup stranger failed to make an intimate disclosure, the lower scores they received in the study could have been a result of their violating the group norm.

One additional possibility is that because of the different environmental settings used in the vignettes, the participant could have had different expectations about interacting with the stranger again. This could explain the difference in results between the two settings. For example, it is reasonable for someone to expect interacting with a stranger they met on a plane (as was the situation in the first vignette) only once and never again. However, if someone meets a stranger at a local mall (as was the case in the second vignette), it is reasonable for them to have a greater expectation of encountering that stranger again, compared to the first scenario.

Some literature indicates that individuals may feel safer disclosing to a stranger whom they feel they will never see again (Chaikin & Derlega, 1974b). While this does not explain all of the discrepancies in data between the two contexts used in this study, it could possibly account for some of them.

Beyond this, the nature of the disclosure in each vignette could also have been a factor. Intimate self-disclosures have been shown to decrease perceptions of risk (Chaikin & Derlega, 1974a, 1974b), yet it is possible that problems arose across at least two dimensions of the intimacy manipulation. Either the *level* of disclosure intimacy in the vignettes or the *content* of the disclosures chosen (cancer diagnosis, death of close friends) may have caused the failure to elicit the desired effect on perceived risk. For example, if a stranger discloses information that is considered too private for socially-accepted standards, it is reasonable to expect that this type of disclosure could elicit surprise, confusion, and/or discomfort in the receiver. Because the discloser did not adhere to the expected social norms, the discloser could be perceived as unpredictable. This could all result in a heightened sense of caution in the receiver, leading to increased perceived risk of engaging with that discloser.

Also, although the content of the disclosures in the vignettes were fairly negative in tone, participants could have perceived an important difference between the two. The cancer diagnosis disclosure could have been perceived as more hopeful, as the vignette described a person diagnosed but getting treatment. However, the military death disclosure could have been perceived as more grim. This difference could have impacted the participant's image of the person in the vignette in unpredicted ways. Specifically, this could explain why people were less likely to reciprocally disclose in the age context, or why, in that context, group membership did not significantly influence trust perceptions

Another indication of how the difference in disclosure content between the two vignettes could have influenced people's perceptions may be found in the differences in mean scores between the two contexts. Across all analyses and all conditions, mean scores of perceived trust and likelihood to reciprocally disclose were generally higher in the geographic origin context when compared to the age context. These higher scores indicate that in the geographic origin context, individuals were more willing to reciprocally share personal information, as well as more likely to trust a stranger. Additionally, mean scores of perceived risk were generally lower in the geographic origin context when compared to the age context. Perhaps, the more hopeful vignette elicited more positive feelings in participants, which in turn positively influenced perceptions of trust, while the less hopeful vignette did not. Perhaps the perception of a less hopeful outcome to a painful situation left people feeling unequipped to make a satisfactory reciprocal disclosure. Or, perhaps people felt that they could not reciprocate with a disclosure that matched the severity of the one they received in the age context.

Additionally, it is reasonable to imagine a participant feeling uncomfortable letting their guard down in a highly visible place where many things are simultaneously happening around them, as would be the case with making self-disclosures in a busy mall food court. It is also reasonable to imagine that some of the influence of the group membership made salient in this scenario could have been overpowered by potential threats and influences coming from this stressful environment. These situational issues could have prevented (or, at the very least, influenced) a participant from feeling safe enough to overcome perceptions of potential harm in disclosing or undertaking other trusting behaviors. This might help to explain why perceived risk of intimately disclosing or likelihood of reciprocally disclosing was not significantly affected by group membership in the age context.

Finally, while the vignettes used were designed to be lean in content, it is possible that elements or aspects of the vignettes influenced the participants in ways that were not anticipated. For example, the vignettes described people who had clear preferences, identity traits, and experiences (e.g., preferred music/musicians, high regard for family members, military service), all of which could have influenced participants' judgments about them. Although the vignettes were designed to make salient a *specific* group membership (i.e., age or geographic place of origin), these other qualities included in the text could have made different group memberships more salient to the participant instead. Further research aimed at controlling for these potential confounding variables is needed.

The overall results of this study indicate that although individuals may be considered a stranger, it does not necessarily mean that they cannot engender trust quickly. These results also indicate that both group membership and the intimacy of self-disclosures can impact perceptions of strangers and a person's willingness to trust someone they have never met. Finally, these findings indicate that context likely matters when assessing risk or gauging whether or not to reciprocally disclose.

Limitations

As with any other research endeavor, this study has certain limitations. First, as mentioned previously, this study utilized vignettes set in two specific environments, inside an airplane and in a mall food court. These specific settings could have impacted the perceptions of the participants in unanticipated ways (as noted above) and future study designs should explore the relationships between trust, self-disclosures, and group memberships in other environmental settings.

Second, the sample studied here is limited in scope and diversity. Research shows that trust increases linearly as people age (Sutter & Kocher, 2007). Thus, because participants were limited to current college students, the overall youth ($M = 20.47$ years old) of the participants included in this study could mean that any conclusions drawn from this research may not be fully applicable to other age ranges. Participants were also required to be residents of Hawai‘i, and this is important to note because some literature highlights how trust perceptions vary depending on geographic location (Delhey, Newton, & Welzel, 2011). This could potentially restrict any of my findings to this particular population.

Third, approximately half the participants were of Asian descent (50.5%) and others were of mixed ethnic background (16.0%), there may be culture-related influences on the participant’s responses that this study was not designed to capture. Previous research suggests that people from collectivistic societies may develop interpersonal trust differently compared to people from individualistic societies (Van Hoorn, 2015; Yamagishi et al., 1998). Specifically, people from collectivistic societies are thought to have generally lower levels of trust in strangers when compared to people from individualistic societies (Van Hoorn, 2015) and Hawai‘i is thought to be a mix of peoples from both types of societies (Kim et al., 1996). In light of these potential cultural influences it is important to consider that these results may be more applicable specifically to one type of society than another, but this study was not designed to address this issue.

Fourth, gender may have influenced at least some of the results found here. Women have been shown to sometimes be more prosocial and cooperative, and have greater overall levels of trust when compared to men (Irwin, Edwards, & Tamburello, 2015). Also, some research shows that same-gender groups trust one another more than mixed-gender groups and that women

reciprocate more than men (Chaudhuri, Paichayontvijit, & Shen, 2012). This study was not designed to capture these differences and since the gender of the person presented in the vignettes was male, this is a potential limitation to consider. As such, there could have been some influences related to gender composition on the results that were not anticipated, and future studies should take into account the gender of the person(s) represented in the vignettes.

Fifth, there may be limitations associated with the social groups selected for this study. This study only examined two group memberships, age and geographic origin. It is possible that certain variables related to these selected social groups influenced the results in ways that were not predicted. For example, since socio-economic status (SES) often differs dramatically between older and younger individuals, SES may have been one of these group-relevant factors. Therefore, it is possible to imagine younger participants perceiving the older participants described in the vignette as having a higher SES, which could have influenced their likelihood to respond. Future studies should include other group memberships to gain a richer understanding of initial trust perceptions between strangers.

Finally, there are limitations regarding measurement and experimental design. As there were no existing scales available to measure many of the variables I wished to test, I created several original scales for this study. Further refining and development of the new scales used here is needed. Also, in this study, scales were modified to improve their reliability; further development could help improve their reliability. In addition, since there was a single order that all the questions and vignettes were presented in, it is possible that there was an order effect present. Alternate ordering should be considered for future studies to try to control for this.

Conclusion and Future Directions

The limitations of this study notwithstanding, these results add to the existing knowledge of how trust develops between strangers. Future studies should explore how group membership affects trust in other contexts and with varying criterion for group membership. This study focused on age and geographic origin, but gender, sexuality, political affiliation, ethnicity, and culture, among other qualifying factors, are important ways individuals categorize themselves into meaningful groups. Thus, there are many opportunities for future studies to examine how some of these other group memberships affect trust development.

Further, how self-disclosures influence trust development should also be explored more thoroughly. It is reasonable to expect that sharing good news with someone else can potentially create a very different kind of interaction than when sharing bad news. With this in mind, future studies should examine if, how, and when positively-valenced intimate self-disclosures affect communication and trust perceptions differently than negatively-valenced ones. Future studies should also examine how perceptions of trust and trust development are affected by disclosures of varying degrees of intimacy. This study only focused on two conditions of intimacy, intimate and non-intimate; future studies could compare differences in trust perceptions at multiple levels of intimacy.

This study explored where trust development exists at the crossroads of interpersonal and intergroup theory, but other theories could also be applied to this exploration of trust. Future researchers should endeavor to build on the findings presented here showing that group membership and disclosure intimacy can be influential factors in how individuals begin trusting relationships with one another.

APPENDIX A

Consent Form

Aloha! My name is Robert Casale and you are invited to take part in a research study. I am a graduate student at the University of Hawai‘i at Mānoa in the Department of Communicology. As part of the requirements for earning my graduate degree, I am doing a research project.

What am I being asked to do?

If you participate in this project, you will be asked to fill out a survey.

Taking part in this study is your choice.

Your participation in this project is completely voluntary. You may stop participating at any time. If you stop being in the study, there will be no penalty or loss to you. Your choice to participate or not participate will not affect your rights to services at the UH Department of Communicology.

Why is this study being done?

The purpose of my project is to evaluate how communication affects trust development between people.

What will happen if I decide to take part in this study?

The survey will consist of multiple choice and open-ended questions. It will take 30 minutes. The survey questions will include questions like, “How much do you trust the person in the scenario?” “Do you consider yourself a “Local” here in Hawai‘i?” and “How much do you think the person in the scenario trusts you?” The survey is accessed on a website to which I will provide you a link.

What are the risks and benefits of taking part in this study?

I believe there is little risk to you for participating in this research project. You may become stressed or uncomfortable answering any of the survey questions. If you do become stressed or uncomfortable, you can skip the question or take a break. You can also stop taking the survey or you can withdraw from the project altogether.

There will be no direct benefit to you for participating in this survey. The results of this project may help improve our understanding of communication and interpersonal trust development.

Confidentiality and Privacy:

I will not ask you for any personal information, such as your name or address. Please do not include any personal information in your survey responses. I will keep all study data secure in a locked filing cabinet in a locked office/encrypted on a password protected computer. Only my University of Hawai‘i advisor and I will have access to the information. Other agencies that have legal permission have the right to review research records. The University of Hawai‘i Human Studies Program has the right to review research records for this study.

Compensation:

If you are a University of Hawai‘i at Mānoa student, you may receive SONA credit for your participation. If you are not, you will receive no compensation.

Future Research Studies:

Even after removing identifiers, the data from this study will not be used or distributed for future research studies.

Questions: If you have any questions about this study, please call or email me at 808-956-8202 or casale@hawaii.edu. You may also contact my faculty advisor, Dr. Jessica Gasiorek, at 808-956-8202 or gasiorek@hawaii.edu. You may contact the UH Human Studies Program at

808.956.5007 or uhirb@hawaii.edu to discuss problems, concerns and questions, obtain information, or offer input with an informed individual who is unaffiliated with the specific research protocol. Please visit <http://go.hawaii.edu/jRd> for more information on your rights as a research participant.

To Access the Survey: Going to the first page of the survey implies your consent to participate in this study.

Please print or save a copy of this page for your reference.

Mahalo!

APPENDIX B

Vignettes – Local Discloser

INSTRUCTIONS: “Imagine that you are sitting in an airplane on your way to Hawai‘i. A conversation between you and the only person seated next to you has just started and what you are about to read describes what the stranger next to you says.”

Vignette 1: Non-Intimate Disclosure

Howzit! I’m Keoni and I’m 24 years old. I’m from O’ahu originally and almost all my ‘ohana still lives in the state. I’m kanaka maoli, but also part Japanese and Portuguese. My older sister lives on Maui and my brother lives over on the Big Island with his two kids and wife. I have a lot of cousins all over on Kaua’i who I grew up surfing with when they’d come visit – was so much fun when they’d come cuz we’d eat manapua and go beach and visit our hānai family over in Kalihi and make fresh lumpia. My parents used to live here on O’ahu but they moved last year. I wanna get active again to relieve the stress; I used to dance hula and paddle canoe but stopped cuz I was so busy with school, haha.

Vignette 2: Intimate Disclosure

Howzit! I’m Keoni and I’m 24 years old. I’m from O’ahu originally and almost all my ‘ohana still lives in the state. I’m kanaka maoli, but also part Japanese and Portuguese. My older sister lives on Maui and my brother lives over on the Big Island with his two kids and wife. I have a lot of cousins all over on Kaua’i who I grew up surfing with when they’d come visit – was so much fun when they’d come cuz we’d eat manapua and go beach and visit our hānai family over in Kalihi and make fresh lumpia. My parents used to live here on O’ahu; it’s hard to talk about and I don’t tell this to many people, but mom got a rare cancer and they had to

move mainland for treatment last year. I wanna get active again to relieve the stress; I used to dance hula and paddle canoe but stopped cuz I was so busy with school, haha.

Vignettes – Non-Local Discloser

INSTRUCTIONS: “Imagine that you are sitting in an airplane on your way to Hawai‘i. A conversation between you and the only person seated next to you has just started and what you are about to read describes what the stranger next to you says.”

Vignette 1: Non-Intimate Disclosure

Well, hello! I’m Oliver and I’m 24 years old. It’s going to be my first time visiting Hawai‘i. I’m guessing it’s going to be much hotter than I’m used to because this time of year sometimes it’s snowing where I’m from. So, I’ve packed a lot of shorts and tank-tops, which is kinda strange for me because I usually only wear those clothes in the summer, haha. My parents have always wanted to visit Hawai‘i but since they’ve never been there it looks like I’m going to beat them to it. I’ve been told that the food in Hawai‘i going to be pretty different from what I’m used to – lots of tropical fruit, which sounds *very* interesting, to say the least! I’m looking forward to trying out surfing for the first time, too.

Vignette 2: Intimate Disclosure

Well, hello! I’m Oliver and I’m 24 years old. It’s going to be my first time visiting Hawai‘i. It’s going to be much hotter than I’m used to because this time of year sometimes it’s snowing where I’m from. So, I’ve packed a lot of shorts and tank-tops, which is kinda strange for me because I usually only wear those clothes in the summer, haha. My parents have always wanted to visit Hawai‘i; it’s hard to talk about and I don’t tell this to many people, but mom got a rare cancer and has to stay in the hospital. She asked me to tell her about all the food I’m going to try; I’ve been told that the food in Hawai‘i going to be pretty different from

what I'm used to – lots of tropical fruit, which sounds *very* interesting, to say the least! I'm looking forward to trying out surfing for the first time, too.

Vignettes – Baby-Boomer

INSTRUCTIONS: “Imagine that you are sitting in the food court at Ala Moana shopping center and it's very crowded. The only seat available is the one right next to you and a stranger sits down who's an older gentleman. He greets you with a nice smile; what follows describes what this stranger says.”

Vignette 1: Non-Intimate Disclosure – Older Discloser

Well, hello! I'm Daniel. The music they're playing in here is nice – it reminds me a lot of the band, the Beatles. Boy, I remember when they broke up – it was 1970 and their music was my favorite. No one listens to that music anymore, really, huh? Haha. The hit song then was “Let It Be” and they used to play it all over the place, especially in the military bases. Speaking of the military, that was kind of a crazy time, actually, because the Vietnam War was happening and I had lots of friends who had to fight in it that last year it was happening – I'm 61 years old now but back then I was only 18. Later, I remember all the celebrations that were going on because everyone was so happy the war was finally over.

Vignette 2: Intimate Disclosure – Older Discloser

Well, hello! I'm Daniel. The music they're playing in here is nice – it reminds me a lot of the band, the Beatles. Boy, I remember when they broke up – it was 1970 and their music was my favorite. No one listens to that music anymore, really, huh? Haha. The hit song then was “Let It Be” and they used to play it all over the place, especially in the military bases. Speaking of the military, that was kind of a crazy time, actually, because the Vietnam War was

happening and I had lots of friends who had to fight in it that last year it was happening – I’m 61 years old now but back then I was only 18. In fact, and I don’t tell this to many people because it’s still pretty hard to talk about, I lost two of my best friends in that war. It still makes me pretty sad when I think about it. Later, I remember all the celebrations that were going on because everyone was so happy the war was finally over.

Vignettes – Non-Baby-Boomer

INSTRUCTIONS: “Imagine that you are sitting in the food court at Ala Moana shopping center and it’s very crowded. The only seat available is the one right next to you and a stranger sits down. He greets you with a nice smile what follows describes what this stranger says.”

Vignette 1: Non-Intimate Disclosure – Non-Baby-Boomer Discloser

Well, hello! I’m Mikey. The music they’re playing in here is pretty sick, actually – it’s a lot of Cardi B’s newest stuff. Boy, I remember when she broke out and got big – it was 2015 and her music was my favorite. She’s still def popular, huh? Haha. I remember my buddy saying they were playing her song “Bodak Yellow” all the time in the military bases. Speaking of the military, the last few years have been kind of a crazy time, actually, what with the Iraq War still going on and how I’ve got lots of friends who have been deployed this last year – I’m 23 years old now and most of them are around my age. Hopefully one of these days it’ll be over cuz it’s been going on for a long time!

Vignette 2: Intimate Disclosure – Non-Baby-Boomer Discloser

Well, hello! I’m Mikey. The music they’re playing in here is pretty sick, actually – it’s a lot of Cardi B’s newest stuff. Boy, I remember when she broke out and got big – it was 2015 and her music was my favorite. She’s still def popular, huh? Haha. I remember my buddy saying they were playing her song “Bodak Yellow” all the time in the military bases. Speaking

of the military, the last few years have been kind of a crazy time, actually, what with the Iraq War still going on and how I've got lots of friends who have been deployed this last year – I'm 23 years old now and most of them are around my age. In fact, and I don't tell this to many people because it's still pretty hard to talk about, I lost two of my best friends in that war. It still makes me pretty sad when I think about it. Hopefully one of these days it'll be over cuz it's been going on for a long time!

APPENDIX C

Questionnaire – Local Discloser Context

INSTRUCTIONS: Read the following statements and rate your answers by selecting the most appropriate number.

Participant Group Membership

1. Do you feel like you are rooted in the local Hawai‘i community in ways that are meaningful to you?

Not at all

Very much

1 2 3 4 5 6

2. Do you feel like you are generally familiar and comfortable with the local cultural and social norms of Hawai‘i?

Not at all

Very much

1 2 3 4 5 6

3. Do you consider yourself a “Local” here in Hawai‘i?

Not at all

Very much

1 2 3 4 5 6

[VIGNETTE PRESENTED HERE]

INSTRUCTIONS: Read the following statements and rate your answers by selecting the most appropriate number or by filling in with your original text.

4. If, in this situation, you feel that you would naturally respond by saying something, please write out what you might say: [OPEN-ENDED QUESTION]

Initial Discloser Group Membership

5. Do you consider the person in the scenario as a Hawai‘i “Local?”

Not at all Very much

1 2 3 4 5 6

Likelihood of Making a Reciprocal Self-disclosure

6. If someone said this to you, how likely would it be that you’d reply by telling them something about yourself?

Not likely at all Somewhat likely Very likely

1 2 3 4 5 6 7

7. If someone said this to you, how likely would it be that you’d reply by telling them something personal or private about yourself?

Not likely at all Somewhat likely Very likely

1 2 3 4 5 6 7

Likelihood of Reciprocal Self-disclosure Intimacy

8. How likely would it be that you’d share something more private or personal than what they shared with you?

Not likely at all Somewhat likely Very likely

1 2 3 4 5 6 7

Perceived Risk of Disclosing (Scale modified from Miller & Lefcourt, 1982)

9. Based on what you read, how risky do you think it would be to share private information with the person in the scenario?

Not at all risky Somewhat risky Very risky

1 2 3 4 5 6 7

10. How likely do you think it is that the information you shared with the person in the scenario will be misused in some way?

Not likely at all				Somewhat likely				Very likely
1	2	3	4	5	6	7		

11. How likely do you think it is that the person in the scenario will keep the information you shared with them to themselves?

Not likely at all				Somewhat likely				Very likely
1	2	3	4	5	6	7		

12. How likely do you think it is that the information you shared with the person in the scenario would cause them to think badly of you?

Not likely at all				Somewhat likely				Very likely
1	2	3	4	5	6	7		

13. How likely do you think it is that the information you shared with the person in the scenario would cause them to reject you?

Not likely at all				Somewhat likely				Very likely
1	2	3	4	5	6	7		

14. How comfortable are you sharing personal information with the person in the scenario?

Not comfortable at all				Somewhat comfortable				Very comfortable
1	2	3	4	5	6	7		

Perceived Intimacy of the Initial Disclosure

15. How private do you think the information shared with you by the person in the scenario was?

Not private at all				Somewhat private				Very private
1	2	3	4	5	6	7		

Perceived Intimacy of the Reciprocated Disclosure

16. How private was the information you shared with the person in the scenario?

Not private at all				Somewhat private				Very private
1	2	3	4	5	6	7		

17. Compared to the information that was shared with you, how private was the information you shared with the person in the scenario?

Less private				Equally private				More private
1	2	3	4	5	6	7		

Perceived Trust Felt Towards the Participant

18. How much do you think the person in the scenario trusts you?

Not at all				Somewhat				Very much
1	2	3	4	5	6	7		

Perceived Trust

19. How much do you trust the person in the scenario?

Not at all				Somewhat				Very much
1	2	3	4	5	6	7		

23. If a story in the media criticized “Locals,” I would feel embarrassed.

Disagree Strongly

Agree Strongly

1

2

3

4

5

6

7

24. When someone praises “Locals” it feels like a personal compliment.

Disagree Strongly

Agree Strongly

1

2

3

4

5

6

7

25. What did this person share about himself? [OPEN-ENDED QUESTION]

Questionnaire – Age-Variable Discloser Context

INSTRUCTIONS: Read the following statements and rate your answers by selecting the most appropriate number. Note: The term “Baby-Boomers” refers to the generation of people born between 1943-1964.

Participant Group Membership

- 1. Do you feel like you are connected to the “Baby-Boomer” generation in ways that are meaningful to you?

Not at all Very much
1 2 3 4 5 6

- 2. Do you feel like you are generally familiar and comfortable with the cultural and social norms of “Baby-Boomers?”

Not at all Very much
1 2 3 4 5 6

- 3. Do you consider yourself a “Baby-Boomer?”

Not at all Very much
1 2 3 4 5 6

[VIGNETTE PRESENTED HERE]

INSTRUCTIONS: Read the following statements and rate your answers by selecting the most appropriate number or by filling in with your original text.

- 4. If, in this situation, you feel that you would naturally respond by saying something, please write out what you might say: [OPEN-ENDED QUESTION]

Initial Discloser Group Membership

5. Do you consider the person in the scenario as a “Baby-Boomer?”

Not at all Very much
1 2 3 4 5 6

Likelihood of Making a Reciprocal Self-disclosure

6. If someone said this to you, how likely would it be that you’d reply by telling them something about yourself?

Not likely at all Somewhat likely Very likely
1 2 3 4 5 6 7

7. If someone said this to you, how likely would it be that you’d reply by telling them something personal or private about yourself?

Not likely at all Somewhat likely Very likely
1 2 3 4 5 6 7

Likelihood of Reciprocal Self-disclosure Intimacy

8. How likely would it be that you’d share something more private or personal than what they shared with you?

Not likely at all Somewhat likely Very likely
1 2 3 4 5 6 7

Perceived Risk of Disclosing (Scale modified from Miller & Lefcourt, 1982)

9. Based on what you read, how risky do you think it would be to share private information with the person in the scenario?

Not at all risky Somewhat risky Very risky
1 2 3 4 5 6 7

10. How likely do you think it is that the information you shared with the person in the scenario will be misused in some way?

Not likely at all				Somewhat likely			Very likely
1	2	3	4	5	6	7	

11. How likely do you think it is that the person in the scenario will keep the information you shared with them to themselves?

Not likely at all				Somewhat likely			Very likely
1	2	3	4	5	6	7	

12. How likely do you think it is that the information you shared with the person in the scenario would cause them to think badly of you?

Not likely at all				Somewhat likely			Very likely
1	2	3	4	5	6	7	

13. How likely do you think it is that the information you shared with the person in the scenario would cause them to reject you?

Not likely at all				Somewhat likely			Very likely
1	2	3	4	5	6	7	

14. How comfortable are you sharing personal information with the person in the scenario?

Not comfortable at all				Somewhat comfortable			Very comfortable
1	2	3	4	5	6	7	

Perceived Intimacy of the Initial Disclosure

15. How private do you think the information shared with you by the person in the scenario was?

Not private at all				Somewhat private			Very private
1	2	3	4	5	6	7	

Perceived Intimacy of the Reciprocated Disclosure

16. How private was the information you shared with the person in the scenario?

Not private at all				Somewhat private			Very private
1	2	3	4	5	6	7	

17. Compared to the information that was shared with you, how private was the information you shared with the person in the scenario?

Less private				Equally private			More private
1	2	3	4	5	6	7	

Perceived Trust Felt Towards the Participant

18. How much do you think the person in the scenario trusts you?

Not at all				Somewhat			Very much
1	2	3	4	5	6	7	

Perceived Trust

19. How much do you trust the person in the scenario?

Not at all				Somewhat			Very much
1	2	3	4	5	6	7	

23. I have a number of qualities typical of “Baby-Boomers.”

Disagree Strongly						Agree Strongly
1	2	3	4	5	6	7

24. If a story in the media criticized “Baby-Boomers,” I would feel embarrassed.

Disagree Strongly						Agree Strongly
1	2	3	4	5	6	7

25. When someone praises “Baby-Boomers,” it feels like a personal compliment.

Disagree Strongly						Agree Strongly
1	2	3	4	5	6	7

26. What did this person share about himself? [OPEN-ENDED QUESTION]

[IF NON-BABY-BOOMER VIGNETTE READ, PARTICIPANT COMPLETES THIS SCALE]

For the remaining questions, think about the group of people who might be considered “Generation Z” (18-25 years old) and then select the number that best reflects your thoughts.

21. When someone criticizes “Generation Z” individuals, it feels like a person insult.

Disagree Strongly						Agree Strongly
1	2	3	4	5	6	7

22. I act like the typical “Generation Z” individual.

Disagree Strongly						Agree Strongly
1	2	3	4	5	6	7

23. I have a number of qualities typical of “Generation Z” individuals.

Disagree Strongly

Agree Strongly

1 2 3 4 5 6 7

24. If a story in the media criticized “Generation Z” individuals, I would feel embarrassed.

Disagree Strongly

Agree Strongly

1 2 3 4 5 6 7

25. When someone praises “Generation Z” individuals, it feels like a personal compliment.

Disagree Strongly

Agree Strongly

1 2 3 4 5 6 7

26. What did this person share about himself? [OPEN-ENDED QUESTION]

27. How old are you? [OPEN-ENDED QUESTION]

28. What is your ethnicity?

Caucasian Hispanic/Latino African American Native American/American

Indian Asian Pacific Islander Two or more ethnicities

Other

29. What gender do you associate most with?

Male

Female

Outside the gender binary

References

- Alarcon, G., Lyons, J., & Christensen, J. (2016). The effect of propensity to trust and familiarity on perceptions of trustworthiness over time. *Personality and Individual Differences, 100*(94), 309-315.
- Altman, I. (1973). Reciprocity of interpersonal exchange. *Journal for the Theory of Social Behaviour, 3*(2), 249-261.
- Benbenishty, J., & Hannink, J. (2015). Non-verbal communication to restore patient-provider trust. *Intensive Care Medicine, 41*(7), 1359-1360.
- Butler, J. (1991). Toward understanding and measuring conditions of trust: Evolution of a conditions of trust inventory. *Journal of Management, 17*(3), 643-663.
- Carpenter, A., & Greene, K. (2016). Social penetration theory. In C. R. Berger, M. E. Roloff, S. R. Wilson, J. P. Dillard, J. Caughlin, & D. Solomon (Eds.), *The International Encyclopedia of Interpersonal Communication* (pp. 1-4).
- Chaikin, A., & Derlega, V. (1974a). Liking for the norm-breaker in self-disclosure. *Journal of Personality, 42*(1), 117-129.
- Chaikin, A., & Derlega, V. (1974b). Variables affecting the appropriateness of self-disclosure. *Journal of Consulting and Clinical Psychology, 42*(4), 588-593.
- Chaudhuri, A., Paichayontvijit, T., & Shen, L. (2012). Gender differences in trust and trustworthiness: Individuals, single sex and mixed sex groups. *Journal of Economic Psychology, 34*(C) 181-194.
- Collins, N., & Miller, L. (1994). Self-disclosure and liking: A meta-analytic review. *Psychological Bulletin, 116*(3), 457-475.

- Cook, K., Yamagishi, T., Cheshire, C., Cooper, R., Matsuda, M., & Mashima, R. (2005). Trust building via risk taking: A cross-societal experiment. *Social Psychology Quarterly*, 68(2), 121-142.
- Couch, L., & Jones, W. (1997). Measuring levels of trust. *Journal of Research in Personality*, 31(3), 319-336.
- Currall, S., & Judge, T. (1995). Measuring trust between organizational boundary role persons. *Organizational Behavior and Human Decision Processes*, 64(2), 151-170.
- Delhey, J., Newton, K., & Welzel, C. (2011). How general is trust in “most people”? Solving the radius of trust problem. *American Sociological Review*, 76(5), 786-807.
- Deutsch, M. (1958). Trust and suspicion. *Journal of Conflict Resolution*, 2(4), 265-279.
- Derlega, V., Chaikin, A. L., & Herndon, J. (1975). Demand characteristics and disclosure reciprocity. *Journal of Social Psychology*, 97(2), 301.
- Derlega, V., Winstead, B., & Greene, K. (2018). Self-disclosure and starting a close relationship. In A. Wenzel, S. Sprecher, & J. Harvey (Eds.), *Handbook of relationship beginnings*, (pp. 164-185). New York, NY: Psychology Press.
- Dragojevic, M., & Giles, H. (2014). Language and interpersonal communication: Their intergroup dynamics. In C. R. Berger (Ed.), *Handbook of interpersonal communication* (pp. 29-51). Berlin: De Gruyter Mouton.
- Ermisch, J., Gambetta, D., Laurie, H., Siedler, T., & Uhrig, S. (2009). Measuring people's trust. *Journal of the Royal Statistical Society: Series A (Statistics in Society)*, 172(4), 749-769.

- Evans, A., & Krueger, J. (2011). Elements of trust: Risk and perspective-taking. *Journal of Experimental Social Psychology, 47*(1), 171-177.
- Evans, A., & Revelle, W. (2008). Survey and behavioral measurements of interpersonal trust. *Journal of Research in Personality, 42*(6), 1585-1593.
- Foddy, M., Platow, M., & Yamagishi, T. (2009). Group-based trust in strangers: The role of stereotypes and expectations. *Psychological Science, 20*(4), 419-422.
- Gambetta, D. (2000). Can we trust trust? In D. Gambetta (Ed.), *Trust: Making and breaking cooperative relations* (pp. 213-237). New York, NY: Basil Blackwell.
- Ganesan, S. (1994). Determinants of long-term orientation in buyer-seller relationships. *Journal of Marketing, 58*(2), 1-19.
- Gächter, S., Starmer, C., & Tufano, F. (2015). Measuring the closeness of relationships: A comprehensive evaluation of the 'Inclusion of the Other in the Self' scale. *PLoS ONE, 10*(6), E0129478.
- Gefen, D. (2000). E-commerce: The role of familiarity and trust. *Omega, 28*(6), 725-737.
- Giffin, K. (1967). The contribution of studies of source credibility to a theory of interpersonal trust in the communication process. *Psychological Bulletin, 68*(2), 104-120.
- Greene, S. (1999). Understanding party identification: A social identity approach. *Political Psychology, 20*(2), 393-403.
- Greene, K., Derlega, V. J., & Mathews, A. (2006). Self-disclosure in personal relationships. In A. Vangelisti & D. Perlman (Eds.), *The Cambridge handbook of personal relationships*,

- (Cambridge Handbooks in Psychology, pp. 409-428). Cambridge: Cambridge University Press.
- Hall, M., Dugan, E., Zheng, B., & Mishra, A. (2001). Trust in physicians and medical institutions: What is it, can it be measured, and does it matter? *Milbank Quarterly*, 79(4), 613-639.
- Hornsey, M. (2008). Social identity theory and self-categorization theory: A historical review. *Social and Personality Psychology Compass*, 2(1), 204–222.
- Irwin, K., Edwards, K., & Tamburello, J. (2015). Gender, trust and cooperation in environmental social dilemmas. *Social Science Research*, 50, 328-342.
- Jiang, L. C., Bazarova, N. N., & Hancock, J. T. (2011). The disclosure-intimacy link in computer-mediated communication: An attributional extension of the hyperpersonal model. *Human Communication Research*, 37(1), 58-77.
- Jiang, L. C., Bazarova, N. N., & Hancock, J. T. (2013). From perception to behavior: Disclosure reciprocity and the intensification of intimacy in computer-mediated communication. *Communication Research*, 40(1), 125–143.
- Johnson, C. F., & Dabbs, J. M. (1976). Self-disclosure in dyads as a function of distance and the subject-experimenter relationship. *Sociometry*, 39(3), 257–263.
- Kim, M. S., Hunter, J. E., Miyahara, A., Horvath, A. M., Bresnahan, M., & Yoon, H. J. (1996). Individual-vs. culture-level dimensions of individualism and collectivism: Effects on preferred conversational styles. *Communications Monographs*, 63(1), 29-49.

- Larzelere, R., & Huston, T. (1980). The dyadic trust scale: Toward understanding interpersonal trust in close relationships. *Journal of Marriage and Family*, 42(3), 595-604.
- Levin, D., Whitener, E., & Cross, R. (2006). Perceived trustworthiness of knowledge sources: The moderating impact of relationship length. *Journal of Applied Psychology*, 91(5), 1163-1171.
- Lin, M.-J. J., Hung, S.-W., & Chen, C.-J. (2009). Fostering the determinants of knowledge sharing in professional virtual communities. *Computers in Human Behavior*, 25(4), 929-939.
- Macrae, C. N., Milne, A. B., & Bodenhausen, G. V. (1994). Stereotypes as energy-saving devices: A peek inside the cognitive toolbox. *Journal of Personality and Social Psychology*, 66(1), 37-47.
- Mayer, R., & Davis, J. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123-136.
- Mayer, R., Davis, J., & Schoorman, F. (1995). An integrative model of organizational trust. *The Academy of Management Review*, 20(3), 709-734.
- Miller, P., & Rempel, J. (2004). Trust and partner-enhancing attributions in close relationships. *Personality and Social Psychology Bulletin*, 30(6), 695-705.
- Miller, R., & Lefcourt, H. (1982). The assessment of social intimacy. *Journal of Personality Assessment*, 46(5), 514-518.

- Montoya, R. M., & Pittinsky, T. L. (2011). When increased group identification leads to outgroup liking and cooperation: The role of trust. *The Journal of Social Psychology, 151*(6), 784–806.
- Morgan, R., & Hunt, S. (1994). The commitment-trust theory of relationship marketing. *Journal of Marketing, 58*(3), 20-38.
- Nicholson, C. Y., Compeau, L. D., & Sethi, R. (2001). The role of interpersonal liking in building trust in long-term channel relationships. *Journal of the Academy of Marketing Science, 29*(1), 3–15.
- Platow, M., Foddy, M., Yamagishi, T., Lim, L., & Chow, A. (2011). Two experimental tests of trust in in-group strangers: The moderating role of common knowledge of group membership. *European Journal of Social Psychology, 42*(1), 30–35.
- Rempel, J., Holmes, J., Zanna, M. (1985). Trust in close relationships. *Journal of Personality and Social Psychology, 49*(1), 95-112.
- Risk. (n.d.). In *Merriam-Webster.com*. Retrieved August 8, 2018, from <https://www.merriam-webster.com/dictionary/risk>
- Rotter, J. (1971). Generalized expectancies for interpersonal trust. *American Psychologist, 26*(5), 443-452.
- Rousseau, D., Sitkin, S., Burt, R., & Camerer, C. (1998). Not so different after all: A cross-discipline view of trust. *Academy of Management Review, 23*(3), 393-404.

- Sánchez-Franco, M., & Roldán, J. (2015). The influence of familiarity, trust and norms of reciprocity on an experienced sense of community: an empirical analysis based on social online services. *Behaviour & Information Technology*, 34(4), 392-412.
- Sutter, M., & Kocher, M. (2007). Trust and trustworthiness across different age groups. *Games and Economic Behavior*, 59(2), 364-382.
- Tajfel, H. (1982). Social psychology of intergroup relations. *Annual Review of Psychology*, 33(1), 1-39.
- Tajfel, H., & Turner, J. C. (1986). The social identity theory of intergroup behavior. In S. Worchel & W. G. Austin (Eds.), *Psychology of intergroup relations, 2nd edition* (pp. 7-24). Chicago: Nelson-Hall Publishers.
- Tanis, M., & Postmes, T. (2005). A social identity approach to trust: Interpersonal perception, group membership and trusting behaviour. *European Journal of Social Psychology*, 35(3), 413-424.
- Taylor, D. (1968). The development of interpersonal relationships: Social penetration processes. *The Journal of Social Psychology*, 75(1), 79-90.
- Taylor, D., & Altman, I. (1975). Self-disclosure as a function of reward-cost outcomes. *Sociometry*, 38(1), 18-31.
- Thielmann, I., Hilbig, B. (2015). Trust: An integrative review from a person-situation perspective. *Review of General Psychology*, 19(3), 249-277.

- Turner, J. C., Hogg, M. A., Oakes, P. J., Reicher, S. D., & Wetherell, M. S. (1987). A self-categorization theory. *Rediscovering the social group: A self-categorization theory* (pp. 42-67). Cambridge, MA: Basil Blackwell.
- Van Hoorn, A. (2015). Individualist–collectivist culture and trust radius: A multilevel approach. *Journal of Cross-Cultural Psychology, 46*(2), 269-276.
- Yamagishi, T., Cook, K., & Watabe, M. (1998). Uncertainty, trust, and commitment formation in the United States and Japan. *The American Journal of Sociology, 104*(1), 165-194.
- Yamagishi, T., & Kiyonari, T. (2000). The group as the container of generalized reciprocity. *Social Psychology Quarterly, 63*(2), 116–132. <https://doi.org/10.2307/2695887>
- Zand, D. (1972). Trust and managerial problem solving. *Administrative Science Quarterly : ASQ : Dedicated to Advancing the Understanding of Administration through Empirical Investigation and Theoretical Analysis, 17*(2), 229-239.