

# Shared Identity, Trustworthiness, and Social Distance in Online Training

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*This research examines shared identity in the context of online training. Specifically, we examine the impact of perceived shared identity on social distance, operationalized as one's willingness to work with another person and their willingness to recommend that person for a job. We conduct two studies of simulated online training and find that increased shared identity plays an important role in the online training process and that perceptions of trustworthiness mediate the relationship between shared identity and social distance. This research explores the impact social exchange has in online training when specifically examining social exchange between the trainer and trainee.*

*Keywords: training, online, shared identity, trustworthiness, social distance*

## **INTRODUCTION**

The ability to build meaningful connections through web-based interaction is a necessary skill in contemporary organizational exchange and relationship building. Online networking tools, such as LinkedIn, are viewed as essential for students and professionals alike to develop social connections as they progress through their careers. The ability to connect with another individual over a shared friend, shared experience, or shared social identity (i.e., Ashforth & Mael, 1989) is an important component of successfully navigating organizational life. In forging these ties (see Granovetter, 1973, 1983), individuals hope to expand their network access and aim to capitalize on any benefit that can be derived from their mutual connections. In particular, one area where these social exchanges play an important role is in that of online training and learning (Kraiger, 2008, 2017).

Learning and knowledge sharing is a social process (Kraiger, 2008). Kraiger's third-generation learning model emphasizes the social interaction between trainees (i.e., learner-learner), as well as the social interaction between trainee and trainer (i.e., learner-instructor) (2008). However, while the relationship

between trainees receives a great deal of attention, considerably less focus is placed on understanding the social dynamics that occur between trainees and trainers. Bedwell and Salas (2008) and Arbaugh (2008) both point out the lack of attention paid to this relationship, particularly in the context of online learning.

The purpose of this research is to focus on the social dynamics that occur between a trainee and trainer in an online training context, as e-learning and online training continue to be a growing practice in the workplace (Attwell, 2019). This study aims to examine the impact that the perception of shared identity has on the trainee's social evaluation of their trainer. Specifically, this research tests how perceptions of shared identity signal or shape perceptions of trustworthiness, and consequently, social distance between a trainee and trainer. In this research, social distance is operationalized as the willingness to have someone as a colleague and the willingness to recommend someone for a job working for a friend. Additionally, we consider the mediating role of perceived trustworthiness on the three dimensions of ability, benevolence, and integrity on the relationship between shared identity and social distance.

### **The Training and Learning Context**

The organizational literature on training highlights characteristics of the trainee (e.g., personality), job and career variables, characteristics of the organization (e.g., culture), and situational variables (e.g., manager support or content of the training) as potential influencers of the training process. Ultimately, these can affect whether or not training is successful (Baldwin & Ford, 1988; Colquitt et al., 2000; Cheng & Hampson, 2008). Understanding the forces influencing the training process is important to the organization, as all employees engage in some type of training (Mathieu et al., 1992), and a primary aim of training is to successfully transfer knowledge and positively impact employee performance (e.g., Cheng & Hampson, 2008).

Studies on training often focus on trainee characteristics, the training content, or the environment in which the training is conducted. In their model of training, Baldwin and Ford address learning and retention, which are directly influenced by training inputs (1988). Training inputs include trainee characteristics such as ability, personality, and motivation; training design, such as principles of learning, sequencing, and training content; and work environment, which includes support and opportunity to use the training (Baldwin & Ford, 1988, p. 65). In this, emphasis on the trainer appears to receive less focused attention, consistent with the critique provided by Bedwell and Salas (2008).

Ghosh and colleagues (2012) analyze the literature related to the trainer and provide a summary table of past research on trainer attributes, which include studies on attributes such as providing feedback, listening, learning environment, questioning, communication skills, relationship with the trainee, knowledge of content, ability to use teaching aids/media, and problem solving. Many of these attributes allude to the ability of the trainer to adequately conduct training and involve some consideration of competence. Although competence is desirable for effective learning, other attributes, such as those that facilitate social exchange, may also be important. This rationale is supported by a related meta-analysis that found interaction with the trainer was a strong predictor of trainee reactions to training (Sitzmann et al., 2008).

It stands to reason that one element that likely plays a significant role in training effectiveness is attributes of the trainer and how those are perceived by the trainee. From this social constructivism viewpoint, such as Kraiger's (2008), trainees not only learn facts or procedures but also develop skills and attitudes that are largely derived from interaction from fellow trainees or the instructor. For example, trainers informally disseminate knowledge through "modeling [the] attitudes or values" of the organization (Kraiger, 2008, p. 461). Consequently, as training and learning are influenced by social exchange between the trainer and the trainee, attributes of the trainer can impact the training process, and thus learning as well (Ghosh et al., 2012). Given the importance of social exchange between the trainee and trainer during learning (Kraiger, 2008), it is important to understand how, exactly, this social exchange shapes the training process.

## Shared Identity

Individuals derive a portion of their self-conception and self-esteem from the groups to which they belong (Tajfel & Turner, 1979), and in doing so, create a perception of their own social identity. Identity exists on three levels, the individual (personal), interpersonal, and collective (Sluss & Ashforth, 2007). At the individual level, identity is assessed through comparison with the traits and characteristics of others. Classifying one's self (i.e., observer) and others (i.e., social other) into groups helps the individual better understand the social landscape and their role in it (Ashforth & Mael, 1989). Social identity is both a subjective and a cognitive construct in that people *perceive* that they are a member of a group or that someone else is a member of that group (Turner, 1982).

Shared identity, as conceptualized in this research, is the perception of how socially alike or dissimilar the observer perceives a social other to be, based on the observer's perceptions of social identity. Shared identity is not agreed upon by two parties, but rather is the product of this subjective and cognitive process that determines whether the observer's self-identity overlaps with the perceived identity of a social other, and if so, to what extent. For example, shared identity might occur when a sports fan sees another individual wearing the logo of their favorite team. In this case, the team's logo serves as a signal of identity and can create a sense of identity overlap for the observer. All of this can occur without any interaction with the wearer. Similarly, in organizations, visual cues or knowledge about another person can also act as signals of shared identity. In the training context, this can occur between trainees or between the trainee and trainer.

Shared identity is not inherently focused on the individual (see Turner & Oakes, 1986) but rather helps the observer place the social other in a wider social context. As it is based on perception, shared identity is subject to biases (e.g., ingroup favoritism) that can inflate evaluations of ingroup members or lower evaluations of outgroup members (Brewer, 1979). While much of the research on shared identity is grounded in the relationship between the individual and the organization (e.g., Ashforth & Mael, 1989), shared social identity can also provide a means by which to understand or evaluate other individuals in relation to one's self within a social context.

The importance of the social context is reinforced by self-categorization theory (Abrams & Hogg, 2008), which argues that self-identity is fluid and context dependent. That is, of the multiple groups to which we belong, our self-categorization depends on the salience and variability of social stimuli in a given setting. Social-categorization theory does not assume any identity maximizing strategies, and instead argues the groups we identify with are driven by the "meta contrast" ratio, which claims "a given set of items is more likely to be characterized as a single entity to the degree that differences within the set are less than the differences between the set and others within the comparative context" (Oakes et al., 1994, p. 96). Self-categorization (Abrams & Hogg, 2008) provides a heuristic for making quick cognitive decisions about the acceptability or unacceptability of others based on whether they are seen as sharing one's identity, and perceptions of ingroup-ness or outgroup-ness are at the core of understanding how much another person shares one's identity (Turner, 1982). This recognition of differences helps determine where another fits in the social landscape and can provide information about attributes of that person, consequently influencing how one acts or behaves. This influence on behavior can then have implications for the workplace.

The perception of shared identity can lead to many work-related outcomes, such as organizational citizenship behaviors (Haslam et al., 2000), extrarole behavior (Blader & Tyler, 2009), motivation, and work performance (van Knippenberg, 2000). In small groups, shared identity can influence knowledge transfer (Kane et al., 2005), and at the interpersonal level, it can shape how followers view leaders (Steffens et al., 2014). In line with Kraiger's (2008) emphasis on social exchange as a key element of training and learning, the current research builds on this and focuses on how shared identity shapes perceptions of trustworthiness and social distance in a work context.

## Social Distance

Social distance is the degree to which a person finds another to be socially acceptable or similar (e.g., St-James et al., 2006). This is done by defining social space as a function of how willing one is to socialize with another (e.g., coworker, neighbor, close friend) and determining how socially "close" that person is to one's self. Social distance is most commonly assessed using the Bogardus Social Distance Scale (Bogardus,

1933), which measures closeness based on perceived differences (Parrillo & Donoghue, 2005), providing a means to approximate the level of comfort a person has with a different "other." The scale has been adapted for modern use by Schomerus and colleagues (2009; see also, Feret et al., 2011) and is used to assess social phenomena involving dissimilar groups (e.g., Tumasjan et al., 2011).

Social distance is useful in understanding varying levels of social comfort between two individuals. In this research, emphasis is placed on those items of the scale that relate to the workplace. How similar or how different an individual appears can impact the degree to which another perceives attributes about them (St-James et al., 2006), and consequently, social distance can play a role in how likely a person is to want another person as a colleague, or how likely they are to recommend another person for a job working for a friend. In the social distance scale, accepting someone as a colleague or working with them (2 of 9 on the scale) is seen as socially "easier" than recommending someone for a job with a friend (5 of 9 on the scale), which demonstrates a moderate level of closeness. This differentiation is used in the current study, as prior research supports the expectation that working with someone would cause less personal risk than making a recommendation. This risk could be based on fears of reduced resources (e.g., people were willing to work with stigmatized individuals, as long as they did not have to share work rewards with them [Miller et al., 2009]).

Measuring social distance makes it possible to approximate the level of social interaction or intimacy shared between two individuals. When social distance is considered through the lens of social network formation (e.g., Watts et al., 2002), a prominent characteristic is homophily, which suggests that people generally interact with or develop their network with people who are very similar to them (McPherson et al., 2001). However, even in homophilous networks, individuals "judge similarity along more than one social dimension" (Watts et al., 2002, p. 1302). This suggests that even when meeting new people who may be similar to one's self, social distance may fluctuate based on how much similarity or shared identity is perceived. Accordingly, we anticipate that as shared identity increases, perceived social distance will be closer.

***H1:*** *As shared identity increases, we expect social distance to be closer, such that the trainee is more likely to be willing to socially accept the trainer as a colleague at work.*

***H2:*** *As shared identity increases, we expect social distance to be closer, such that the trainee is more likely to be willing to recommend the trainer for a job working for a friend.*

## **Trustworthiness**

Classifying an individual as either an ingroup or outgroup member provides a heuristic for making quick cognitive decisions about the acceptability or unacceptability of others, as well as providing a framework for determining how similar or different others may be from the self. The more distinctive the differences are, the more likely a threat to the ingroup will be perceived (Abrams & Hogg, 2008). A shared identity can result in ingroup favoritism on measures such as housing or employment decisions (Greenwald & Pettigrew, 2014), resource allocation (Tajfel & Turner, 1979), and cooperation (Balleit et al., 2014). Consequently, shared identity may aid in decisions such as whether or not a person can be trusted. We argue that perceived trustworthiness might play an important role in influencing how shared identity translates into social distance.

An important role of the trainer in an online context is to facilitate trust in a learning or training environment (Bedwell & Salas, 2008). Trust requires the "willingness...to be vulnerable to the actions of another party" (Mayer et al., 1995, p. 712), and trustworthiness is the assessment of how likely a person is to betray that trust (e.g., Colquitt et al., 2007; McAllister, 1995). At its most basic level, trustworthiness involves determining whether the other party has motivation to deceive or mislead (Mayer et al., 1995). However, determining whether another party has a motivation to lie is inadequate to fully explain trustworthiness. As a residual effect of determining whether another has the motivation to lie, trustworthiness, at its core, is an individual's perception of whether or not they should place trust and confidence in another, and if so, to what extent. Trustworthiness encompasses both an affective and

cognitive element, in that the propensity to trust is borne out of both emotional and rational considerations (McAllister, 1995).

Cognitively, trustworthiness is argued to depend on the perceived ability, benevolence, and integrity of the individual in question (Mayer et al., 1995). The ability dimension assesses the competency of the individual to determine if he or she actually possesses the needed skills or knowledge necessary for a task (Mayer et al., 1995). Ability assumes some type of competency in a particular area in question (Mayer et al., 1995). Ability, in part, contributes to the dynamic nature of trust, as an individual may be skilled in one area but lack any ability in another. The benevolence dimension is the perceived level of the trustee's desire to do good for the trustor without the inducement of a reward for doing so. In terms of defining trustworthiness as determining the propensity to lie, increased benevolence would suggest that the propensity to lie would decrease, as a benevolent trustee would act in accordance with the interests of the trustor (Mayer et al., 1995). Lastly, integrity in a trust relationship is described by Mayer and colleagues as "the trustor's perception that the trustee adheres to a set of principles that the trustor finds acceptable" (1995, p. 719). Integrity is important early in a dyadic relationship, as initially, it is anticipated that the trustor has limited knowledge of the trustee. Both integrity and ability may rely on information obtained early on in a relationship. As all three dimensions align, perceived trustworthiness should increase.

Later, as the relationship persists and the trustor is able to gain more experience and first-hand knowledge, they can then better assess benevolence as well (Mayer et al., 1995). Time and available information play an important role in establishing the extent to which each factor informs trustworthiness (Schoorman et al., 2007). Accordingly, we anticipate that information gained from shared identity may play an important role in shaping perceptions of trustworthiness in a new professional relationship.

In situations where shared identity is high, we anticipate that the perception of shared values can bolster trustworthiness. This is, in part, due to ingroup bias, which can lead to projecting positive attributes onto members of the ingroup (Kramer, 2010). In the absence of knowledge about other people, group membership via social identity can be a useful heuristic to determine whether or not someone is trustworthy (i.e., Macrae et al., 1994). While the term "stereotype" often carries a negative connotation, in this case, they can be used as " 'reasonable' expectations about group members" (Abrams & Hogg, 2008, p. 439). Thus, we hypothesize the following:

**H3a:** *Perceived trustworthiness based on ability will mediate the relationship between shared identity and willingness to accept the trainer as a colleague at work.*

**H3b:** *Perceived trustworthiness based on benevolence will mediate the relationship between shared identity and the willingness to accept the trainer as a colleague at work.*

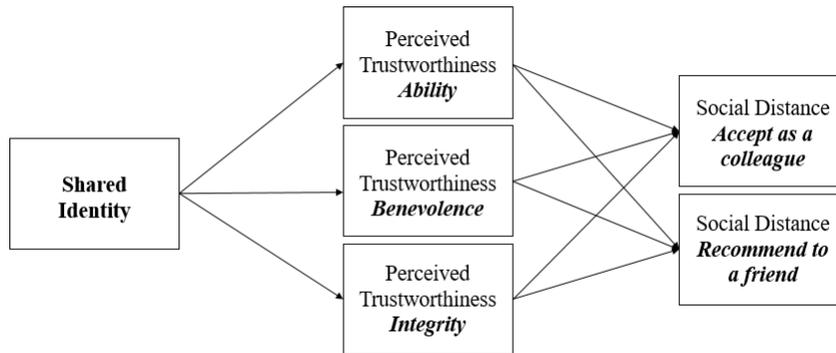
**H3c:** *Perceived trustworthiness based on integrity will mediate the relationship between shared identity and the willingness to accept the trainer as a colleague at work.*

**H4a:** *Perceived trustworthiness based on ability will mediate the relationship between shared identity and the willingness to recommend the trainer for a job working for a friend.*

**H4b:** *Perceived trustworthiness based on benevolence will mediate the relationship between shared identity and the willingness to recommend the trainer for a job working for a friend.*

**H4c:** *Perceived trustworthiness based on integrity will mediate the relationship between shared identity and the willingness to recommend the trainer for a job working for a friend.*

**FIGURE 1**  
**HYPOTHESIZED MODEL**



## STUDY 1

### Sample and Procedures

This research was conducted using a simulated online training followed by a survey questionnaire. Potential participants were told the study was investigating computer-based video training for an entry-level job as a bank teller. Informed consent was obtained prior to respondents beginning the training. The training was created to approximate a work-training context and was pre-recorded to ensure consistent stimulus. Participants were instructed to watch a training video featuring a white male trainer. The trainer was in his mid-20s, making him a similar age to applicants for this entry level position. The trainer wore a white polo shirt that displayed the bank's logo.

In the training, the trainer explained the procedure for check cashing, which included knowledge about bank standards and federal regulations. Post-training attention checks were used to ensure that the participants paid attention to the training. Immediately following the training, participants were first asked questions related to what they learned during the training. After this, participants were asked additional questions covering their attitudes about the training and the trainer. Lastly, participants were asked to report demographic information.

Study 1 was conducted using undergraduate students at a large public university in the southern United States ( $n = 104$ ). 60% of respondents were male, and the average age was 24.5 ( $SD = 5.7$ ). 82.7% of respondents were non-Hispanic White, 13.5% Black or African American, 2.9% Asian or Asian American, and 1.0% American Indian or Alaska Native. The inclusion of undergraduate students was desired for this research as the students were demographically similar to many entry-level applicants in the United States, given that they were early career and had some college experience. Thus, while students are not good proxies for research focused on later-stage employees, we argue they provide an appropriate sample population for this research. Sample means and correlations are provided below in Table 1.

### Measures

#### *Shared Identity*

Shared identity was assessed using Bergami and Bagozzi's (2000) verbal and visual scale. The scale asks the participant to choose a level of identity overlap based on the representation of two increasingly overlapping circles. The scale follows the structure of a Likert scale, ranging from 1 "Far Apart" to 8 "Complete Overlap." The instructional language presented to participants was adapted from language used by Bartels and Hoogendam (2011, see p. 708), changing the target to "the trainer." This was the only change made, and otherwise, the instructional language remained the same. Prior research demonstrates the reliability of the scale; Bartels and Hoogendam (2011) reported Cronbach's alpha values of 0.71 and 0.86 for their measures of social identity with two different groups, both suggesting good reliability for the measure. This is consistent with the alpha of 0.71 reported by Bergami and Bagozzi (2000).

While earlier methodological practices tend to avoid single item measures, Wanous, Reichers, and Hudy (1997) argue that single item measures are appropriate for constructs that are "sufficiently narrow or [are] unambiguous to the respondent" (p. 247). This is demonstrated in their meta-analysis, where they find evidence that a single-item measure is appropriate to measure overall job satisfaction (Wanous et al., 1997). The same has been demonstrated for student-rated college teaching effectiveness (Wanous & Hudy, 2001), global quality of life (de Boer et al., 2004), and happiness (Abdel-Khalek, 2006). Given that the measure of shared identity is a perception that is seemingly both narrow and unambiguous (i.e., asking a respondent how alike or not alike they are to someone else), coupled with the fact that prior research has shown the visual and verbal scale to be a reliable measure of shared identity, the use of the single-item measure was methodologically appropriate for this research.

### *Social Distance*

Social distance was assessed using a modified version of the original Bogardus social distance scale (Bogardus, 1933). This scale has been adapted for a number of studies on social phenomena (Parrillo & Donoghue, 2005). The scale items ask respondents how willing or comfortable they are associating with another person. To establish this, the items become progressively closer in social distance, with the intent of finding the point at which the respondent is unwilling to associate with the other person (Weinfurt & Moghaddam, 2001). Items for the present scale were derived from those employed by Schomerus and colleagues (2009; see also, Feret et al., 2011). Adapting the social distance scale for the stigmatized behavior of substance abuse, Brown (2011) reported an alpha of 0.85. The scale ranges from 0 to 9, where 0 indicates an unwillingness to accept someone like the trainer as a neighbor, and 9 indicates a willingness to introduce someone like the trainer as a relationship partner. Cronbach's alpha for the entire social distance scale was assessed, with Study 1  $\alpha = 0.90$ , exceeding the established cutoff of 0.70 (Nunnally & Bernstein, 1994).

### *Trustworthiness*

Trustworthiness was assessed using scale items developed by Mayer and Davis (1999) to measure the facets of ability, benevolence, and integrity. The initial scale developed by Mayer and Davis was modified by replacing the term "top management" (1999) with "the trainer." Mayer and Davis (1999) report high coefficient alphas for all three sub-scales, as do Colquitt and Rodell (2011). Their confirmatory factor analysis also indicated good model fit for the three construct scales over a single higher order scale (Colquitt & Rodell, 2011). Accordingly, we follow the use of the three construct scales rather than the higher order scale and report each construct of trustworthiness individually. Items in the scale were measured ranging from 1 "strongly disagree" to 5 "strongly agree" and were combined to create an index with higher scores indicating higher levels of trustworthiness for each of the three sub-scales.

Cronbach's alpha for the three trustworthiness scales and authoritarianism were assessed. The scales for the three dimensions of trustworthiness, ability ( $\alpha = 0.94$ ), benevolence ( $\alpha = 0.91$ ), and integrity ( $\alpha = 0.91$ ) all met the pre-established cutoff of 0.70 (Nunnally & Bernstein, 1994).

## **Results**

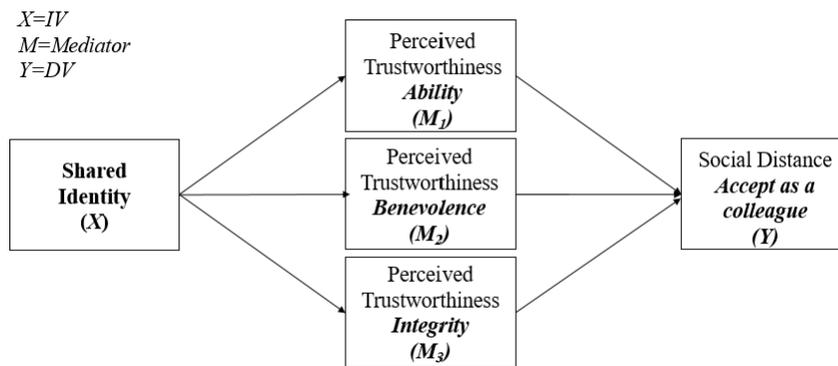
Table 1 reports the correlations and sample means for the study. Hypothesis testing was conducted using the Hayes PROCESS macro (2018), with a bootstrapped sample of 5000. Following the PROCESS model (Hayes, 2018), OLS regression was used to test direct effects and mediation (see Figures 2 & 3). A parallel multiple mediator model allows for the test of all mediators "while accounting for the association between them" (Hayes, 2018, p. 155).

**TABLE 1**  
**CORRELATIONS, MEANS, AND STANDARD DEVIATIONS OF STUDY**  
**VARIABLES, STUDY 1**

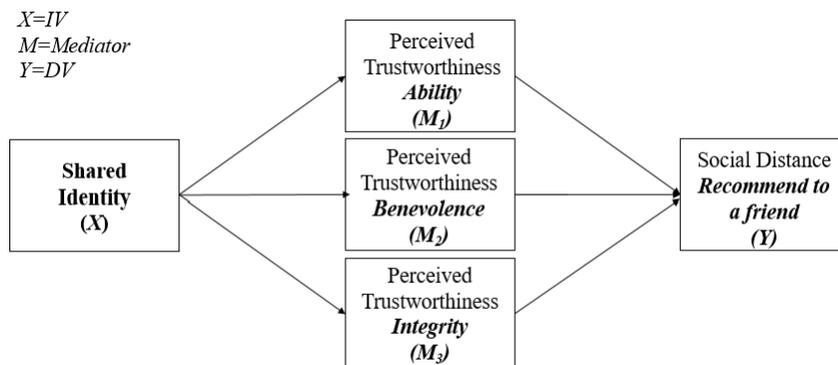
Variable	1	2	3	4	5	6
1. Shared Identity	1.00					
2. Trustworthiness-Ability	.29**	1.00				
3. Trustworthiness-Benevolence	.37**	.71**	1.00			
4. Trustworthiness-Integrity	.37**	.76**	.72**	1.00		
5. Social Distance-Colleague	.41**	.56**	.40**	.54**	1.00	
6. Social Distance-Recommend	.43**	.47**	.44**	.59**	.62**	1.00
<i>M</i>	2.63	3.43	3.06	3.23	4.92	4.21
<i>SD</i>	1.66	0.73	0.66	0.62	1.36	1.33

\*\*  $p < .01$ .  $N = 104$

**FIGURE 2**  
**SD-COLLEAGUE PROCESS MEDIATION MODEL**



**FIGURE 3**  
**SD-RECOMMEND PROCESS MEDIATION MODEL**



*Hypotheses Testing*

The first model tested (see Figure 2) included H1, as well as H3a, H3b, and H3c, with trustworthiness mediating the relationship between shared identity and the acceptability of the individual as a colleague at work. For the willingness to accept someone as a colleague at work, shared identity, and the trustworthiness mediators account for 38% of the variance,  $R^2 = 0.380$ ,  $F(4, 99) = 15.184$ ,  $p < 0.001$ . H1 was supported,  $c' = 0.216$ ,  $t(99) = 3.063$ ,  $p = 0.003$ . For the mediating variables, bootstrap confidence intervals were used

(see Hayes, 2018) to support H3a (CI: 0.032 to 0.232) with a 95% confidence that  $X$  influences  $Y$  through  $M_1$ . H3b and H3c were not supported, as the confidence intervals for both  $M_2$  (CI: -0.109 to 0.041) and  $M_3$  (CI: -0.048 to 0.123) included zero (Hayes, 2018). Looking at all three mediators together, the total indirect effect of perceived trustworthiness as a mediator was statistically significant, with an effect of 0.116 and confidence interval of 0.025 to 0.215. The results of this model are reported in Table 2.

**TABLE 2**  
**STUDY 1 TEST OF SD-COLLEAGUE MEDIATION MODEL**  
**(HYPOTHESES 1, 3A, 3B, AND 3C)**

Antecedent		Consequent				
		$M_1$ (Trustworthiness - Ability)			95% CI	
		Coefficient	SE	$p$	LL	UL
$X$ (Shared Identity)	$a_1$	0.132	0.042	0.002	0.049	0.214
Constant	$i_{m1}$	3.087	0.129	0.000	2.831	3.343
		$R^2 = 0.090$				
		$F(1, 102) = 10.025, p = 0.002$				
		$M_2$ (Trustworthiness - Benevolence)			95% CI	
		Coefficient	SE	$p$	LL	UL
$X$ (Shared Identity)	$a_2$	0.148	0.037	0.000	0.075	0.221
Constant	$i_{m2}$	2.674	0.115	0.000	2.447	2.901
		$R^2 = 0.137$				
		$F(1, 102) = 16.144, p < 0.001$				
		$M_3$ (Trustworthiness - Integrity)			95% CI	
		Coefficient	SE	$p$	LL	UL
$X$ (Shared Identity)	$a_3$	0.137	0.035	0.000	0.069	0.206
Constant	$i_{m3}$	2.871	0.107	0.000	2.658	3.084
		$R^2 = 0.134$				
		$F(1, 102) = 15.833, p < 0.001$				
		$Y$ (Social Distance - Colleague)			95% CI	
		Coefficient	SE	$p$	LL	UL
$X$ (Shared Identity)	$c'$	0.216	0.070	0.003	0.076	0.355
$M_1$ (Trustworthiness - Ability)	$b_1$	0.867	0.243	0.001	0.385	1.348
$M_2$ (Trustworthiness - Benevolence)	$b_2$	-0.236	0.252	0.352	-0.737	0.265
$M_3$ (Trustworthiness - Integrity)	$b_3$	0.265	0.293	0.368	-0.317	0.846
Constant	$i_y$	1.247	0.591	0.037	0.074	2.421
		$R^2 = 0.380$				
		$F(4, 99) = 15.184, p < 0.001$				

Note. Coefficients are unstandardized (see Hayes, 2013, p. 318).  $n = 104$ . Bootstrap sample size = 5,000. CI = bias corrected bootstrap confidence interval; LL = lower limit; UL = upper limit.

The second model tested (see Figure 3) included H2, as well as H4a, H4b, and H4c, with trustworthiness mediating the relationship between shared identity and the acceptability of recommending another individual for a job working for a friend. For the willingness to recommend someone for a job working for a friend, shared identity and the trustworthiness mediators accounted for 34% of the variance,  $R^2 = 0.337$ ,  $F(4, 99) = 12.594, p < 0.001$  (see Table 3). H2 was supported,  $c' = 0.222, t(99) = 3.122, p = 0.002$ . For the mediating variables, bootstrap confidence intervals again were used with a 95% confidence that  $X$

influences *Y* through the mediators. Mediation was not supported for H4a, H4b, or H4c, as the confidence intervals for  $M_1$  (CI: -0.015 to 0.129),  $M_2$  (CI: -0.053 to 0.094), and  $M_3$  (CI: -0.013 to 0.145) all included zero (Hayes, 2018). The total indirect effect of perceived trustworthiness as a mediator, however, was statistically significant, with an effect size of 0.123 and confidence interval of 0.057 to 0.204. The results of this model are reported in Table 3.

**TABLE 3**  
**STUDY 1 TEST OF SD-RECOMMEND MEDIATION MODEL**  
**(HYPOTHESES 2, 4A, 4B, AND 4C)**

Antecedent		Consequent				
		<b>Y (Social Distance - Recommend)</b>			95% CI	
		Coefficient	SE	<i>p</i>	LL	UL
<i>X</i> (Shared Identity)	<i>c'</i>	0.222	0.071	0.002	0.081	0.364
$M_1$ (Trustworthiness - Ability)						
<i>b</i> <sub>1</sub>		0.348	0.245	0.160	-0.139	0.835
$M_2$ (Trustworthiness - Benevolence)						
<i>b</i> <sub>2</sub>		0.111	0.255	0.666	-0.396	0.617
$M_3$ (Trustworthiness - Integrity)						
<i>b</i> <sub>3</sub>		0.441	0.296	0.141	-0.148	1.029
Constant	<i>i<sub>y</sub></i>	0.668	0.598	0.267	-0.519	1.856
		<i>R</i> <sup>2</sup> = 0.337				
		<i>F</i> (4, 99) = 12.594, <i>p</i> < 0.001				

*Note.* Coefficients are unstandardized (see Hayes, 2013, p. 318). *n* = 104. Bootstrap sample size = 5,000. CI = bias corrected bootstrap confidence interval; LL= lower limit; UL = upper limit.

## Discussion

Hypotheses 1 and 2 were both supported, with shared identity increasing the willingness for the respondent to accept the target as a colleague at work and to recommend the target for a job working for a friend. As reported, all three types of trustworthiness were assessed individually, following the structure first used by Mayer and Davis (1999). For Study 1, trustworthiness based on ability, as well as perceived trustworthiness overall, mediated the relationship between shared identity and the willingness to accept the target as a colleague. Additionally, perceived trustworthiness overall mediated the relationship between shared identity and the willingness to recommend the target. Thus, H3a received support, but the other mediation hypotheses did not.

## STUDY 2

### Sample and Procedures

Study 2 was conducted using the same procedure and measures as Study 1. While Study 1 provided a sample with ages similar to many entry level employees in the beginning stages of their career, Study 2 was conducted to include participants who were older than college students. Study 2 was comprised of respondents recruited through Amazon Mechanical Turk (AMT) (*n* = 136) and only included participants who resided in the United States. 48% of respondents were male, and the average age was 39.9 (*SD* = 12.5). 73.5% of respondents were non-Hispanic White, 11.8% Black or African American, 5.8% Hispanic or Latino, 4.4% Asian or Asian American, 2.2% American Indian or Alaska Native, and 1.5% Hawaiian or Pacific Islander. This sample was restricted to respondents who were 24 years of age or older, and this cut off was imposed in an effort to sample a population that did not include participants like those sampled in Study 1. As previously stated, attention checks were used in the research, as were checks for acquiescence.

These steps were taken to mitigate concerns about the use of Amazon Mechanical Turk (e.g., Goodman et al., 2012).

## Results

Sample means and correlations for Study 2 are provided in Table 4. Cronbach's alpha for the entire social distance scale was  $\alpha = 0.93$ . The scales for the three dimensions of trustworthiness of ability ( $\alpha = 0.95$ ), benevolence ( $\alpha = 0.90$ ), and integrity ( $\alpha = 0.89$ ) were also assessed. All exceed the established cutoff of 0.70 (Nunnally & Bernstein, 1994).

**TABLE 4**  
**CORRELATIONS, MEANS, AND STANDARD DEVIATIONS OF STUDY**  
**VARIABLES, STUDY 2**

Variable	1	2	3	4	5	6
1. Shared Identity	1.00					
2. Trustworthiness-Ability	.28**	1.00				
3. Trustworthiness-Benevolence	.32**	.62**	1.00			
4. Trustworthiness-Integrity	.32**	.66**	.77**	1.00		
5. Social Distance-Colleague	.25**	.53**	.43**	.58**	1.00	
6. Social Distance-Recommend	.28**	.59**	.57**	.64**	.67**	1.00
<i>M</i>	2.77	3.61	3.22	3.38	5.57	4.79
<i>SD</i>	1.55	0.91	0.79	0.63	1.18	1.56

\*\*  $p < .01$ .  $N = 136$

### Hypotheses Testing

Following the same procedure as Study 1, the first model tested (see Figure 2) included H1, as well as H3a, H3b, and H3c, with trustworthiness mediating the relationship between shared identity and the acceptability of the individual as a colleague at work. For the willingness to accept someone as a colleague at work, shared identity and the trustworthiness mediators account for 38% of the variance,  $R^2 = 0.379$ ,  $F(4, 131) = 20.000$ ,  $p < 0.001$ . H1 was not supported,  $c' = 0.045$ ,  $t(131) = 0.802$ ,  $p = 0.424$ . For the mediating variables, bootstrap confidence intervals were used (see Hayes, 2018) to support H3a and H3c with a 95% confidence that  $X$  influences  $Y$  through  $M_1$  (CI: 0.014 to 0.123) and  $M_3$  (CI: 0.040 to 0.223). H3b was not supported, as the confidence interval for  $M_2$  (CI: -0.100 to 0.024) included zero (Hayes, 2018). Looking at all three mediators together, the total indirect effect of perceived trustworthiness as a mediator was statistically significant, with an effect of 0.145 and confidence interval of 0.062 to 0.245. The results of this model are reported in Table 5.

**TABLE 5**  
**STUDY 2 TEST OF SD-COLLEAGUE MEDIATION MODEL**  
**(HYPOTHESES 1, 3A, 3B, AND 3C)**

Antecedent		Consequent				
		<i>M</i> <sub>1</sub> (Trustworthiness - Ability)			95% CI	
		Coefficient	<i>SE</i>	<i>p</i>	LL	UL
<i>X</i> (Shared Identity)	<i>a</i> <sub>1</sub>	0.164	0.048	0.001	0.068	0.259
Constant	<i>i</i> <sub>m1</sub>	3.155	0.153	0.000	2.852	3.459
		$R^2 = 0.079$				
		$F(1, 134) = 11.500, p < 0.001$				

		<b><i>M</i><sub>2</sub> (Trustworthiness - Benevolence)</b>			95% CI	
		Coefficient	<i>SE</i>	<i>p</i>	LL	UL
<i>X</i> (Shared Identity)	<i>a</i> <sub>2</sub>	0.162	0.041	0.000	0.080	0.244
Constant	<i>i</i> <sub>m2</sub>	2.772	0.132	0.000	2.512	3.032
<i>R</i> <sup>2</sup> = 0.103						
<i>F</i> (1, 134) = 15.348, <i>p</i> < 0.001						
		<b><i>M</i><sub>3</sub> (Trustworthiness - Integrity)</b>			95% CI	
		Coefficient	<i>SE</i>	<i>p</i>	LL	UL
<i>X</i> (Shared Identity)	<i>a</i> <sub>3</sub>	0.131	0.033	0.000	0.066	0.197
Constant	<i>i</i> <sub>m3</sub>	3.011	0.105	0.000	2.803	3.219
<i>R</i> <sup>2</sup> = 0.105						
<i>F</i> (1, 134) = 15.706, <i>p</i> < 0.001						
		<b><i>Y</i> (Social Distance - Colleague)</b>			95% CI	
		Coefficient	<i>SE</i>	<i>p</i>	LL	UL
<i>X</i> (Shared Identity)	<i>c</i> '	0.045	0.056	0.424	-0.066	0.156
<i>M</i> <sub>1</sub> (Trustworthiness - Ability)	<i>b</i> <sub>1</sub>	0.372	0.124	0.003	0.127	0.617
<i>M</i> <sub>2</sub> (Trustworthiness - Benevolence)	<i>b</i> <sub>2</sub>	-0.196	0.168	0.244	-0.528	0.136
<i>M</i> <sub>3</sub> (Trustworthiness - Integrity)	<i>b</i> <sub>3</sub>	0.880	0.219	0.000	0.447	1.312
Constant	<i>i</i> <sub>y</sub>	1.770	0.447	0.000	0.886	2.654
<i>R</i> <sup>2</sup> = 0.379						
<i>F</i> (4, 131) = 20.000, <i>p</i> < 0.001						

*Note.* Coefficients are unstandardized (see Hayes, 2013, p. 318). *n* = 136. Bootstrap sample size = 5,000. CI = bias corrected bootstrap confidence interval; LL= lower limit; UL = upper limit.

Like Study 1, the second model tested (see Figure 3) included H2, as well as H4a, H4b, and H4c, with trustworthiness mediating the relationship between shared identity and the acceptability of recommending another individual for a job working for a friend. For the willingness to recommend someone for a job working for a friend, shared identity and the trustworthiness mediators accounted for 46% of the variance, *R*<sup>2</sup> = 0.462, *F* (4,131) = 28,148, *p* < 0.001. H2 was not supported, *c*' = 0.050, *t* (131) = 0.729, *p* = 0.468. For the mediating variables, bootstrap confidence intervals again were used with a 95% confidence that *X* influences *Y* through the mediators. Mediation was supported for H4a, and H4c, based on confidence intervals for *M*<sub>1</sub> (CI: 0.006 to 0.174) and *M*<sub>3</sub> (CI: 0.031 to 0.214). H4b was not supported, as the confidence interval for *M*<sub>2</sub> (CI: -0.033 to 0.136) included zero (Hayes, 2018). The total indirect effect of perceived trustworthiness as a mediator was statistically significant, with an effect size of 0.228 and confidence interval of 0.113 to 0.353. The results of this model are reported in Table 6.

**TABLE 6**  
**STUDY 2 TEST OF SD-RECOMMEND MEDIATION MODEL**  
**(HYPOTHESES 2, 4A, 4B, AND 4C)**

Antecedent		Consequent				
		Y (Social Distance - Recommend)			95% CI	
		Coefficient	SE	p	LL	UL
X (Shared Identity)	c'	0.050	0.069	0.467	-0.086	0.186
M <sub>1</sub> (Trustworthiness - Ability)						
b <sub>1</sub>		0.459	0.152	0.003	0.159	0.759
M <sub>2</sub> (Trustworthiness - Benevolence)						
b <sub>2</sub>		0.245	0.206	0.235	-0.161	0.652
M <sub>3</sub> (Trustworthiness - Integrity)						
b <sub>3</sub>		0.860	0.278	0.002	0.331	1.390
Constant	i <sub>y</sub>	-0.695	0.548	0.206	-1.779	0.388
		<i>R</i> <sup>2</sup> = 0.462				
		<i>F</i> (4, 131) = 28.148, <i>p</i> < 0.001				

*Note.* Coefficients are unstandardized (see Hayes, 2013, p. 318). *n* = 136. Bootstrap sample size = 5,000. CI = bias corrected bootstrap confidence interval; LL= lower limit; UL = upper limit.

### Discussion

Results for Study 2 did not offer support for H1 or H2, as shared identity was not significantly related to either measure of social distance for the AMT sample. Despite the lack of a significant direct relationship, the analysis did indicate statistically significant mediation effects. Specifically, indirect perceptions of trustworthiness based on ability and integrity had indirect effects on both the willingness to accept someone as a colleague and the willingness to recommend them for a job. However, trustworthiness based on benevolence is not supported for either model. Despite this, overall, perceived trustworthiness as a whole does mediate the relationship between shared identity and the measures of social distance. Looking at the trustworthiness mediators, integrity has a larger effect size for both models, as compared to ability. However, based on contrasts (Hayes, 2018), there were no statistically significant differences in effect size between ability and integrity in either model, suggesting that neither is more proximal as a mediator.

### GENERAL DISCUSSION

The purpose of this research is to examine the impact of perceived shared identity on social distance, operationalized as the willingness to have someone as a colleague and the willingness to recommend someone for a job with a friend. We also investigate the mediating role of perceived trustworthiness as it influences the relationship between shared identity and social distance. While both Study 1 and Study 2 demonstrate partial support for the hypothesized models, Study 1 finds support for the direct relationship and partial support for mediation, while Study 2 finds more robust support for mediation. At a glance, it might appear that these two studies offer incongruous results. However, upon closer consideration, the results of Study 1 and Study 2 suggest a more complex process than that which is proposed in the hypothesized models. By considering the findings of the two studies together, we are able to better explore this process.

#### Shared Identity and Social Distance

As reported above, Hypotheses 1 and 2 were both supported in Study 1, with shared identity increasing the willingness for the respondent to accept the target as a colleague at work and to recommend the target for a job working for a friend. However, in Study 2, H1 and H2 were not supported, leading to mixed findings. In comparing means between the two studies, both the student and AMT sample rated the trainer

similarly in terms of perceived shared identity but diverged in ratings of social distance. The measures of social distance (where higher scores indicate a greater willingness to accept the target), however, had a statistically significant difference in means, with the AMT sample (Study 2) indicating a greater likelihood to accept the trainer as a colleague or recommend him for a job. This difference is somewhat surprising, as we might reasonably expect the student sample to have a narrower social distance, given a greater demographic similarity between the student sample and the trainer. However, given the present findings, it appears that other unaccounted for factors likely drive this distance.

A possible explanation for the mixed findings is that the greater professional experience held by the AMT group (who had an average 12.25 years of full-time work experience, as compared to the student sample average of 2.07 years) influences the way by which a person determines whether or not someone would be a good colleague or employee. We do not expect that the amount of full-time work experience alone accounts for this, but rather some experience gained or attitude developed likely shapes how an individual considers someone in a work context. In post-hoc analysis, we did not find any direct or indirect relationship between full time work experience and either dependent variable. It is possible, given the student sample has less overall professional experience, that the less-experienced sample would be apt to rely more heavily on social judgments, while the more-experienced sample draws from a greater set of criteria by which to professionally evaluate another individual, such as perceptions of trustworthiness. We return to this in the discussion of the trustworthiness mediation below.

Additionally, for both studies, shared identity was positively and significantly correlated with both social distance measures. However, for the AMT sample, this correlation was much weaker. Given the lack of significant findings in Study 2 and the comparatively weaker correlation between the two variables, it is possible that shared identity was more important for the student sample as compared to the AMT sample. It is also worth noting that respondents in both studies gave the trainer low shared identity scores. While there were some individual respondents who indicated strong identity overlap, as an aggregate, both samples gave the trainer low ratings for shared identity. Somewhat surprisingly, even respondents who were demographically similar to the trainer rated him as dissimilar. Given the online nature of the training, it is possible that more information about the trainer was needed to fully convey markers of identity. In the training used in this research, no personal information was given about the trainer. Rather, study participants had to deduce his identity based on observing him. Given that he was acting on behalf of the bank, it is possible that his identity was too closely associated with the organization, and participants may have simply viewed him as an extension of the organization.

This is noteworthy for this research, given that we are interested in how social dynamics play out in online training. One possible implication that can be drawn from our mixed results on perceptions of shared identity is that, in the online format, more information about an individual may be necessary for an observer to develop a sense of shared identity. If this is true, this may have important implications for organizations as they decide on how to conduct training through digital platforms. Further research would be needed to determine whether or not this dynamic influences social evaluation. However, given the low ratings found in the two studies, we argue this provides preliminary evidence that online mediums may require markers of identity be more obvious. One way to achieve this may be through richer, two-way interaction. In the current study, there was one-way interaction in order to control for differences in the training. However, a richer exchange between the trainee and trainer through repeated two-way interaction will likely provide the means by which to tacitly share markers of identity.

### **Trustworthiness**

In addition to examining the relationship between shared identity and social distance, this research is also interested in the mediating effect of trustworthiness, as it is perceived on the three facets of ability, benevolence, and integrity. Unlike the mixed results found for H1 and H2, results from both studies indicated mediation effects based on perceived trustworthiness, providing further evidence that shared identity alone is not sufficient in shaping social distance.

Based on the indirect effects, trustworthiness mediates the relationship between perceived shared identity and social distance for both models in Study 1 and Study 2. This held true even in Model 2 of Study

1, where the individual facets of trustworthiness did not have an indirect effect on their own but did as a whole. In looking at perceived trustworthiness across both studies, an interesting pattern emerges. In Study 1, shared identity was more important in influencing social distance. In Study 2, however, perceptions of trustworthiness were more important, and measures of both ability and integrity also had significant direct effects on social distance (see Tables 5 & 6). While we can only speculate based on the two studies, it is possible that perceptions of trustworthiness have greater value for respondents with longer organizational tenure. Post hoc analysis using only respondents from Study 2 with four years work experience or less ( $n = 43$ ) lends initial support to this, as mediation effects disappear for the relationship between the independent variable and both dependent variables. This alone does not provide sufficient evidence that perceived trustworthiness is less important when the respondent has less work experience but does suggest that different factors may influence social distance at different points in an individual's career.

Overall, while we have mixed findings, the data indicates that perceptions of trustworthiness do play an indirect role between perceptions of shared identity and social distance. However, the data also suggests that this relationship is more complex than the present study warrants. Thus, this opens an avenue for future research that might better capture the social processes that lead to creating stronger social ties between two individuals in online mediums.

One noteworthy pattern that did emerge in both Study 1 and Study 2 was the positive relationship between shared identity and perceptions of trustworthiness on all three facets (see Tables 3 & 5). While the subsequent impact on social distance measures was mixed, evidence from both studies provide solid evidence that perceptions of trustworthiness for ability, benevolence, and integrity all increase as shared identity increases as well. This is an interesting and important finding, as perceptions of trustworthiness can have many benefits for organizational members (Mayer et al., 1995).

### **Theoretical Implications**

This research contributes to the literature concerning social identity and trustworthiness, as well as the literature related to job training. Given the emphasis on networking for employees and job seekers, our findings confirm that shared identity plays a pivotal role in shaping perceptions of trustworthiness, which are essential in the online training context (e.g., Bedwell & Salas, 2008). In broader terms, this research also offers some support to the hypothesis that shared identity reduces perceived social distance between the participant and a social other. Returning to Kraiger's (2008) third-generation model of learning, our research supports the assertion that social dynamics are an important consideration in online training and learning.

It is also worth noting that our findings reflect the temporal expectation of trustworthiness, most notably that perceptions of benevolence take longer to form than do perceptions of ability or perceptions of integrity. While ability and integrity may be perceived rather quickly, the trustworthiness literature suggests that benevolence develops over time and repeated interaction (Mayer et al., 1995). Our results in Study 2 support the first assumption of this, which is that benevolence was not a significant mediator after first exposure to the trainer, while ability and integrity were. Furthermore, together, these three facets converge as an overall measure of perceived trustworthiness. This is consistent with expectations, as Mayer and colleagues emphasize that one or two facets without the others do not necessarily constitute trustworthiness (1995). Thus, while benevolence may not play a significant role in early trustworthiness formation, it does still play an essential part of the larger construct.

Lastly, our research contributes to the organizational literature by way of examining social distance not as a measure between network nodes but rather as a perception occurring during social interaction. While this research does not directly address the literature on networks, it does complement it by taking a social processes view of network interaction. The current research creates a lens that enables us to enrich our understanding of structural distance in social networks by illustrating how social contexts can dynamically shape this distance. By applying the social cognition literature to dyadic exchange, it is possible to examine how cognitive factors influence perception (e.g., Fiske & Taylor, 1991) that in turn affects the richness of a network tie.

## **Practical Implications**

The findings of this research support the value of social exchange in training and learning. Particularly, this research demonstrates that, in some contexts, shared identity may have potential value for enriching this exchange. More importantly, our findings support the argument that social processes are important in an online training context. While this can occur passively through this observation, as previously stated, we anticipate that interaction is key in developing both perceived shared identity and perceived trustworthiness in online training.

In the current research, shared identity was assessed through the participant viewing a social other in an online training video. Extrapolating this to a real-world setting, this research suggests there may be value in directly providing information that can be used to establish identity. Given that trust is an important consideration for online training (Bedwell & Salas, 2008), this research lends support to activities that can perhaps enhance perceived trustworthiness. Specifically, we anticipate that online training can benefit from greater exchange between the trainer and trainee, particularly in the area of the trainer sharing information about his or herself that can allow for better social interactions with the trainee.

Given the risk involved in using one's own social capital to benefit an otherwise unknown individual, an interesting finding of this research is that shared identity does indeed influence perceived trustworthiness. Increased trustworthiness may, in turn, make it easier for an individual to bear the type of personal risk associated with accepting new information from a previously unknown individual (i.e., the trainer). While we anticipate that association with the organization alone bestows an implied level of competency in the trainer, increased trustworthiness may enhance the training and learning process.

## **Limitations and Future Directions**

While this research focuses on training in a professional entry level setting (i.e., bank teller), a simulated training environment limits generalizability. While the findings could be enriched by actual observations in the workplace, the simulated training environment allowed for the training to be consistent across all participants in an effort to reduce confounding variables. As discussed, the inability to observe richer interactions between the trainer and the trainee is a limitation of this study and is also a promising avenue for future research. However, as evidenced by the transition to remote work and learning during the COVID-19 global pandemic, organizations are increasingly relying on virtual solutions to fulfill goals such as training. Furthermore, as autonomous learning continues to gain popularity (e.g., Kraiger, 2017), future research may benefit in further exploring how organizations can balance autonomous learning with the need for social interaction in the online training context.

Another limitation of this research is the reliance on a sample that included students, as students are not perfect proxies for employees. However, this limitation is mitigated by the fact that the training was for an entry-level job familiar to students and recent graduates. Additionally, the second study was comprised of participants recruited through Amazon Mechanical Turk. While MTurk has concerns about quality and representativeness, the research followed best practices in using both numeric and descriptive attention checks to ensure the validity of the data. Future research could greatly benefit from observation of real, rather than simulated, online training.

This research focuses on training solely as direct instruction, as the training content is limited in both scope and time. One area for future research would be to examine the role shared identity plays in shaping other roles a trainer can undertake, such as facilitating discourse (i.e., Arbaugh, 2008). Additionally, an avenue for future research is to replicate this research with different social "others." Particularly, we are interested in determining whether or not findings related to the facets of perceived trustworthiness would be replicated with a female acting as the trainee. Given differences in how men and women both trust and perceive trustworthiness (e.g., Buchan et al., 2008), future research would benefit from understanding the impact of gender on perceptions of trustworthiness. Furthermore, an intersectional approach looking at both gender and race could provide insight into the relationship between shared identity, trustworthiness, and social distance.

As previously mentioned, shared identity can presumably be established based on cues that suggest one's social context. Future research on shared identity could potentially bridge both social identity theory

as discussed in this paper with identity theory (i.e., Desrochers et al., 2004), as identity salience may influence the strength of shared identity. For instance, if the salience of one's identity as an alumnus for a university is high, this might encourage more shared identity than if the salience level was low. Additionally, the salience of one's career identity might shape how shared identities are acted upon in a work context. While identity salience is outside of the present research, it is an interesting avenue for future research. In line with salience, group entitativity may play an important role in determining the strength or utility of a social connection (i.e., Lickel et al., 2000), as perceived shared identity with a highly entitative group would likely be more impactful than shared identity with a less entitative group.

Lastly, based on our mixed findings between the two studies, future research could potentially benefit from a more detailed look at how things like age, experience, and organizational knowledge gained throughout one's career may shape social evaluations in the workplace. As people are working longer and changing careers later in life, this may be important as the demographics of new employees change. If there are differences based on experience or other factors, this could have practical significance for how organizations design training for employees changing jobs mid-career or re-entering the job market.

## CONCLUSION

We investigate the influence perceived shared identity has on social distance, operationalized as one's willingness to work with another person and their willingness to recommend that person for a job. Additionally, we examine perceptions of trustworthiness in terms of integrity and ability to mediate the relationship between shared identity and social distance. Our findings highlight the potential benefits perceptions of shared identity may have in training and learning, particularly as it relates to perceptions of trustworthiness. Additionally, we find mixed support for the impact perceived shared identity has on social distance. Taken together, the findings of our research highlight the importance of social exchange in online training and learning, specifically between the trainer and trainee.

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## ENDNOTE

1. Participants were assigned to one of three conditions for the purposes of a larger research project, with each participant receiving the same training. No differences were found between the groups based on the trainer or training, and thus responses to the three conditions were combined for the purposes of this research.

## REFERENCES

- Abdel-Khalek, A.M. (2006). Measuring happiness with a single-item scale. *Social Behavior and Personality: An International Journal*, 34(2), 139-150. doi: 10.2224/sbp.2006.34.2.139
- Abrams, D., & Hogg, M.A. (2008). Collective identity: Group membership and self-conception. In M.A. Hogg & R.S. Tindale (Eds.), *Blackwell Handbook of Social Psychology: Group processes* (pp. 425-460). Oxford, UK: Blackwell Publishers Ltd.
- Arbaugh, J.B. (2008). Instructors as facilitators of learner-learn interaction in third-generation learning environments. *Industrial and Organizational Psychology*, 1, 487-490. doi: 10.1111/j.1754-9434.2008.00092.x
- Ashforth, B.E., & Mael, F. (1989). Social identity theory and the organization. *Academy of Management Review*, 14(1), 20-39. doi:10.5465/amr.1989.4278999

- Attwell, G. (2019). E-learning at the workplace. In S. McGrath, M. Mulder, J. Papier, & R. Stuart (Eds.), *Handbook of Vocational Education and Training* (pp. 1-25). Springer. doi: 10.1007/978-3-319-49789-1\_110-1
- Baldwin, T.T., & Ford, J.K. (1988). Transfer of training: A Review and directions for future research. *Personnel Psychology, 41*(1), 63-105. doi: 10.1111/j.1744-6570.1988.tb00632.x
- Balliet, D., Wu, J., & De Dreu, C.K. (2014). Ingroup favoritism in cooperation: A meta-analysis. *Psychological Bulletin, 140*(6), 1556-1581. doi:10.1037/a0037737
- Bartels, J., & Hoogendam, K. (2011). The role of social identity and attitudes toward sustainability brands in buying behaviors for organic products. *Journal of Brand Management, 18*(9), 697-708. doi:10.1057/bm.2011.3
- Bedwell, W.L., & Salas, E. (2008). If you build it, will they interact? The importance of the instructor. *Industrial and Organizational Psychology, 1*, 491-493. doi: 10.1111/j.1754-9434.2008.00093.x
- Bergami, M., & Bagozzi, R.P. (2000). Self-categorization, affective commitment and group self-esteem as distinct aspects of social identity in the organization. *British Journal of Social Psychology, 39*, 555-577. doi:10.1348/014466600164633
- Blader, S.L., & Tyler, T.R. (2009). Testing and extending the group engagement model: Linkages between social identity, procedural justice, economic outcomes, and extra role behavior. *Journal of Applied Psychology, 94*(2), 445-464. doi:10.1037/a0013935
- Bogardus, E.S. (1933). A social distance scale. *Sociology & Social Research, 17*, 265-271. Retrieved from <http://psycnet.apa.org/record/1933-03965-001>
- Brewer, M.B. (1979). Ingroup bias in the minimal intergroup situation: A cognitive-motivational analysis. *Psychological Bulletin, 86*(2), 307-324. doi:10.1037/0033-2909.86.2.307
- Brown, S.A. (2011). Standardized measures for substance use stigma. *Drug and Alcohol Dependence, 116*, 137-141. doi:10.1016/j.drugalcdep.2010.12.005
- Buchan, N.R., Croson, R.T., & Solnick, S. (2008). Trust and gender: An examination of behavior and beliefs in the Investment Game. *Journal of Economic Behavior & Organization, 68*(3-4), 466-476.
- Cheng, E.W.L., & Hampson, I. (2008). Transfer of training: A review and new insights. *International Journal of Management Reviews, 10*(4), 327-341. doi: 10.1111/j.1468-2370.2007.00230.x
- Colquitt, J.A., & Rodell, J.B. (2011). Justice, trust, and trustworthiness: A longitudinal analysis integrating three theoretical perspectives. *Academy of Management Journal, 54*(6), 1183-1206. doi:10.5465/amj.2007.0572
- Colquitt, J.A., Scott, B.A., & LePine, J.A. (2007). Trust, trustworthiness, and trust propensity: A meta-analytic test of their unique relationships with risk taking and job performance. *Journal of Applied Psychology, 92*(4), 909-927. doi:10.1037/0021-9010.92.4.909
- Colquitt, J.A., LePine, J.A., & Noe, R.A. (2000). Toward an integrative theory of training motivation: A meta-analytic path analysis of 20 years of research. *Journal of Applied Psychology, 85*(5), 678-707. doi: 10.1037/0021-9010.85.5.678
- de Boer, A.G., van Lanschot, J.J., Stalmeier, P.F., van Sandick, J.W., Hulscher, J.B., de Haes, J.C., & Sprangers, M.A. (2004). Is a single-item visual analogue scale as valid, reliable and responsive as multi-item scales in measuring quality of life? *Quality of Life Research, 13*(2), 311-320. doi: 10.1023/B:QURE.0000018499.64574.1f
- Desrochers, S., Andreassi, J., & Thompson, C. (2004). Identity theory. *Organization Management Journal, 1*(1), 61-69. doi:10.1057/omj.2004.14
- Feret, H., Conway, L., & Austin, J.C. (2011). Genetic counselors' attitudes towards individuals with schizophrenia: Desire for social distance and endorsement of stereotypes. *Patient Education and Counseling, 82*(1), 69-73. doi:10.1016/j.pec.2010.02.007
- Fiske, S.T., & Taylor, S.E. 1991. *Social Cognition* (2nd ed.). New York: McGraw-Hill.
- Ghosh, P., Satyawadi, R., Joshi, J.P., Ranjan, R., & Sing, P. (2012). Towards more effective training programmes: A study of trainer attributes. *Industrial and Commercial Training, 44*(4), 194-202. doi: 10.1108/00197851211231469

- Goodman, J.K., Cryder, C.E., & Cheema, A. (2013). Data collection in a flat world: The strengths and weaknesses of Mechanical Turk samples. *Journal of Behavioral Decision Making*, 26(3), 213-224. doi: 10.1002/bdm.1753
- Granovetter, M.S. (1973). The strength of weak ties. *American Journal of Sociology*, 78(6), 1360-1380. doi:10.1086/225469
- Granovetter, M.S. (1983). The strength of weak ties: A network theory revisited. *Sociological Theory*, 1, 201-233. doi:10.2307/202051
- Greenwald, A.G., & Pettigrew, T.F. (2014). With malice toward none and charity for some: Ingroup favoritism enables discrimination. *American Psychologist*, 69(7), 669-684. doi:10.1037/a0036056
- Haslam, S.A., Powell, C., & Turner, J.C. (2000). Social identity, self-categorization, and work motivation: Rethinking the contribution of the group to positive and sustainable organizational outcomes. *Applied Psychology: An International Review*, 49(3), 319-339. doi:10.1111/1464-0597.00018
- Hayes, A.F. (2018). *Introduction to mediation, moderation, and conditional process analysis* (2nd Ed.). New York: The Guilford Press.
- Kane, A.A., Argote, L., & Levine, J.M. (2005). Knowledge transfer between groups via personnel rotation: Effects of social identity and knowledge quality. *Organizational Behavior and Human Decision Processes*, 96, 56-71. doi:10.1016/j.obhdp.2004/09/002
- Kraiger, K. (2008). Transforming our models of learning and development: Web-based instruction as enabler of third-generation instruction. *Industrial and Organizational Psychology*, 1, 454-467. doi: 10.1111/j.1754-9434.2008.00086.x
- Kraiger, K. (2017). Reflections and future directions. In J.E. Ellingson & R.A. Noe (Eds.), *Autonomous Learning in the Workplace* (pp. 307-320). New York: Routledge.
- Kramer, R.M. (2010). Collective trust within organizations: Conceptual foundations and empirical insights. *Corporate Reputation Review*, 13(2), 82-97. doi:10.1057/crr.2010.9
- Lickel, B., Hamilton, D.L., Wierzchowska, G., Lewis, A., Sherman, S.J., Uhles, A.N. (2000). Varieties of groups and the perception of group entitativity. *Journal of Personality and Social Psychology*, 78(2), 223-246. doi:10.1037//0022-3514.78.2.223
- 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. doi:10.1037/0022-3514.66.1.37
- Mathieu, J.E., Tannenbaum, S.I., & Salas, E. (1992). Influence of individual and situational characteristics on measures of training effectiveness. *Academy of Management Journal*, 35(4), 828-847. doi: 10.2307/256317
- Mayer, R.C., & Davis, J.H. (1999). The effect of the performance appraisal system on trust for management: A field quasi-experiment. *Journal of Applied Psychology*, 84(1), 123-136. doi:10.1037/0021-9010.84.1.123
- Mayer, R.C., Davis, J.H., & Schoorman, F.D. (1995). An integrative model of organizational trust. *Academy of Management Review*, 20(3), 709-734. doi:10.5465/amr.1995.9508080335
- McAllister, D.J. (1995). Affect- and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38(1), 24-59. doi:10.5465/256727
- McPherson, M., Smith-Lovin, L., & Cook, J.M. (2001). Birds of a feather: Homophily in social networks. *Annual Review of Sociology*, 27, 415-444. doi:10.1146/annurev.soc.27.1.415
- Miller, B.K., Nicols, K.M., & Eure, J. (2009). Body art in the workplace: piercing the prejudice? *Personnel Review*, 38(6), 621-640. doi:10.1108/00483480910992247
- Nunnally, J.C., & Bernstein, I.H. (1994). *Psychometric Theory*. New York: McGraw Hill, Inc.
- Oakes, P.J., Haslam, S.A., & Turner, J.C. (1994). *Stereotyping and social reality*. Blackwell Publishing.
- Parrillo, V.N., & Donoghue, C. (2005). Updating the Bogardus social distance studies: A new national survey. *The Social Science Journal*, 42, 257-271. doi:10.1016/j.sosci.2005.03.011

- Schomerus, G., Matschinger, H., & Angermeyer, M. (2009). The stigma of psychiatric treatment and help-seeking intentions for depression. *European Archives of Psychiatry and Clinical Neuroscience*, 259(5), 298-306. doi:10.1007/s00406-009-0870-y
- Schoorman, F.D., Mayer, R.C., & Davis, J.H. (2007). An integrative model of organizational trust: Past, present, and future. *Academy of Management Review*, 32(2), 344-354. doi:10.5465/amr.2007.24348410
- Sitzmann, T., Brown, K.G., Casper, W.J., Ely, K., & Zimmerman, R.D. (2008). A review and meta-analysis of the nomological network of trainee reactions. *Journal of Applied Psychology*, 92(2), 280-295. doi: 10.1037/0021-9010.93.2.280
- Sluss, D.M., & Ashforth, B.E. (2007). Relational identity and identification: Defining ourselves through work relationships. *Academy of Management Review*, 32(1), 9-32. doi:10.5465/amr.2007.23463672
- St-James, M.B., de Man, A.F., & Stout, D. (2006). Athletic style of dress and perceived social distance. *North American Journal of Psychology*, 8(3), 541-546. Retrieved from <https://search.proquest.com/docview/198021625>
- Steffens, N.K., Haslam, S.A., & Reicher, S.D. (2014). Up close and personal: Evidence that shared social identity is a basis for the 'special' relationship that binds followers to leaders. *The Leadership Quarterly*, 25, 296-313. doi:10.1016/j.leaqua.2013.08.008
- Tajfel, H., & Turner, J.C. (1979). An integrative theory of intergroup conflict. In W.G. Austin & S. Worchel (Eds.), *The Social Psychology of Intergroup Relations*, (pp. 33-47). Monterey, Calif: Brooks/Cole.
- Tumasjan, A., Strobel, M., & Welpe, I. (2011). Ethical leadership evaluations after moral transgression: Social distance makes the difference. *Journal of Business Ethics*, 99, 609-622. doi:10.1007/s10551-010-0671-2
- Turner, J.C. (1982). Towards a cognitive redefinition of the social group. In H. Tajfel (Ed.), *Social Identity and Intergroup Relations*. Cambridge, UK: Cambridge University Press.
- Turner, C.J., & Oakes, P.J. (1986). The significance of the social identity concept for social psychology with reference to individualism, interactionism and social influence. *British Journal of Social Psychology*, 25, 237-252. doi:10.1111/j.2044-8309.1986.tb00732.x
- van Knippenberg, D. (2000). Work motivation and performance: A social identity perspective. *Applied Psychology: An International Review*, 49(3), 357-371. doi:10.1111/1464-0597.00020
- Watts, D.J., Dodds, P.S., & Newman, M.E. (2002). Identity and search in social networks. *Science*, 296(5571), 1302-1305. doi:10.1126/science.1070120
- Wanous, J.P., & Hudy, M.J. (2001). Single-item reliability: A replication and extension. *Organizational Research Methods*, 4(4), 361-375. doi: 10.1177/109442810144003
- Wanous, J.P., Reichers, A.E., & Hudy, M.J. (1997). Overall job satisfaction: How good are single-item measures? *Journal of Applied Psychology*, 82(2), 247-252. doi: 10.1037/0021-9010.82.2.247
- Weinfurt, K.P., & Moghaddam, F.M. (2001). Culture and social distance: A case study of methodological cautions. *The Journal of Social Psychology*, 141(1), 101-110. doi:10.1080/00224540109600526