Leader Trustworthiness and Employee Work Intentions: A Canonical Correlation Study

Abstract

Trust, in all its forms, is frequently at the top of the list when experts write about healthy organizational environments. When studying the concept of trust, however, researchers often do not use quantitative approaches that take into account the complex relationships between multiple sets of variables, thereby not fully exploring the underlying structure of the phenomena they are investigating. The seven variables used in this study are affect- and cognition-based trust in one's leader and five employee work intentions, namely intent to remain in the organization, intent to endorse the organization and its leadership, intent to use discretionary effort, intent to perform at a higher than average level, and intent to be an organizational citizen.

This study uses the responses from 1,856 participants to examine the multiple relationships between two forms of trust in one's leader and five forms of employee work intentions. After conducting a canonical correlation analysis (CCA), the data results showed that two canonical functions, affect trust-based perspectives and cognition trust-based perspectives, account for between 35% and 85% of the explained variance for work intentions measured.

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Trust, in all its forms, is frequently at the top of the list when experts write about healthy organizational environments. Yet public trust in various institutions (e.g., government and business) is at "an all-time low" (Mishra & Mishra, 2012). We submit that while this assertion was made six years ago, the statement is true today. While there has been a wide range of proposed functions for human resource develop practitioners (e.g., Chalofsky, Rocco, & Morris, 2014), there is common agreement that the word "development" incorporated in the title implies the nurturing and growth of individuals, teams, and organizational units under the practitioners' care. The desired outcomes of development should result in the improvement of organizational performance as well as the increased health and well-being of the individual worker. Given the purposes the HRD practitioner serves, such as helping the organization emphasize an approach toward human cognitive, emotional, and physical development while maintaining the health and growth of the organization (Chalofsky, 2007; 2014), we submit that trust in all its forms is a necessary ingredient for the HR practitioner to consider.

Trust is a key component in creating a healthy work environment.

Specifying the context of trust—namely trust between individuals, within and between groups, and between individuals and their organization—is fundamental to understanding the antecedents, consequences, and problems of building and enhancing trustful relationships (Dirks & Ferrin, 2002). The referent or focus of an individual's trust will determine the relevant antecedents and outcomes (Fulmer & Gelfand, 2012). For example, building a trustful relationship may involve different antecedents and outcomes for trusting a leader, colleague, or direct report at work. The same is true when forming a sense of trust within a team or if the focus refers to trust in a proximal versus distal leader. The context of this study is at the one-to-one level and examines the premise that the extent to which employees trust their direct leader relates to an employee's work intentions. This context was chosen for the study because it seemed to be the best place to start in an organization to help HRD professionals understand the dynamics of trust.

Purpose of Study

This study sought to understand the multivariate (i.e., shared variance between two variable sets) relationships between employee perceptions of general trust in the person to whom they immediately report and employee work intentions. In particular, this study looks at the multivariate relationship between two dimensions of trust that employees form concerning their leader (i.e., affect- and cognition-based trust) and employees' expressed intensity toward five work intentions. Specifically, those intentions are intent to endorse, intent to remain, intent to perform at a higher-than-average level, intent to use discretionary effort, and intent to use organizational citizenship behaviors (OCBs) (see Figure 1).

There are two advantages to this research study not frequently seen in today's research on this topic. First, the study examines the multivariate (i.e., the shared variance between two variable sets) relationship between two forms of trust in one's leader and five employee work intentions. We agree with Sherry and Henson (2005), who stated that "determining outcomes based on research that separately examines singular causes and effects may distort the complex reality of human behavior and cognition" (p. 38).

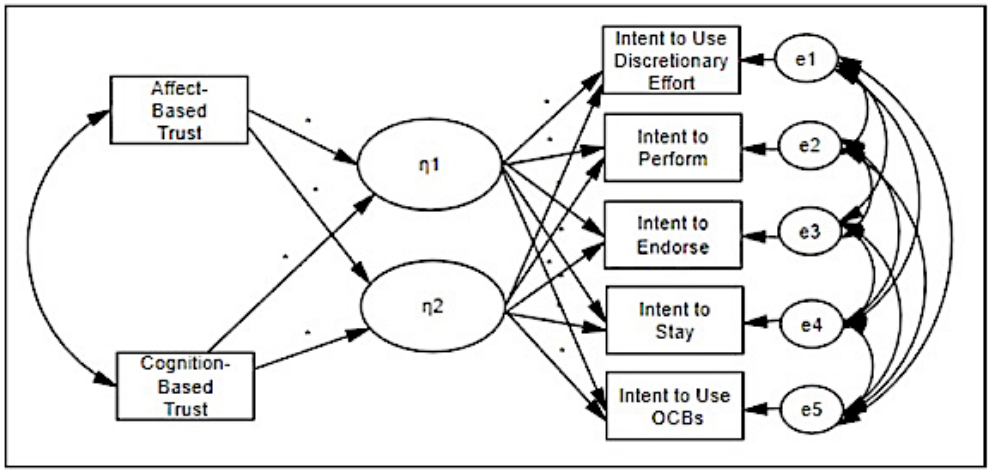

Figure 1: Research model represented as a Multiple Indicators/Multiple Causes (MIMIC) model (cf. Fan, 1997). n indicates canonical variate. * indicates coefficients associated with one canonical variate estimated when all other coefficients are constrained to be equal to values obtained for other canonical variates.

A second advantage of this study is that it presents five work intentions, some of which have been less frequently examined thus far in the trust- and work-related literature. An examination of two prominent meta-analyses (i.e., Colquitt, Scott, & LePine, 2007; Dirks & Ferrin, 2002) and an extensive integrative review (i.e., Fulmer & Gelfand, 2005) completed on trust in the last ten years reveals that some of the five intentions mentioned above have sporadically been used as outcomes for employee trust in their leader. Measures of outcomes such as risk-taking behaviors, task performance, citizenship behaviors, and counterproductive work behaviors have been frequently used (Colquitt, Scott, & LePine, 2007; Fulmer & Gelfand, 2012). Certain job attitudes such as job satisfaction, organizational commitment, intent to quit, goal commitment, and belief in information have also been researched as the consequences of employee trust (see Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012). It should be noted, however, based on our survey of the literature, that intent to endorse and intent to use discretionary effort have not been frequently researched as outcome measures.

This study examines the relationship between trust, job satisfaction, organizational commitment and five key intentions that influence organizational vitality.

Theoretical Framework and Literature Review

As shall be seen in the forthcoming pages, there has been some research done on the connection between employee trust in their leader and work intentions. We shall begin the literature review by looking at the concept of trust, the concept of intentions, and then the combination of the two.

Trust

A number of recent meta-analyses on the topic of trust (i.e., Colquitt et al., 2007; Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012) reveal three major concepts. The literature makes clear distinctions between the propensity to trust, trustworthiness, and the general concept of trust. Both the concepts of propensity to trust and trustworthiness are related to the larger concept of general trust. More specifically,

"trustworthiness and trust propensity explained incremental variance in the behavioral outcomes when general trust is controlled" (Colquitt et al., 2007, p. 909). For the purposes of this study, the term general trust is defined as an individual's "psychological state comprising the intention to accept vulnerability based upon positive expectations of the intentions or behaviors of another" (Rousseau, Sitkin, Burt, & Camerer, 1998, p. 395). The definition of general trust is built on two elements: one element concerned with the expectations of the focus person's behaviors (the trustee) and the second element concerned with the willingness of another (the trustor) to accept vulnerability to the actions of the trustee (Colquitt et al., 2007; Fulmer & Gelfand, 2012).

The concept of propensity to trust rests on the assumption that individuals differ in their tendency for risk or to accept uncertainty (Colquitt et al., 2007; McAllister, 1995). The propensity to trust is defined as "the dispositional willingness to rely on others" (Colquitt et al., 2007, p. 909). Individuals have different developmental experiences, cultural upbringings, and personality preferences that may lead to a generalized expectation as to the trustworthiness of others (Mayer, Davis, & Schoorman, 1995). Propensity to trust, when used as an antecedent in a set of more complete variables, contributes to the explanation of variance in study outcomes such as job satisfaction, organizational commitment, goal commitment, intent to quit, and satisfaction with leader (Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012).

The concept of trustworthiness is basically defined as a set of specific characteristics of the trustee (in our study, the leader), as perceived by the trustor (in our study, the employee) (Butler, 1991; Colquitt et al., 2007). Various characteristics such as leader ability, competence, benevolence, and integrity have been researched as reliably related to producing a sense of general trust in the trustor (Butler, 1991; Mayer et al., 1995).

The trustor forms opinions about the trustworthiness of another through a specific (situational/cognitive) component and a global (attitudinal/affective) component (Butler, 1991; McAllister, 1995). The cognitive logical aspect of trustworthiness results when the trustor consciously makes choices and has "good reasons" or "evidence of trustworthiness" concerning the focal person. The affective foundations for trust are formed when individuals develop emotional bonds, and when the motives of both individuals become clearer and the relationship is recognized as personally chosen rather than role prescribed (McAllister, 1995). In fact, it is possible that once the affective bonds of trust have been established, the affective connection is not easily nullified even after the cognitive basis for trust proves to be unwarranted (Zajonc, 1980). Transgressions can be easily discounted until accumulated cognitive dissonance is created through repetitive breaches in promises given (McAllister, 1995).

In quantum physics there is concept known as a process structure. A process structure is an unseen element that maintains and influences form over time yet has no rigid structure. A perfect example of a process structure in the physical universe is gravity (Wheatley, 1992). We can't see it or touch it, but we know that it shapes and influences various phenomena. We know its effects when we jump, fall, or move. A classic process structure within an organization is its vision (Wheatley, 1992).

Another process structure is trust because it acts as a "linchpin for divergent areas such as negotiation, leadership, team processes, human resource management, organizational change, entrepreneurship, and strategic alliances" (Fulmer & Gelfand, 2012, p. 1167).

Trust within organizations is important because most of today's organizations produce and supply complex products and services that require efficient, coordinated action and interdependence between employees in specialized subunits of the organization. Because efficiency is associated with higher profits, trust is essential in systems that require coordinated action and interdependence between others. There is compelling evidence that the presence of high levels of trust between leaders and followers are associated with behaviors such as greater job performance and higher levels of organizational citizenship behavior (Colquitt et al., 2007; Dirks & Ferrin, 2002; Fulmer & Gelfand, 2012). Various attitudinal outcomes have been confirmed when trust between leader and follower is established. Positive attitudes such as job satisfaction, organizational commitment, intent to remain, goal commitment, and belief in information have been shown to be higher when trust between leader and follower is established (Colquitt et al., 2007; Dirks & Ferrin, 2002; McAllister, 1995). Generalized trust has also been shown to be important to the overall health, happiness, and life satisfaction of individuals outside of work settings in Western (e.g., Schneider, Konijin, Righetti, & Rusbult, 2011) and non-Western countries (e.g., Chan, Hamamura, Li, & Zhang, 2017).

There have been several studies over the last 20 years that quantitatively support the relationship between employees' trust in their immediate leader and various important outcomes. A meta-analysis done in 2002 revealed strong statistical relationships (mean-weighted correlations) between general trust (affect- and cognition-based) in one's direct leader and various hypothesized outcomes such as job performance ($r = .17$), organizational citizen behaviors ($r = .22$), intent to quit ($r = -.38$), job satisfaction ($r = .55$), and organizational commitment ($r = .44$) (Dirks & Ferrin, 2002, p. 620). It should be noted that this meta-analysis did not involve intent to endorse the organization, intent to use discretionary effort, or intent to perform at a higher-than-average level.

In a second meta-analysis, Colquitt et al. (2007) found that trust in one's leader was highly correlated with risk-taking behaviors ($r = .34$), task performance ($r = .26$), organizational citizenship behaviors ($r = .22$), and counterproductive behaviors ($r = –.26$) (p. 915). In an extensive integrated review, Fulmer and Gelfand (2012) found consequences of interpersonal trust between the employee and their leader were associated with high trust scores and satisfaction with leader, ratings of leadership effectiveness, job satisfaction, and reduced uncertainty of work (p. 1188). Other findings showed various behavioral outcomes such as knowledge sharing, cooperation, communication, and performance were also associated with high trust scores in one's leader (Fulmer & Gelfand, 2012).

Work Intentions

We define the concept of work intentions as a "set of mental representations of the behaviors an individual chooses to manifest" (Zigarmi & Nimon 2011, p. 450). Specifically, intentions are mental plans for purposeful actions. There are two types of intentions: (a) goal or outcome intentions and (b) means intentions (Heckhausen & Beckmann, 1990). In other words, individuals have intentions to achieve certain outcomes through various actions or means. For three reasons, we chose five intentions—intent to endorse, intent to remain, intent to perform at a higher-than-average level, intent to use discretionary effort, and intent to use OCBs—as measures of outcomes.

First, in both the sociological and psychological research literature, intentions have shown to be an overwhelmingly reliable predictor of behaviors (see the following meta-analyses: Armitage & Connor, 2001; Godin & Kok, 1996; Webb & Sheeran, 2006). Second, intentions are better predictors of employee behaviors than other frequently used outcome measures such as withdrawal cognitions, job satisfaction, or organizational commitment (see the following meta-analyses: Podsakoff, LePine, & LePine, 2007; Steel & Ovalle, 1984; Tett & Meyers, 1993). Third, intentions reduce inference. In other words, one does not have to infer from outcome measures such as job satisfaction or organizational commitment that an employee might stay or endorse the organization. Those are desirable intentions and should be measured. (For more in-depth treatment, see Zigarmi & Nimon, 2011).

Research Hypothesis

This study was designed to test the multivariate relationship between two sets of constructs: (a) trust in one's leader and (b) work intentions as depicted in Figure 1. In this case, two forms of general trust (affect- and cognition-based) were chosen as the predictor variable set and five forms of work intention were chosen as the criterion variable set. These intentions have been shown to be highly correlated with employees who are passionate about their work (e.g., Shuck, Zigarmi, & Owen, 2015; Zigarmi, Galloway, & Roberts, 2016).

These five intentions have also been shown to be highly correlated with positive and negative feelings toward their manager. Zigarmi, Roberts, and Randolph (2015) showed that positive and negative affect mediated the relationship between leaders' use of various forms of power and the five intentions used in this study. Zigarmi and Roberts (2012) also found that negative and positive affect toward the job mediated the relationship between managers' perceived values (concerns for others versus self-concerns) and the five intentions used in the study. Although there is yet no multivariate evidence linking the two measures of trust to the five measures of work intention, studies mentioned above lend credence to these two sets of measures being theoretically linked.

Based on our review of related literature, we hypothesized there would be a statistically and practically significant multivariate relationship between perceptions of general trust in one's leader as measured by McAllister's affect- and cognition-based trust scales (1995) and employee work intentions as measured by the work intention inventory (WII) (Nimon & Zigarmi, 2015).

Methodology

The following sections describe the participants and the study procedure, the measures, and the analytic strategy. Each section is described in detail.

Participants and Procedure

The 1,856 people who participated in the study included human resource, learning and development, management, and non-management professionals from domestic (United States) and international organizations. Of the participant population, 68% were from the United States; 58% were female; 66% reported they held supervisory or leadership positions; and 30% were born between 1943 and 1960, 60% were born between 1961 and 1981, and 9% were born after 1982. See Table 1 for additional demographics. The study was distributed using Qualtrics software.

Using an email list from a Southern California consulting firm, we asked respondents to fill out a survey that would take 15 minutes. Directions for participation and a human subjects statement were sent to all respondents. Participants had the opportunity to opt out of the study at any point. There were no incentives. They were asked to rate their trust in their manager and to answer intention questions.

Measures

Two separate measures were distributed and analyzed. Perceptions of general trust in one's leader were measured using McAllister's affect- and cognition-based trust scales (1995). The measure uses a seven-point Likert scale with response possibilities ranging from one, indicating strongly agree, to seven, indicating strongly disagree. The total trust scale has 11 items divided into subscales: a cognition-based trust subscale (six items) and an affect-based trust subscale (five items). An example of the affect-based trust: "If I shared my problems with my leader, I know he/she would respond constructively and caringly." An example of a cognition-based item: "My leader approaches his/her job with professionalism and dedication."

The WII-SF (Nimon & Zigarmi, 2015) was used to measure five work intentions: intent to endorse ("I intend to talk positively about this organization to my family or friends"); intent to perform ("I intend to exert the energy it takes to do my job well"); intent to remain ("I intend to continue to work here because I believe it is the best decision for me"); intent to use discretionary effort ("I intend to propose innovative solutions at work"); and intent use OCBs ("I intend to support my fellow workers when I have an opportunity"). Each WII scale has three items and was measured with a six-point Likert scale with responses ranging from one, indicating to no extent, to six, indicating to the fullest extent.

More than 1,850 individuals participated in the study.

Table 1
Demographics (n = 1856)

Characteristic	*n*	%
Job Level		
Leader/Supervisor	1225	66
Non-Leader/Non-Supervisor	631	34
Tenure		
0–6 months	68	3.7
7–11 months	86	4.6
1–2 years	230	12.4
3–5 years	386	20.8
6–10 years	398	21.4
11–14 years	237	12.8
15–19 years	202	10.9
20–30 years	180	9.7
31+ years	69	3.7
Gender		
Male	767	41.3
Female	1089	58.7
Generational Cohort		
1901–1925	1	0.1
1926–1942	11	0.6
1943–1960	566	30.5
1961–1981	1108	59.7
1982–present	170	9.2
Education		
GED	7	0.4
High School Diploma	161	8.7
Associate's/2-year degree	168	9.1
Bachelor's degree	632	34.1
Master's degree	738	39.8
Doctorate/advanced professional degree	150	8.1
Location		
Asia	148	8.0
Austrialia/New Zeland	33	1.8
Canada	66	3.6
Europe	245	13.2
Africa/Middle East	44	2.8
Latin/South America	52	2.8
United States	1268	68.3

** Not all demographics add to 100% as demographic questions were not forced choice.*

Analyses

To test the study's hypothesis, we conducted canonical correlation analyses (CCA). Canonical correlation analysis characterizes the multivariate relationship between two sets of variables that are theoretically linked (Nimon & Reio, 2011a). Multivariate methods such as CCA assist in controlling Type I error rates associated with performing multiple univariate regressions (Thompson, 2000). In addition to reducing the inflation of error and the necessity of performing separate analyses, CCA honors the reality of many effects resulting from multiple causes and that many causes result from multiple effects (Thompson, 2000). Canonical correlation analysis yield m canonical functions where m equals the number of variables in the variable set with the fewest variables. In the case of the present study, the CCA yielded two canonical functions. As reviewed by Nimon, Henson, and Gates (2010),

> The first canonical function identifies linear combinations of the study's variables that yield the largest squared correlation possible. The second canonical function identifies linear combinations of the study's variables that are not correlated with the first pair of canonical variates and yield the second largest possible, given the residual variance left over from the first function. (p. 705)

Proper inferences regarding statistical significance tests resulting from CCA depend on multivariate normality, linearity, and sample size (Tabachnick & Fidell, 2001). Multivariate normality and linearity was examined by comparing the Mahalanobis D2 plot against the chi-square values (cf. Thompson, 1990). The resulting scatterplot indicated only small departures from linearity, which provided that the data was sufficient to satisfy the normality assumption (Bray & Maxwell, 1985).

The five measures of work intention (i.e., intent to use discretionary effort, intent to perform, intent to endorse, intent to stay, and intent to use OCBs) and two measures of trust in leader ((i.e., affect- and cognition-based trust in one's leader) were used in the canonical model. Standardized and unstandardized canonical function coefficients, squared structure coefficients, and communality coefficients were interpreted consistent with Sherry and Henson (2005). Additionally, canonical commonality analysis (Thompson & Miller, 1985) was employed to more fully interpret noteworthy canonical effects. Readers unfamiliar with canonical correlation or canonical commonality are referred to Oslund (2010), Sherry and Henson (2005), and Nimon and Reio (2011b), respectively.

We analyzed the canonical correlation model using yacca (Butts, 2012) and calc.yhat (Nimon & Oswald, 2013) as well as AMOS 23.0 (Oslund, 2010). We also considered an alternative structural relations model (cf. Bagozzi, Fornell, & Larcker, 1981) where the measures of leader trust and work intention were respectively modeled by a leader trust and work intention factor, and the factors were correlated. As noted by Bagozzi et al., (1981), the structural relations model is different from the canonical model and uses different assumptions. As such, the structural relations model may provide "different conclusions regarding the relationship between constructs" (Bagozzi et al., 1981, p. 452). For the canonical and structural relation models, we used the implied covariance matrix that resulted from the measurement model, following the procedure outlined by Kohn and Schooler (1978). As noted by Guarino (2004),

the measurement model allows "the researcher to control more effectively for the inevitable measurement errors of any construct" and yields "unbiased estimates of the relationships among the latent constructs" (p. 28).

Common method variance (CMV) is often a concern in conducting cross-sectional research; the present study used a confirmatory factor analysis (CFA) marker technique (Williams, Hartman, & Cavazotte, 2010). Consistent with Shuck, Nimon, and Zigarmi (2017), item-level covariances and variances from three negatively worded items (i.e., hostile, nervous, and afraid) from the International Positive and Negative Affect Scale Short Form (I-PANAS-SF; Thompson, 2007) were used to model the marker variable.

Following Williams et al., (2010), we tested a series of models to examine the effects of CMV. Initially, a CFA model that included the marker variable was tested to include the seven study factors and related 24 items. Second, we tested a baseline model in which the seven correlations between the method and substantive latent variables were set to 0 and the unstandardized regression weights and variances for the marker variable were fixed to the values from the CFA model. Third, we tested a constrained model (Model-C) in which the 24 factor loadings from the latent marker variable were constrained to be equal. Fourth, we tested an unconstrained model (Model-U) in which the 24 factor loadings from the latent marker variable were freely estimated. Finally, we tested a restricted model (Model-R) in which the substantive factor covariances from Model-U were set to the values obtained from the baseline model.

Results

After eliminating two items (one from the cognition-based trust scale and one from the intent-to-stay scale), the model fit the data from a global fit perspective with the exception of the x2 statistic (x2 [231] = 1676 1,p <.001; CFI = .965, RMSEA = .058 [90% CI= .050, .061]. SRMR = .030). Local fit assessment revealed only one standardized residual covariance value outside the bounds of 3.9. All the factor loadings were above the minimum threshold of .5, and all but one were above the more stringent threshold of .7 (cf. Bagozzi & Yi, 1988; Kline, 2016; see Tables 2 and 3). Examination of structure coefficients (cf. Graham, Guthrie, & Thompson, 2003) revealed that each manifest variable correlated most highly with its respective factor and that each factor correlated most highly with its respective manifest variable (see Tables 2 and 3). The range of composite reliability (CR; .76–.95) and average variance extracted (AVE; .51–.86), respectively, provided evidence of adequate reliability and convergent validity (cf. Bagozzi & Yi, 1988). Correlations between factors were lower than the square root of the AVE for individual factors, thus providing evidence of discriminant validity (see Table 4).

Model fit indices of the CFA marker models are presented in Table 5. The constrained model (Model-C) offered a significantly better fit, statistically, than the baseline model, which indicates there was shared common method variance between the indicators of the substantive variables and the latent marker variable. When compared to the constrained model, the unconstrained model (Model-U) fit the

Table 2
Standardized Pattern and Structure Coefficients for Work Intentions (WI) Items

Item	IDE	IP	IE	IR	IOCB	AT	CT
IDE1	**0.66**	0.38	0.34	0.27	0.27	0.22	0.17
IIDE2	**0.71**	0.41	0.37	0.30	0.29	0.24	0.19
IDE3	**0.77**	0.44	0.40	0.32	0.31	0.26	0.20
IP1	0.50	**0.87**	0.53	0.34	0.61	0.29	0.28
IP2	0.53	**0.92**	0.56	0.36	0.64	0.31	0.30
IP3	0.45	**0.79**	0.48	0.31	0.55	0.27	0.25
IE1	0.47	0.55	**0.90**	0.60	0.52	0.48	0.45
IE2	0.48	0.56	**0.93**	0.62	0.54	0.50	0.46
IE3	0.49	0.57	**0.93**	0.62	0.54	0.50	0.47
IR2	0.40	0.35	0.64	**0.96**	0.34	0.50	0.46
IR3	0.37	0.37	0.60	**0.90**	0.32	0.48	0.43
IOCB1	0.35	0.60	0.50	0.30	**0.85**	0.28	0.29
IOCB2	0.38	0.65	0.54	0.33	**0.93**	0.30	0.32
IOCB3	0.34	0.58	0.48	0.29	**0.82**	0.27	0.28

Note. Patern coefficients bolded. IDE = Intent to use Discretionary Effort. IP = Intent to Perform. IE = Intent to Endorse. IR = Intent to Remain. IOCB = Intent to use OCBs. AT = Affect-based Trust. CT = Cognition-based Trust.

Table 3
Standardized Pattern and Structure Coefficients for Trust Measure Items

Item	IDE	IP	IE	IR	IOCB	AT	CT
ATI	0.30	0.31	0.49	0.48	0.30	**0.91**	0.76
AT2	0.31	0.31	0.50	0.49	0.30	**0.93**	0.78
AT3	0.29	0.29	0.46	0.46	0.28	**0.86**	0.72
AT4	0.31	0.31	0.50	0.49	0.30	**0.93**	0.78
AT5	0.28	0.28	0.45	0.44	0.27	**0.84**	0.70
CTI	0.23	0.28	0.43	0.42	0.29	0.72	**0.86**
CT2	0.23	0.28	0.44	0.43	0.30	0.74	**0.88**
CT3	0.24	0.29	0.45	0.44	0.31	0.75	**0.90**
CT4	0.22	0.27	0.41	0.40	0.28	0.69	**0.82**
CT5	0.24	0.29	0.45	0.44	0.31	0.75	**0.90**

Note. Pattern coefficients bolded. IDE = Intent to use Discretionary Effort. IP = Intent to Perform. IE = Intent to Endorse. IR = Intent to Remain. IOCB = Intent to use OCBs. AT = Affect-based Trust. CT = Cognition-based Trust.

Table 4
Descriptive Statistics for Study Measures

Variable	IDE	IP	IE	IR	IOCB	AT	CT	AVE	CR
IDE	0.748	0.577	0.521	0.416	0.408	0.333	0.262	0.507	0.755
IP	0.478	0.890	0.607	0.388	0.704	0.337	0.322	0.736	0.893
IE	0.444	0.554	0.941	0.670	0.583	0.535	0.500	0.844	0.942
IR	0.353	0.343	0.630	0.924	0.354	0.528	0.483	0.860	0.925
IOCB	0.348	0.643	0.543	0.318	0.898	0.324	0.341	0.752	0.901
AT	0.293	0.310	0.512	0.495	0.296	0.953	0.834	0.803	0.953
CT	0.228	0.295	0.480	0.453	0.315	0.799	0.939	0.764	0.942
M	4.069	5.218	4.739	3.546	5.387	4.948	5.350		
SD	1.087	0.831	1.199	1.590	1.711	1.711	1.514		

Note. Lower triangle provides correlations among study variables using observed data. Coefficient alpha reported on diagonal. Upper triangle is implied correlation matrix from measurement model. IDE = Intent to use Discretionary Effort. IP = Intent to Perform. IE = Intent to Endorse. IR = Intent to Remain. IOCB = Intent to use OCBs. AT = Affect-based Trust. CT = Cognition-based Trust. AVE = Average Variance Extracted. CR = Composite Reliability

Table 5
Model Fit Indices and Model Comparisons for CFA Models with Marker Variable

Model	χ^2	CFI	SRMR	RMSEA	LR of $\Delta\chi^2$	Model
CFA with	1990.628	.960	.051	.056		
Baseline	2268.880	.954	.104	.058		
Method-C	2169.856	.957	.077	.057	98.98, *df* = 1,	vs. Baseline
Method-U	1883.744	.963	.048	.055	1551.513, *df* = 23,	vs. Method-C
Method-R	1904.828	.963	.055	.053	21.084, *df* = 21,	vs. Method-U

Note. df = degrees of freedom. SRMR = standardized root mean residual. RMSEA = root-mean-square error of approximation. LR = likelihood ratio test.

data better, which indicates that common method variance was not constant for all indicators. The restricted model (Model-R) was not significantly different from Model-U, which indicates that the presence of common method variance did not appear to bias the relationships among the substantive variables (cf. Williams et al., 2010).

Canonical Model

The canonical model that resulted from simultaneously correlating the measures of work intention and trust in one's leader yielded two canonical functions of .350 and .021. The full model was statistically significant across all functions using Wilk's 1c = .636 criterion (x2 [10] = 835.481, p < .001). Wilk's 1c identifies the variance not explained by the model so subtracting A from 1 provides the full model's effect

size in an l statistic (Sherry & Henson, 2005). The r effect size across both canonical functions was .364, which revealed that the model identified 36.4% between the study's two variable sets. Given the statistical and practical significance of the full model, the study hypothesis was supported.

Canonical functions one and two accounted for 35.0% and 1.3%, respectively, of the original variance across the variable sets. Thus, the two canonical functions were considered for further analysis (cf. Sherry & Henson, 2005; Tabachnick & Fidell, 2007; Thompson, 2000). The standardized canonical function coefficients, structure coefficients ( ), squared structure coefficients (r_2^s), and communality coefficients (h2) are presented in Table 6. In addition, the unique, common, and total effects across the variable sets are provided, in keeping with Nimon and Reio (2011a).

The two canonical functions accounted for between 35% and 85% of the explained variance in the work intentions (see h^2 in Table 6). The two canonical functions accounted for less than 50% of the explained variance in *intent to perform*, suggesting that the trust measures were poor predictors of that intention. Notably, the two canonical functions accounted for more than 80% of the explained variance in intent to remain and intent to endorse, indicating that the trust measures were good predictors of those intentions.

Across both functions, all the work intentions other than *intent to use discretionary effort* correlated most highly with the canonical variates associated with Function 1 (see Table 6). Although not as high as intent to use discretionary effort, 43% of the explained variance in intent to use OCBs was credited to Function 2 (see Table 6). Both trust measures correlated most highly with the canonical variates associated with Function 1 (see in Table 6).

Function 1. All work intentions were strongly related to Function 1's predictor canonical variate (see in Table 6). However, analysis of commonality coefficients revealed that the outcome canonical variate could simply be explained by intent to endorse and intent to remain. The two variables alone explained 99% of the variance in the outcome canonical variate and canonical effect for Function 1. Related, intent to endorse and intent to remain had the highest squared structure coefficients and squared index coefficients, respectively, explaining 85% and 81% of variance within the outcome canonical variate and canonical effect and 30% and 29% of variance in the predictor canonical variate for Function 1 (see Table 6).

Both measures of leader trust were strongly related with the predictor canonical variate in Function 1 (see r_s in Table 6). However, analysis of commonality coefficients revealed that the outcome of Function 1's canonical variate could simply be explained by affect-based trust. Affect-based trust alone explained 97% of the variance in the predictor canonical variate and canonical effect for Function 1 (see $\boldsymbol{r}_s^2$ in Table 6). Related, affect-based trust explained 34% of the variance in the outcome canonical variate for Function 1 (see T in Table 6).

Provided that Function 1 can be described in a parsimonious fashion by the predictors of affect-based trust and the outcomes of intent to endorse and intent to remain, we name Function 1 affect-based trust intentions. These intentions seem to have their origins in the emotional bonds and connections made over time as the

leader–employee relationship evolves. The emotional aspects or heart attachments formed through repeated fulfillment of promises seem to be associated with employee intentions to endorse and stay with their organizations.

Function 2. Only the outcomes of intent to use discretionary effort and intent to use OCBs were strongly related to the outcome canonical variate in Function 2. The two variables alone explained 99% of the variance in the outcome canonical variate and canonical effect for Function 2. Related, the variables had the highest squared structure and squared index coefficients, respectively explaining 34% and 25% of variance within the outcome canonical variate and canonical effect and .7% and .5% of variance in the predictor canonical variate for Function 2 (see r_s^2 and T in Table 6). Further analysis of the coefficients indicates that intent to use discretionary effort served as a suppressor variable in Function 2, increasing the contribution of intent to use OCBs to the outcome canonical variate.

Table 6

Canonical Solution for Relating Leader Trust and Work Intention for Functions 1 and 2

	Function 1							Function 2							
Var	Coef	Coefs	r_s	r_s^2 (%)	U	C	T	Coef	Coefs	r_s	r_s^2(%)	U	C	T	h^2(%)
IDE	0.028	0.036	0.547	29.9%	0.000	0.104	0.105	-0.757	-0.978	-0.584	34.1%	0.012	-0.005	0.007	64.0%
IP	0.013	-0.010	0.583	34.0%	0.000	0.119	0.119	0.104	0.084	0.115	1.3%	0.000	0.000	0.000	35.3%
IE	0.444	0.506	0.919	84.5%	0.033	0.262	0.296	0.037	0.042	0.044	0.2%	0.000	0.000	0.000	84.7%
IR	0.329	0.520	0.902	81.4%	0.051	0.233	0.285	-0.021	-0.034	-0.086	0.7%	0.000	0.000	0.000	82.1%
IOCB	0.122	0.090	0.576	33.2%	0.001	0.115	0.116	1.124	0.828	0.501	25.1%	0.007	-0.001	0.005	58.3%
R^2_c				35.0%							2.1%				
AT	0.440	0.732	0.986	97.2%	0.057	0.283	0.340	-0.997	-1.658	-0.168	2.8%	0.017	-0.017	0.001	100.0%
CT	0.235	0.304	0.915	83.7%	0.010	0.283	0.293	1.382	1.787	0.404	16.3%	0.020	-0.017	0.003	100.0%

Note. Structure coefficients (*rs*) greater than .40 are underlined. Communality coefficients (h^2) greater than 40% are underlined. Coef = unstandardized canonical function coefficient. Coefs = standardized canonical function coeffient. *Rc* = canonical correlation coefficient. r_s^2 = squared structure coefficient = Total/ R^2_c; U = variable's unique effect. *C* = ∑ variable's common effects. T = Unique + Common = $r^2_{\text{variable, other variate.}}$ IDE = Intent to use Discretionary Effort. IP = Intent to Perform. IE = Intent to Endorse. IR = Intent to Remain. IOCB = Intent to use Organizational Citizenship Behaviors. AT = Affect-based Trust. CT = Cognition-based Trust.

Provided that Function 2 can be described in a parsimonious fashion by the predictor of cognition-based trust as suppressed by irrelevant variance in common with affect-based trust and the outcome of intent to use OCBs as suppressed by irrelevant variance in common with intent to use discretionary effort, we name Function 2 cognition-based trust intentions. These intentions may be anchored in the logical evidence and rational reasons that may be present and consistently observed over the life of the leader–employee relationship. Rational examination of the leader's ethical behavior, use of forms of power, and manifestation of leader self-interest, which require the trustee's cause and effect analysis, could have bearing on the employee's intent to use discretionary effort or intent to be an organizational citizen.

Structural Relations Model

The structural relations model in which the measures of trust and work intention were respectively modeled by correlated leader trust and work intention factors did not fit the data well from a global fit perspective (x2 [13] = 855.326, p < .001; CFI = .885, RMSEA= .187 [90% CI =.176, .198]; SRMR= .072). Similarly, local fit assessment revealed five standardized residual covariance values outside the bounds of 3.9. The factor loadings were all above the minimum value of .5, and many were above the higher threshold of .7 (cf. Bagozzi & Yi, 1988; Kline, 2016; see Table 7). The leader trust factor explained 32.5% of variance in the work intention factor. In comparison, the canonical SEM model with only Functions 1 and 2 indicated that the two functions collectively explained 36.4% of shared variance between the two variable sets.

Table 7

Standardized Pattern and Structure Coefficients for Structural Relations Model

Construct	Work Intention	Leader Trust
IE	**0.875**	**0.536**
IP	**0.737**	**0.452**
IOCB	**0.689**	**0.423**
IR	**0.689**	**0.422**
IDE	**0.625**	0.383
AT	0.579	**0.945**
CT	0.541	**0.833**

Note. Pattern coefficients bolded. IDE = Intent to use Discretionary Effort. IP = Intent to Perform. IE= Intent to Endorse. IR = Intent to Remain. IOCB = Intent to use Organizational Citizenship Behaviors. AT = Affect-based Trust. CT = Cognition-based Trust.

Discussion

Data from the present study indicated that there was a statistically and practically significant multivariate relationship between measures of work intention and trust in one's leader, as hypothesized. The study results revealed that employee intent to endorse the organization and their intent to remain in the organization are strongly related to the positive emotional trust they may develop in their leader. The data also revealed that employee intent to use discretionary effort on behalf of the organization's outcomes and employee intent to engage in organizational citizenship behaviors were strongly related to cognitive trust (logical reasons) they may develop in their leader.

As the organizational psychology literature is beginning to reveal, studies using affect-based measures are occurring more frequently (Colquitt, Scott, Rodell, Long, Sabato, Conlon, Wesson, 2013). Affect is becoming a complementary concept for understanding and gaining insights into indicators of the quality of social exchange (Colquitt et al., 2013; Nimon, Shuck, & Zigarmi, 2016; Weiss & Cropanzano, 1996). Outcome variables such as organizational commitment, perceived organizational

support, and leader–employee exchange have shown to be mediated by either positive or negative affect. A recent meta-analysis of 493 independent samples showed that justice–performance relationships were mediated by positive and negative affect (Colquitt et al., 2013). Even more recently, Zigarmi et al. (2015) reported that positive or negative affect mediated the relationship between forms of leader power and all five intentions used in this study.

What the present study revealed was that certain intentions might be more connected to affect-based trust (than cognition-based trust) that develops between employees and their leader. This study enriches trust theory by confirming how one's trust in their leader—more specifically affect-based trust—correlates with an employee's intent to endorse the organization and its leadership and to remain in the organization. It is as if the latent emotional aspect of an employee's trusting or non-trusting mind-set toward their leader acts as a process structure that may differentially shape their intent to remain in the organization or endorse the organization.

Contributions to the Field

The significance of the findings in this study rests on the HRD practitioners' understanding of the difference between the latent concepts of affect and cognition. It is important to note that research on affect or emotions in the psychological as well as the organizational research fields has existed for decades (e.g., Brief & Weiss, 2002; Watson, Clark, & Tellegen, 1988; Weiss & Cropanzano, 1996). More importantly, it has been established that emotion and cognition are related in an asynchronous reciprocal relationship (e.g., Fugate, Harrison, & Kinicki, 2011; Parkinson, 2007), in which employees make both cognitive and affective appraisals of their work experience. It is probable that general trust is not only logically "thought out" but is also emotionally "felt out." This duality has been researched and shown to be relevant in other work experiences (e.g., Fugate et al., 2011; Parkinson, 2007). Finally, not only is affect important to take into consideration when thinking about outcomes such as trust, organizational commitment, job satisfaction, and performance, but job-related attitudes carry with them persistent, residual affect or emotion that influences employee behavior over time (see Thoresen, Kaplan, Barsky, Warren, & de Chermont, 2003). The contribution this study makes to the HRD field lies in the confirmation of the relationship between affect- and cognition-based trust in leaders and the resulting employee intentions.

When leaders do not recognize or give credence to the concept of affect at work, they may be inadvertently sabotaging their own efforts as well as weakening the fabric of employee job satisfaction, organizational commitment, and organizational culture. Zigarmi et al., (2011) stated that "the emotional life of all who live and work in organizations needs to be brought out into the open and acknowledged for its potential as well as its duplicity" (p. 212). The implications that leader-related employee affect has for job attitudes and work intentions can be seen in work-passion-related studies (e.g., Zigarmi et al., 2011; Zigarmi & Roberts, 2012; Zigarmi, Roberts, & Randolph, 2015) as well as in the leadership/management literature (e.g., Butler, 1991; Dirks & Ferrin, 2002; McAllister, 1995).

The results of this study support the contention that employees' trust in their leader plays a large part in four of the five outcome intentions measured. This study also shows that both affect- and cognition-based trust intentions are shaped in different ways. This study would imply that affective aspects of the leader–employee relationship play a significant role in the formation of general trust.

Implications for HRD Practitioners

To develop trusting relationships across organizations as well as to promote employee well-being, emphasis should be placed on improving HRD policies and practices (Whitener, 1997; Zeffane & Connell, 2003). Past research has shown that trust issues show up in most human resource areas such as compensation (e.g., Folger & Konovsky, 1989), recruitment (e.g., Rousseau, 1990), training and development, promotion, job security, performance evaluation, and feedback (e.g., Robinson & Rousseau, 1994).

Human resource development practices can directly influence an employee's general trust perceptions by providing policies and operating procedures that place an emphasis on respecting and valuing the employee. Practitioners in HRD also can indirectly influence employee perceptions of general trust by emphasizing the role the leader plays in their daily one-to-one interactions with employees whom they are assigned to develop and evaluate.

The study puts an emphasis on HRD practitioners understanding which leader behaviors elicit follower trust. More specifically, how do leaders engender trustworthiness in their followers? Training programs and evaluation processes should be geared toward helping leaders demonstrate various trustworthy behaviors. The antecedents of general trust should be emphasized. Research has shown that trustworthy behaviors such as ability (business acumen), benevolence, and integrity (Fulmer & Gelfand, 2012) could be emphasized during the recruitment of future leaders as well as in the evaluation of leadership performance. Feedback mechanisms should be used to help leaders understand the level of trustworthiness they might engender through interaction with their employees. Forms of communication "such as face-to-face interactions create greater trust than online or phone communications" (Fulmer & Gelfand, 2012, p. 1185). Face-to-face interactions as well as information sharing and employee empowerment opportunities should be emphasized (Dirks & Ferrin, 2002).

Limitations and Recommendations for Future Research

There are various limitations to this study that need to be noted. The nature of the sample is cross-sectional; therefore no claims of causality can be made. These employee perceptions can be used only as a source of information for this research. It would be helpful to get several cross-sectional samples from other countries and repeat this analysis. Another approach would be to take samples from different organizations to see whether the relationships hold across different organizational cultures. Also, some type of longitudinal repeated measures analysis should be done to establish stronger causality findings.

An alternative approach is to examine potential mediators that would explain the relationship between trust and intentions. Some mediators for certain consideration could be measured forms of cognition such as attribution processing, expectation processing, and evaluation processing. These types of cognition processing may explain more fully how both affect and cognition shape trust and various forms of intentions.

About the Authors

Drea Zigarmi is coauthor of Achieve Leadership Genius (2007) and The Leader Within (2005), and codeveloper of a number of The Ken Blanchard Companies' products, including SL II® and the widely used Leader Behavior Analysis® II instruments. In addition, he is a professor at University of San Diego.

Dr. Kim Nimon is Associate Professor in the Department of Human Resource Development at the University of North Texas. Previously, she was Associate Professor in Department of Learning Technologies and Director and Founder of the Information for Research and Analysis (IRA) Lab at the University of North Texas (UNT). Her areas of expertise are in workforce development (human resource development, employee engagement, corporate chaplaincy programs) and analytical methodologies (applied general linear model analyses, statistical software programming, measurement and evaluation).

David Conley is a current PhD student at The University of Texas at Tyler. Previously, he was a commissioned US Naval Officer and has held progressive positions in Human Resources, Organizational Training & Development, Enterprise Risk, Emergency Management, and Operations. David received a MPH in Administration from The Northwest Ohio Consortium for Public Health in 2006 which includes The University of Toledo and Bowling Green State University. His areas of interest include employee engagement, perceived organizational support, strategic development, and advanced statistical methodologies.

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THE Ken Blanchard® COMPANIES

Global Headquarters
125 State Place
Escondido, CA 92029 USA

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