



Revisiting the relationship of supervisor trust and CEO trust to turnover intentions: A three-country comparative study

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ABSTRACT

Dirks and Ferrin (2002) conducted a landmark meta-analysis that addressed many questions about the antecedents and effects of the employee's trust in their direct leader and in the organization's leadership. There are still some unanswered research questions. The present study addresses direct-leader trust and organization-leadership trust in the international setting (U.S., Russia, and Poland) while employing a refined research design that minimizes range restriction. The results show that trust of the firm's CEO and top management is more highly correlated with turnover intentions than is trust of the supervisor. In-group collectivism dimension did not moderate these trust and turnover-intentions relationships.

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1. Introduction

Griffeth, Hom, and Gaertner (2000) found that antecedents, such as the employee's intention to stay or leave the organization, remain the best predictors of voluntary turnover. Harris, Kacmar, and Witt (2005) added that it makes more sense to study these antecedents of turnover than actual voluntary turnover. Identifying predictors of quit intentions can allow the firm to correct the conditions that spur thoughts of quitting so that the firm's voluntary turnover rate can be better managed. Also the poor attitudes that are likely to be held by an employee with an intense intention to leave (Griffeth et al., 2000; Harris et al., 2005) can be contagious, negatively affecting the morale of others. For these reasons, research into the conditions that affect employee quit intentions should prove beneficial. Though there are numerous factors that can influence one's turnover intentions, such as job dissatisfaction and labor-market perceptions (Mobley, Griffeth, Hand, & Meglino, 1979), the present study focuses attention on two trust antecedents that have appeared in the turnover-intentions

literature (Dirks & Ferrin, 2002): employee's trust of their direct leader and trust of the organization's top leadership.

1.1. Leader trust

The two types of leader trust differ in their nature. Trust of the direct leader is more commonly understood in that it is formed in a dyadic interpersonal relationship with the supervisor. Trust of top management, on the other hand, is based more on the reputation of the organization's top leadership than on information gained through a direct interpersonal relationship. Unless the organization is small, most employees usually have at most a limited direct relationship with their top managers. Fox (1974) referred to top management trust as institutional trust. Scott (1980) found that top-management trust is related to the perceived value of a management-by-objective program. Carnevale (1988) reported that workers monitor organizational processes and outcomes to decide whether top management can be trusted. McCauley and Kuhnert (1992) added that CEO and top-management trust is determined more by the efficiency and fairness of organization-wide systems and practices than by the personal characteristics of the top managers. Costigan, Ilter, and Berman (1998) explored the relationship between top-management trust and the organization's reward practices.

As a result, the makeup of these trust constructs (i.e., trust of the direct leader and trust of top management) differs radically; the extent to which they differ depends on the amount of direct personal contact between the trustor and the trustee. Like the foci-of-commitment research (e.g., Becker, 1992) which has shown that

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there are multiple kinds of employee commitment (i.e., commitment to top management, commitment to supervisor, and commitment to workgroups) with different associations to outcomes such as turnover intentions, there are also multiple referents of employee trust (e.g., trust of the boss, and trust of the CEO and top management) that perhaps relate differently to turnover intentions (e.g., Dirks & Ferrin, 2002). Though the nature of our study's trust constructs differs of necessity, we believe that it is beneficial to use these two trust constructs to determine whether the employee's trust of the supervisor or the employee's trust of the CEO and top-management team has a stronger association with that employee's turnover intentions. The answer to this research question can help with the management of turnover.

Dirks and Ferrin's (2002) commented that there has not been enough research that has distinguished between trust-in-direct leader versus trust-in-organizational leadership, and the respective implications and consequences of each type. In their meta-analysis, which included nine trust-in-direct-leader studies (e.g., direct supervisor) and seven trust-in-organizational-leadership studies (e.g., trust of the CEO and top management, trust of the employer, and trust of management), they reported that there was no difference in the strength of the relationship between each kind of trust and turnover intentions. Their meta-analysis correlation showing the relationship of the employee's trust in the direct leader to intention to leave is $-.38$ while the correlation between the employee's trust in the firm's leadership and intention to leave is $-.41$. Notwithstanding these nearly equivalent results, Dirks and Ferrin suggested that future studies should continue to assess the extent to which both trust constructs account for unique variance in outcome variables. Our study addresses this suggestion and, because our data enables us to do a comparison, it provides the opportunity for examining possible differences in the relationship of both kinds of trust to quit intentions, which was not possible in the studies reviewed by Dirks and Ferrin.

1.2. Trust referents

Dirks and Ferrin (2002) claimed that employees can distinguish between an individual target of trust and a collective, system-wide target of trust. Considering the operational definitions of their referent constructs, we are not convinced of this. As defined in the studies in Dirks and Ferrin's (2002) meta-analysis, employee trust in the direct leader and employee trust in the organization's leadership appear to be overlapping constructs. A few examples of this overlap are provided next.

Though Korsgaard et al. (2000) work was coded as a trust-in-organization-leadership study in Dirks and Ferrin's (2002) meta-analysis, a respondent's rating on items such as "I trust the management of this plant" may reflect trust in the organization's leadership as well as trust in the immediate supervisor. Similarly, Parra's (1995) scale included items such as "XYZ (name of the organization) has a poor future unless it can attract better managers." The lack of clarity as to the precise target of trust in these items leaves the rater with a challenge. The ratings in these instances might reflect one's distrust (trust) of managers at all levels of the firm, including (or not including) the direct supervisor.

Matthai's (1989) operational definition of trust in management presents a different obstacle. She combined the trust-in-supervisor items with the items assessing the employee's "trust in management in general," forming a hybrid trust measure. Though Matthai's measure falls in Dirks and Ferrin's (2002) trust-in-organization-leadership classification, its complex makeup is a more obvious example of the confusion that surfaces in the literature.

In defense of Dirks and Ferrin's (2002) classification of the two sets of trust studies, they did not claim that these trust constructs (i.e., trust in the direct leader and trust in the organization's leadership) are independent. They were only interested in knowing which of the two constructs had a stronger relationship with turnover intentions. The present study provides a clearer separation of the two trust referents and then attempts to give a more definitive answer as to whether trust of the direct leader or trust of the organization's upper-level leadership is more highly correlated with turnover intentions.

Our study's operational definition of this direct-leader trust construct has two dimensions. More specifically, trust of the supervisor in the present study is a composite of McAllister's (1995) scales for cognition-based trust and affect-based trust constructs. Just as Dirks and Ferrin (2002) had operationally defined *overall trust* of the direct leader to have "affective and cognitive forms" (p. 616), we also have both aspects in our overall trust measure. Cognition-based trust, which is one kind of interpersonal trust, refers to a more rational decision to trust or to withhold trust of another employee (McAllister, 1995). This decision is grounded on the employee's history in performing responsibly and competently among others. The employee's reliability and dependability are also a part of this decision to trust or not to trust. Affect-based trust is more emotional than rational. It evolves over a period of time into a deep workplace relationship with another. Both the trustor and trustee make an emotional investment in each other's well-being (McAllister, 1995). Care and concern for persons in the relationship typify this form of trust. Both parties believe in the intrinsic value of a close interpersonal relationship with the expectation of goodwill and exchanges benefiting the two parties in the relationship. In this study, both cognition-based trust and affect-based trust are combined to form the trust-in-supervisor variable.

The CEO and top management were chosen as a second referent of trust for a couple of reasons. Two of the seven organization-leadership studies in Dirks and Ferrin's meta-analysis (i.e., Costigan et al., 1998; Rhee, 1996) focused explicitly on trust of the CEO and top managers. Two other studies (i.e., Konovsky & Cropanzano, 1991; Robinson, 1996) implied that top management was the target of trust. Examples of Konovsky and Cropanzano's (1991) and Robinson's (1996) scale items are, respectively: "The people who run this company are very honest" and "I believe my employer has high integrity." Other Dirks and Ferrin's studies (Matthai, 1989; Parra, 1995) operationalized this construct with items assessing the employee's trust of the firm's management in general. Hence, four of seven of the studies in their meta-analysis define trust-in-organization-leadership more precisely. A second reason for focusing on CEO and top-management trust is the recent top-manager scandals and bankruptcies for which CEOs and top managers are responsible. Simply put, CEO trust is on people's minds.

In sum, the trust referents in our study are clearly identified and distinguishable: that is, the employee's overall trust of the supervisor (i.e., direct leader) and the employee's trust of the organization's CEO and top managers (i.e., organization's leadership). This clear separation of trust referents allows for a fair assessment of the relationship between the employee's trust of their direct leader and the employee's trust of the CEO/top management as a predictor of turnover intentions.

1.3. Research design

Of the 16 studies in Dirks and Ferrin's (2002) meta-analysis that examined the relationship between trust and turnover intentions, only one (i.e., Rhee, 1996) distinguished between trust-in-direct leader and trust-in-organization leadership in the same study. The

other 15 studies concentrate on the association to turnover intentions of either employee trust of the direct leader or trust in the firm's leadership, but not both. The one study in Dirks and Ferrin's meta-analysis that included both trust measures was conducted in a Korean firm which may not be generalizable due to the unique nature of trust in the Korean culture (see Chung, Lee, & Jung, 1997, description of trust in *yong-go* relationships). Because that study collected data from a single organization, the top-management trust target in Rhee's (1996) study was the same for all of the study's participants. Through conversations with other employees, as well as having a shared understanding of the organization's financial results, the employees in this study may have developed a common perception of trust in the organization's top-management, possibly resulting in range restriction on this trust measure. For example, if this Korean company's earnings or market share had not fared well recently, a consensus among its employees could develop, resulting in a relatively uniform lack of trust in the firm's leadership. Because these employee trust ratings would congregate at the low end of the trust scale, the size of the correlation involving turnover intentions and this trust measure may be suppressed due to the range restriction.

Range restriction might also occur when a positive mindset develops among an organization's employees who are happy with the successes of their top-management team. Only the upper-end of the trust scale would be used by the employees who are quite satisfied with management's strategic decisions. Dirks and Ferrin (2002) corrected for unreliability but not for range restriction in their meta-analysis.

Five of the seven studies included in Dirks and Ferrin's trust-in-organization-leadership condition share this weakness. In Konovsky and Cropanzano's (1991) study, for example, 204 employees assessed their trust in the employer of a privately owned pathology laboratory. Matthai's (1989) study took place at a private psychiatric hospital. Sixty counselors and social workers rated their trust in the hospital's management at this hospital. Parra (1995) examined employee trust in management at a large aerospace corporation.

Only two trust-in-organization-leadership studies in Dirks and Ferrin's (2002) meta-analysis (i.e., Costigan et al., 1998; Robinson, 1996) included samples of employees from different organizations. Collecting data from employees who work in different organizations is a way to control for the extraneous effects of the organization's unique culture and the common perception that develops within a single firm about its CEO. In this way, no one firm's idiosyncratic corporate culture or singular frame of reference can have a strong influence on the trust-in-organization-leadership ratings, hence there is no expectation of range restriction in the data. Though they assessed the corporate culture of multiple organizations instead of trust, Hofstede, Neuijen, Ohayv, and Sanders' (1990) research design has some similarity to the Costigan et al.'s and Robinson's studies. They collected 60 employee survey responses in each subunit; in all, there were 20 subunits in 10 different organizations. Hofstede et al. (1990) recognized the wisdom of such a research design when measuring phenomena related to the corporation's culture.

All of the studies in Dirks and Ferrin's (2002) meta-analysis that examined trust in the direct leader (i.e., immediate supervisor) included different targets of trust, thereby lessening the range-restriction threat. Put simply, all points on the scale are more likely to be used when each employee is assessing their trust of their own boss; and with many bosses being evaluated, the result is an increase in the range of data points and thereby the potential for a higher correlation.

To even the "playing field" when comparing trust of top management and trust of the supervisor in the same study, it makes sense to include trust ratings of workers employed in

different firms. Most of our study's participants, who provide trust judgments of both their immediate supervisor and their firm's CEO and top management, have a different supervisor and a different CEO, minimizing the possibility of range restriction on any of our predictor variables. Only a small number of employees participating in this study come from the same organization. In this way, we can better test whether the employee's trust of the direct supervisor or the employee's trust in the organization's CEO and top managers is a more important determinant of turnover intentions.

1.4. Hypothesis development

Of the two targets of trust, which one will relate more strongly to employee turnover intentions? Supervisors manage day-to-day work activities permitting the employee to focus attention on job-related performance. Bosses make "operational and tactical decisions" within the employee's sphere of influence (Mayer & Gavin, 2005). The CEO and top-management team, on the other hand, are responsible for the firm's future prospects, its goals and business strategies, human-resource practices, and organizational morale, including the climate of integrity. For instance, Mayer and Gavin (2005) stated:

"Top management makes decisions that affect the culture and success of the organization, and decisions about the company's financial position, impending strategic moves, and policies. A lack of trust in top management would likely leave employees spending time and mental energy speculating about their futures in the company, layoffs, or the future of the company itself" (p. 877).

It seems that employees would see the "handwriting on the wall" with poor financial results of the firm over time. Ethical breaches on the part of the CEO can cause a major disruption in the morale of the organization. The improprieties of Boeing's CEOs in the early-to-mid 2000s resulted in widespread turmoil within the firm's culture (Holmes, 2005). Besides a leadership vacuum that can occur with CEO scandals, employees may become sidetracked away from effective implementation of the business strategy.

In sum, both targets of trust can affect an employee's intention to leave the organization. The immediate boss affects the employee's daily work life by making operational decisions and providing socio-emotional support that directly impact that employee's job-related well-being. The firm's CEO and top managers make decisions and model behavior that determine the success of the entire organization and every employee's welfare and job security rides on these decisions and actions (Mayer & Gavin, 2005). Decisions made by the organization's top management team have strong and lasting effects on an employee's morale and their desire to stay or leave.

Based on Mayer and Gavin's (2005) description of the import of CEO and top-management activities in relation to the immediate supervisor's activities, we expect that employee trust in the firm's CEO and top management will be more strongly correlated with turnover intentions than will the employee's trust of the immediate supervisor. Dirks and Ferrin (2002) and Mayer and Gavin (2005) proposed that trust in the supervisor should relate to the employee's job performance whereas trust in the organizational leadership should relate to an organization outcome variable such as organizational commitment. Accordingly, we state:

Hypothesis 1. The relationship between an employee's trust in the organization's CEO and top management and the employee's turnover intentions will be more strongly negative than the relationship between the employee's overall trust of the supervisor and turnover intentions.

1.5. Cross-cultural moderator hypothesis

The present study has a cross-cultural objective. Employee trust and turnover-intentions data were collected not only in the U.S. but also in Russia and Poland. The reason for including these countries is that they were a part of a broader study of trust in which the moderator effects of various cultural dimensions were examined. Russia and Poland are of interest for a number of other reasons. Russia is rich in terms of natural resources; its 2008 population and gross domestic product were ranked 9th and 7th largest in the world, respectively (World Almanac, 2009). Poland has recently been admitted to the European Union. Notwithstanding the economic crisis of 2008 and 2009, the longer term economic growth in Russia and Poland is providing multinational companies with attractive business opportunities (Dawson, 2005). Therefore, examining the effects of employee trust on turnover intentions should be of interest to multinationals considering activities in these countries.

The cross-cultural research question addressed in this study is whether the association between CEO/top-management trust and turnover intentions is stronger than the association between trust of the supervisor and turnover intentions in a low in-group collectivism culture (U.S.) than in a high in-group collectivism culture (Russia and Poland). Different results in the cross-cultural conditions (i.e., a bigger difference in the correlations in one cultural condition versus the other) would suggest the presence of a cultural moderator at work. On the other hand, equivalent findings across the two cultural conditions would support the notion that individualism–collectivism does not alter the pattern of these relationships.

Individualism–collectivism refers to the degree to which a culture values individual self-interests versus the collective interests within the society (Hofstede, 1980). A related construct is Project GLOBE's in-group collectivism cultural dimension which looks at in-group, out-group relationships (Gelfand, Bhawuk, Nishii, & Bechtold, 2004; House, Javidan, Hanges, & Dorfman, 2002). In-groups are typically formed around family and close friends. In-group collectivism indicates the person's pride, loyalty, and cohesiveness within their family and within a small group of close friends both in and outside of the organization in which they work. Collectivist societies more clearly distinguish between in-group and out-group members whereas individualist societies do so to a lesser extent. A collectivist's primary allegiance and favor is directed to in-group members while little-to-no loyalty or special favor is shown to out-group members. An individualist's allegiance and favor is more equally distributed across family, close friends, acquaintances, and even relative strangers.

Khatri, Tsang, and Begley (2006) present another perspective on this cultural dimension saying that: "Individualists define the self as an autonomous entity independent of groups; collectivists define themselves through their connectedness to groups" (p. 65). Extending this thinking to the two kinds of relationships examined in the present study, the relationship with the supervisor could be more important to the employee located in a collectivist society than the employee located in an individualist society. As a result, the employee in a collectivist society is expected to be more focused on the interpersonal duties and mutual obligations that come with the dyadic supervisor–employee relationship (Khatri et al., 2006) than the employee in an individualist employee would be.

Recall that the nature of supervisory trust and CEO/top-management trust differs markedly. Overall trust of the supervisor describes the employee's socio-emotional attachment to and respect for the capability of the supervisor. Trust of top management has more of an institutional-trust orientation. It depends on the size of the organization, the reputation of the organization's top leadership and outcomes of organization-wide decisions than on information gained through a direct interpersonal relationship with a supervisor.

According to Khatri et al.'s (2006), a collectivist should have greater sensitivity for his or her relationship with the supervisor but have less concern for a more distant "relationship" with the firm's CEO and top management. In the collectivist's view, top-management reflects the institutional organization but not a personal relationship. In the individualist's view, both "relationships" (i.e., relationship with the supervisor and with the CEO/top managers) could be seen as a series of business exchanges and transactions, mixed with varying amounts of personal contact.

Does individualism–collectivism moderate the relationship between trust and turnover intentions? In support of a cultural moderator hypothesis, Felfe, Yan, and Six (2008) discovered that the relationship of affective and normative commitment to turnover intentions is stronger in collectivist countries (China and Romania) than in an individualist country (Germany). Their study provides some evidence for the moderator role of individualism–collectivism (determined at the country level rather than the individual level) on the association between employee attitudes and that employee's turnover intentions. Accordingly, we state:

Hypothesis 2. The relationship between the employee's trust in the organization's CEO and top management and the employee's turnover intentions will be more strongly negative than the relationship between the employee's overall trust of the supervisor and turnover intentions in a low in-group collectivist culture (U.S.) than in a high in-group collectivist culture (Russia and Poland).

1.6. Unemployment rates

Economic conditions have an effect on turnover intentions (Mobley et al., 1979). This study's participants come from Rochester (New York, USA), Krasnoyarsk (Russia), and Warsaw (Poland). At the time this study was conducted, the unemployment rates were 4.5%, 8.2% and 5.7% in the metropolitan areas of Rochester, Krasnoyarsk, and Warsaw, respectively.⁵ Because these unemployment rates vary from one locale to the other, the effects of these differential rates on turnover intentions are not known, except for the obvious implication that a higher unemployment rate might tend to reduce the typical employee's intention to leave the firm. Therefore, when testing for effects (Hypotheses 1 and 2), we statistically control for the variation in the unemployment rates in the three cities.

It should also be noted that unemployment is a new experience in the post-communist regimes of Poland and Russia. While the new economic systems that have been in place for over a decade might mitigate the "newness" of this factor, the steep recessions that occurred shortly after the end of communism may have lingering effects on individuals in these countries, much like the depression had lasting effects on Americans of that era, making them reluctant to leave their current jobs. Another potentially influential factor might be the rapid changes occurring in these post-communist economies, with firms entering and leaving frequently. Such changes might tend to promote voluntary turnover.

2. Methods

2.1. Sample

There are 320 participants in this study. The Russian sample is made up of low- to mid-level employees from mostly different firms

⁵ Unemployment rates for Krasnoyarsk and Warsaw are from personal communications with co-authors Kureshov (e-mail of 10-13-06) and Kranas (e-mail of 8-23-07). For Rochester, the unemployment rate is from the U.S. Department of Labor (<http://data.bls.gov/PDQ/servlet/SurveyOutputServlet>, 8-3-09).

Table 1
Descriptive statistics for the sample in each country.

	U.S.	Poland	Russia
Employees			
Female	56%	70%	62%
Management position	39%	16%	34%
Tenure in organization	7.32 years (SD = 6.17)	3.65 years (SD = 4.49)	9.29 years (SD = 9.07)
Supervisors			
Female	37%	53%	48%
Number of years supervised target employee	2.96 years (SD = 2.94)	2.31 years (SD = 2.91)	6.86 years (SD = 6.94)
Average number of employees in firm	9444 (SD = 21,819)	1824 (SD = 12,074)	895 (SD = 1859)

located in and around city of Krasnoyarsk in central Russia. The 86 Russian participants were recruited from among current and former students of a local university, who were employed in various firms. The Polish sample is made up of 113 low- to mid-level employees from mostly different firms located in Warsaw. These Polish employees were enrolled in a non-traditional program for adult learners in a major Polish university while working in their respective organizations. The U.S. sample is made up of 121 low- to mid-level employees from mostly different firms located in Rochester, New York. The U.S. participants were employed in their respective organizations while enrolled as part-time students in adult evening programs at a local university. Demographic statistics describing each country's sample are provided in Table 1.

2.1.1. Data collection

The employees in this study completed their ratings (e.g., trust items and intention-to-leave items) and then returned their responses in person or by mail. All questionnaires were completed anonymously. The estimated response rate for the U.S. sample is above 35% and above 50% for both the Russian and Polish samples.

2.2. Measures

This study's measures come from a broader study of workplace trust that included other measures of trust (e.g., propensity to trust and trust of coworkers) and behavior (e.g., enterprising behavior). The broader study also included a sizable number of survey responses from each of four Turkish companies and from a U.S. company. Because this study is attempting to control for the unique corporate-culture effects by including, at the most, a couple of participants from each organization, data collected at the four Turkish companies ($n = 219$) and at the U.S. company ($n = 35$) were not considered in this study.

The Russian and Polish questionnaires used in this study were translated into their respective languages. Each questionnaire was then back-translated into English by one interpreter (for each country) in order to insure translation accuracy. A discussion of our method of translation and back-translation appears in Pavett and Morris (1995). To promote equivalence, an expert national from each of the countries was directly involved in conducting the study. These experts were senior academics who were fluent in both English and their national language and were experienced in doing cross-cultural work and research, including work with (and in) the U.S. and their native country. The participation of these experts helped to ensure that the translation and meaning of the questions was consistent with the original version. In addition to reviewing both versions of the questionnaire to ensure a comparability of meaning, they took control of the data gathering in their respective countries.

2.2.1. Trust measures

The questionnaire that was administered to the employees included various demographic items (e.g., number employed in firm,

length of tenure in the firm, gender, management status), items assessing the employee's trust of the firm's CEO and top management, and the employee's trust of their immediate supervisor. More specifically, our operational definition of the CEO and top-management trust construct comes from a version of Cook and Wall's (1980) scale. We substituted the words "CEO and top management" for the word "management" in Cook and Wall's scale to clarify the target of trust to be the organization's CEO and top management and not all levels of management. Their six-item scale included items such as "The CEO and top management of my organization can be trusted to make sensible decisions for the firm's future." McAllister's (1995) six-item scale measuring cognition-based trust (e.g., "This person approaches his/her job with professionalism and dedication") and five-item scale measuring affect-based trust (e.g., "I can talk freely to this individual about difficulties I am having at work and know that (s)he will want to listen") were used to form the supervisory trust scale. The CEO and supervisor scales use a five-point Likert scale format (1 = "strongly agree," ... 5 = "strongly disagree"). A low score on the trust items is indicative of high trust levels. To aid in interpretation of the trust ratings, all but three of the trust scores were reverse-scored.

2.2.2. Turnover-intentions measure

The employee's questionnaire included Mowday's (1981) two items (i.e., "I will probably look for a new job in the near future" and "All things considered, I would like to find a comparable job in another organization as soon as possible") to assess the employee's intention and desire to leave the organization. The same five-point Likert scale format was also employed in the turnover-intentions scale. To aid in interpretation of the ratings, both turnover-intentions items were reverse-scored.

2.2.3. Determining common-method bias

To ascertain the extent to which common-method bias might produce inappropriately significant findings, we conducted an unrotated principal component factor analysis (Podsakoff & Organ, 1986) on the 19 items appearing in the proposed two independent variables (i.e., 11 trust-of-supervisor items, and 6 CEO/top-management trust items) and the one criterion variable (i.e., two turnover-intentions items) for each country's sample. Four factors emerged with eigenvalues of 1 or greater for the U.S. and Polish samples, and six factors emerged with eigenvalues of 1 or greater for the Russian sample. If common-method bias were a problem in each country's data, then one "general" factor would emerge or one factor would account for most of the covariance in the trust and turnover-intentions variables (Podsakoff & Organ, 1986). The factor-analysis results for each country showed that one factor did not emerge and one factor did not account for the majority of the covariance; hence, common-method bias is not a major concern.

2.2.4. Translation equivalence

We then considered translation equivalence in the two independent trust variables (e.g., Mullen, 1995; Podsakoff &

Table 2
Loadings for trust items^a.

Items	Components for U.S. sample ^b		Components for Polish sample ^c		Components for Russian sample ^d	
	Supervisor trust	CEO trust	Supervisor trust	CEO trust	Supervisor trust	CEO trust
Supervisor trust items						
Professionalism ^e	.76	.16	.73	.34	.78	.19
Talk freely ^e	.85	.12	.72	.18	.75	-.04
Competence ^e	.84	.26	.74	.24	.82	.05
Sense of loss ^e	.80	.01	.84	.10	.67	.14
Share problems ^e	.85	.09	.84	.16	.80	.20
Respect ^e	.84	.24	.82	.17	.69	.17
Trustworthy ^e	.79	.25	.83	.22	.74	.00
CEO trust items						
Sincere ^e	.07	.75	.24	.75	.04	.80
Treat fairly ^e	.19	.83	.19	.74	.05	.79
Deceive workers	.24	.78	.25	.87	.09	.82
Sensible decision ^e	.06	.70	.16	.86	.17	.81
Efficient job ^e	.19	.76	.10	.63	.15	.49

^a Method: *Principal Component* Extraction with *Varimax* rotation. Initial eigenvalues and % of variance explained: for U.S. sample, the 1st factor = 5.71, 48%, 2nd factor = 2.26, 19%; for Polish sample, the 1st factor = 5.81, 48%, 2nd factor = 2.06, 17%; and for Russian sample, the 1st factor = 4.53, 38%, 2nd factor = 2.43, 20%.

^b $n = 121$.

^c $n = 113$.

^d $n = 86$.

^e Reverse scored.

Organ, 1986). We observed complex loadings where items loaded on more than one factor in one or more of the three samples. In line with Podsakoff and Organ's (1986) recommendations, these trust items were trimmed using a rigorous analytical procedure supplemented by judgment. We did a principal component factor analysis with varimax rotation on the items in each of the two trust variables and eliminated items that loaded on more than one of the factors until we arrived at two separate (and distinct) measures. Specifically, two cognition-based trust items (i.e., "I can rely on them not to make my job more difficult by careless work" and "If people knew more about this individual and his/her background, they would become more concerned and monitor his/her performance more closely"), two affect-based trust items (i.e., "We have a sharing relationship; we can share our ideas, feelings, and hopes" and "I would have to say that we have both made considerable emotional investment in our professional relationship"), and one CEO/top-management item (i.e., "The CEO and the TOP MANAGEMENT of my organization spell a poor future, unless we can attract better people at the top") were not retained. These items were identified by the factor analysis and were supported by judgment regarding the potential ambiguity in the phrasing of the items (e.g., colloquialisms such as "a sharing relationship", and complex positive and negative sentence construction such as "I can rely on them not . . . more difficult"), especially in a cross-cultural study. Following the item trimming, a second principal component factor analysis with varimax rotation was conducted on each country's 12 remaining trust items. These factor analyses show that the factors are distinct and that the loadings for the two trust scales appear to be equivalent for the U.S., Russian, and Polish samples (Douglas & Craig, 1983). The results appear in Table 2.

Internal consistency for the remaining items in the three scales for each country is reported in Table 3a. Composite means were computed for the five items in the CEO and top-management trust scale, for the seven items in the supervisory trust scale, and for the two-item turnover-intentions scale. Regarding scale reliability, with one exception (i.e., turnover intentions for Poland), the alphas appear to be similar across the three countries. The low alpha (.68) for the Polish respondents should not pose a problem because none of the hypotheses in this study involves a direct comparison of the Polish data (alone) with the other countries. More specifically, the turnover-intentions alpha across the three national samples (i.e., test of Hypothesis 1) is .79 (see Table 3b), and Table 3b also shows

that the alpha for the collectivist sample (combined Russia and Poland sample), which is relevant for testing Hypothesis 2, is .75. Though these turnover-intentions alphas are not high, they are still in the acceptable range.

2.3. In-group collectivism moderator

We used Project GLOBE's in-group collectivism operational definition in the present study instead of Hofstede's individualism–collectivism because Project GLOBE included Russia and Poland in its original study whereas Hofstede did not. Project GLOBE also provided recent measures of this cultural dimension in Russia, Poland, and the U.S. To test this moderator hypothesis, our study included samples from two countries considered to be higher in in-group collectivism (Russia and Poland) relative to a lower in-group collectivist country (U.S.). Russia and Poland were identified as collectivist countries due to their high current *practices* scores on GLOBE's in-group collectivism dimension (Gelfand et al., 2004). Russia's score of 5.63 and Poland's score of 5.52 on this seven-point scale are higher than the U.S. score on this in-group collectivism dimension which is 4.25. Russia's and Poland's scores place them in Band A while the U.S.' score places it in Band C. According to Project GLOBE methodology, the different bands suggest that the in-group collectivism practices in the U.S. are significantly lower than the in-group collectivism practices in Russia and Poland.

3. Results

Tables 3a and 3b show the correlations between our study's demographic variables (i.e., firm size, employee gender and tenure in firm, and management status), the two trust composites, and the employee's turnover-intentions composite for each country and for each culture. As shown in those tables, only one demographic variable is significantly correlated with turnover intentions. The employee's tenure is significantly correlated with turnover intentions in the U.S. and Polish samples ($r = -.18$ and $-.20$, respectively) and the collectivism sample ($r = -.16$) but not in the Russian sample ($r = -.14$). Note that the strength of these four tenure-turnover intentions correlations is relatively weak. In sum, there appears to be a similarity in how this study's demographic variables relate to turnover intentions between countries.

Table 3a

By country: means, standard deviations, and intercorrelations^a.

Variable		M	SD	1	2	3
United States^b						
1.	Turnover intentions	2.73	1.29	(.84)		
2.	Trust of supervisor	3.83	.88	-.36**	(.92)	
3.	Trust of CEO & top mgmt	3.32	.83	-.49**	.38**	(.84)
4.	Tenure in firm			-.18*	-.11	-.12
5.	Employee gender ^c			-.11	.07	.08
6.	Firm size			.09	.09	.01
7.	Management status ^d			.00	-.17	.04
Poland^e						
1.	Turnover intentions	2.66	1.11	(.68)		
2.	Trust of supervisor	3.56	.92	-.41**	(.91)	
3.	Trust of CEO & top mgmt	3.15	.85	-.43**	.46**	(.85)
4.	Tenure in firm			-.20*	-.06	.01
5.	Employee gender ^c			-.04	.10	.13
6.	Firm size			-.01	-.12	-.14
7.	Management status ^d			.02	-.12	-.16
Russia^f						
1.	Turnover intentions	2.52	1.07	(.88)		
2.	Trust of supervisor	3.96	.56	-.20	(.87)	
3.	Trust of CEO & top mgmt	3.42	.63	-.40**	.27*	(.81)
4.	Tenure in firm			-.14	-.02	.09
5.	Employee gender ^c			-.03	.05	-.05
6.	Firm size			-.08	.03	-.18
7.	Management status ^d			-.12	.00	.19

^a Cronbach's alphas appear on the diagonal for multiple-item measures.^b n = 121.^c Male = 0, female = 1.^d Non-manager = 0, manager = 1.^e n = 113.^f n = 86.

* p < .05 (two-tailed test).

** p < .01 (two-tailed test).

Table 3b

By culture: means, standard deviations, and intercorrelations^a.

Variable		M	SD	1	2	3
Entire sample^b						
1.	Turnover intentions	2.65	1.17	(.79)		
2.	Trust of supervisor	3.77	.84	-.34**	(.92)	
3.	Trust of CEO & top mgmt	3.29	.79	-.45**	.41**	(.84)
4.	Tenure in firm			-.16*	.01	-.16
5.	Employee gender ^c			-.07	.06	-.07
6.	Firm size			.06	.02	.06
7.	Management status ^d			-.02	-.07	-.02
8.	Unemployment rate			-.07	.08	-.07
Individualism^e						
1.	Turnover intentions	2.73	1.29	(.84)		
2.	Trust of supervisor	3.83	.88	-.36**	(.92)	
3.	Trust of CEO & top mgmt	3.32	.83	-.49**	.38**	(.84)
4.	Tenure in firm			-.18*	-.11	-.12
5.	Employee gender ^c			-.11	.07	.08
6.	Firm size			.09	.09	.01
7.	Management status ^d			.00	-.17	.04
Collectivism^f						
1.	Turnover intentions	2.60	1.10	(.75)		
2.	Trust of supervisor	3.73	.81	-.34**	(.91)	
3.	Trust of CEO & top mgmt	3.27	.77	-.42**	.43**	(.84)
4.	Tenure in firm			-.16*	.06	.11
5.	Employee gender ^c			-.03	.06	.05
6.	Firm size			-.01	-.11	-.14
7.	Management status ^d			.07	-.01	.04

^a Cronbach's alphas appear on the diagonal for multiple-item measures.^b n = 320.^c Male = 0, female = 1.^d Non-manager = 0, manager = 1.^e n = 121.^f n = 199.

* p < .05 (two-tailed test).

** p < .01 (two-tailed test).

Hypothesis 1 proposed that the relationship between an employee's trust in the organization's CEO and top management and the employee's turnover intentions will be stronger (i.e., more negatively correlated) than the relationship between that employee's overall trust of the supervisor and turnover intentions for the combined sample. The correlation is $-.45$ ($p < .01$) for the CEO and top management relationship and $-.34$ ($p < .01$) for trust-of-supervisor relationship. In a formal test of this first hypothesis, Hotelling's (1931) procedure testing the difference between two non-independent correlations was used to determine whether these two non-independent correlations are significantly different (see Howell, 1982). The results indicate that there is a significant difference in the strength of the correlations ($t = 1.91$, $df = 317$, $p < .05$, one-tailed). This gives preliminary support for Hypothesis 1.

Two hierarchical regressions were then conducted with the turnover-intentions composite serving as the dependent variable in both. In the first regression procedure, employee tenure in the firm, the one control variable that is significantly correlated with turnover intentions, was entered in Step 1, along with each country's unemployment rate. That is, the 4.5% unemployment rate for the U.S. respondents, the 8.2% rate for Krasnoyarsk respondents, and the 5.7% rate for Warsaw respondents were also entered in Step 1 to control for the extraneous effects of each country's unemployment rate. The employee's CEO/top-management trust variable was entered in Step 2, followed by the employee's trust of the supervisor in Step 3. In the second regression, employee tenure and the unemployment rates were again entered in Step 1, followed by trust of the supervisor in Step 2 and by CEO/top-management trust in Step 3. Thus, the trust variables in Steps 2 and 3 were reversed in the two regressions.

As shown in Table 4, the unique, incremental variance accounted for by the Step 3 trust variable in the two regression models changes depending on the variable entered; in this way, we can determine the strength of each predictor variable. Only 3% ($p < .01$) of the variance is accounted for when the third-step variable is trust of the supervisor (see Regression 1 in Table 4) whereas 11% ($p < .01$) of the variance is accounted for when the third-step variable is CEO and top-management trust (see Regression 2 in Table 4). Both Hotelling's results and the regression results indicate support for Hypothesis 1 due to the strength of the CEO trust and intention-to-leave relationship relative to the supervisory trust and intention-to-leave relationship for the combined sample.

Table 4
Results of hierarchical regression analysis of trust of supervisor and CEO trust variables on turnover intentions.

Variable	Combined sample ^a		
	B	SE	ΔR^2
Regression 1			
Step 1: Demographic/control variable			
Tenure	-.03	.01	.03*
Unemployment rate	-.04	.04	
Step 2: CEO/top-management trust			
Step 3: Trust of supervisor	-.27	.08	.03**
Regression 2			
Step 1: Demographic/control variable			
Tenure	-.03	.01	.03*
Unemployment rate	-.04	.04	
Step 2: Trust of supervisor			
Step 3: CEO/top-management trust	-.53	.08	.11**

Note: B represents the unstandardized regression coefficients for each step in the regression equation.

^a $n = 320$.

* $p < .05$.

** $p < .01$.

Hypothesis 2 proposed that the relationship between CEO/top-management trust and turnover intentions will be more strongly negative than the relationship between trust of the supervisor and turnover intentions in the low in-group collectivism condition (U.S.) than in the high in-group collectivism condition (Russia and Poland). The results show that the correlations are $-.42$ ($p < .01$) for the CEO relationship and $-.34$ ($p < .01$) for the trust-of-supervisor relationship to turnover intentions in the high in-group collectivism condition (Russia and Poland) whereas the correlations are $-.49$ ($p < .01$) for the CEO relationship and $-.36$ ($p < .01$) for the trust-of-supervisor relationship to turnover intentions in the low in-group collectivism condition (U.S.). Upon inspection, it appears that the hypothesis is supported. Ghiselli, Campbell, and Zedeck (1981) recommended subgroup analysis, which is separating a sample on the basis of the moderator variable and then assessing the relationship between the predictor and criterion in each subgroup. In this study, we are assessing the strength of the relationships of two predictor variables to the criterion variable in each cultural condition. Hotelling's (1931) procedure testing the difference between two non-independent correlations was again used to determine whether these two non-independent correlations are significantly different in each cultural condition. Hotelling's results indicate that there is not a significant difference in the strength of the two correlations (i.e., [1] CEO/top-management trust to turnover intentions versus [2] overall trust of supervisor to turnover intentions) in the low in-group collectivism condition ($t = 1.46$, $df = 118$, $p = .08$, one-tailed: U.S. sample) and in the high in-group collectivism condition ($t = 1.18$, $df = 196$, $p = .12$, one-tailed: Russia and Poland samples). These results lack statistical significance and therefore do not support Hypothesis 2. Though the Hotelling's t -test results did not reach statistical significance in the two conditions, this possibly reflects the moderate sample size of the low in-group collectivism condition.

4. Discussion

The purpose of this study is to determine whether an employee's trust of the direct leader (i.e., trust of the supervisor) or their trust in the organization's leadership (i.e., trust of the CEO and top management) is more highly correlated with the employee's turnover intentions. Unlike previous studies, the conceptual and operational definitions of supervisory trust and CEO/top-management trust were clearly differentiated, and a within-subjects design was employed to better examine the strength of the relationships with a maximum of statistical power. The majority of the participants were from different organizations, lessening the risk of range restriction on the top-management trust variable. For these reasons, we believe that the internal validity of the present study is superior to previous studies that have explored the relationship between trust and turnover intentions. We have also included data from three countries in order to explore the possibility of cultural moderation of the hypothesized relationships.

We discovered that, across the three samples, the employee's trust in the organization's CEO and top management is more highly associated with turnover intentions than is their overall trust of their immediate supervisor. It might not be surprising that CEO and top-management trust was more salient than the trust of one's direct supervisor. An incompetent (or competent) and uncaring (or caring) boss seems to have less of an effect on turnover intentions than does a lack of trust (or a lot of trust) in the top-management team. Our hypothesis is that lacking trust in their top-management leadership may be more disturbing to the average employee because it spells a poor future for the firm and subsequently their own job security. We also wonder whether the employee who is

unhappy with an incompetent boss might become discouraged by the lack of support from the firm in general, blaming the leadership, and thereby deciding to leave. This thinking is still speculative until future research can pinpoint exactly how CEO/top-management trust influences turnover intentions.

We found that in-group collectivism (i.e., individualism versus collectivism) did not moderate the hypothesized relationships. Thus, the rationality of basing one's turnover intentions more on the trust of the CEO's business acumen and integrity over the trust of the immediate supervisor seems plausible in any societal context.

Though hypotheses were not reported formally in the literature, we examined the possibility of a second widely studied cultural moderator (i.e., power distance) affecting the pattern of relationships in this study. Power distance indicates the extent to which society as a whole (and therefore organizational members) accepts that power is to be unequally shared and that status differences and inequality are viewed as tolerable (Hofstede, 1980). Note that Project GLOBE categorized Russia in Band A and the U.S. and Poland in Band B as far as power distance (Carl et al., 2004). Russia's power distance score is 5.57 whereas the U.S. and Poland's power distance scores are 4.88 and 5.10, respectively. Both sets of scores reflect current power distance practices in these countries.

The results show that the correlations are $-.40$ ($p < .01$) for the CEO relationship and $-.20$ ($p = .07$) for the trust-of-supervisor relationship to turnover intentions in the high power distance condition (Russia) whereas the correlations are $-.45$ ($p < .01$) for the CEO relationship and $-.37$ ($p < .01$) for the trust-of-supervisor relationship to turnover intentions in the low power distance condition (U.S. and Poland).

Hotelling's (1931) procedure testing the difference between two non-independent correlations was again used to determine whether these two non-independent correlations are significantly different in each cultural condition. Hotelling's results indicate that there is not a significant difference in the strength of the two correlations (i.e., [1] CEO/top management trust to turnover intentions versus [2] overall trust of supervisor to turnover intentions) in the low power distance condition ($t = 1.36$, $df = 231$, $p = .09$, one-tailed: U.S. and Polish samples) and in the high power distance condition ($t = 1.66$, $df = 83$, $p = .05$, one-tailed: Russian sample). These results provide a preliminary indication that there is statistical significance for the moderating effect of power distance. Future research should examine this cultural variable in more depth and also develop a hypothesis and explanation for the basis of this effect.

4.1. Limitations

Though we have attempted to strengthen this study's internal validity with better measurement and an improved research design, we also acknowledge that our two-item turnover-intentions scale needs revision. Problems with internal consistency could lie in the multiple meanings of the two turnover-intention items. One item clearly measures the employee's desire to leave the organization whereas the second item allows for a broader interpretation: the employee's desire to look for a different job, which could be within or outside of the organization. Examining the relationship of trust with a better measure of turnover intentions will strengthen future studies.

There might also be concern with our study's external validity. Participants were recruited through their connections with a university's adult-education program or alumni office. Though this recruitment process may suggest younger samples, the average tenure of the Russian, Polish, and U.S. participants in their firms is 9.29, 3.65, and 7.32 years, respectively, suggesting relatively experienced employees in this study.

Admittedly, the participants in the three samples represent the more educated folks within each country. Will our findings generalize to less-educated members of the organization? Because the three samples came from adult-education programs, the participant's trust of the supervisor could have been inflated due to tuition-remission policies. That is, employees approved for university coursework may have trusted their bosses more because they were able to capitalize on this discretionary benefit and they might have conditions on the tuition reimbursement that entail remaining with the firm. Though we have attempted to lessen the threat of range restriction on the CEO trust variable, it is possible that it has surfaced in our data in other ways (i.e., the supervisor trust or the turnover intentions variables).

Finally, our cross-cultural comparison involved only three countries, one of which served as the sole representative of a low in-group collectivist country. To strengthen this comparison, at least one other Band C nation should have been included. Because of this shortcoming, our "cultural" moderator variable is actually the U.S. versus two high in-group collectivism countries.

4.2. Managerial relevance

Some organizations conduct climate surveys to assess employee satisfaction with supervisory practices; trust and justice issues are at times included (McClelland, 1988). Considering our study's findings, it may behoove the firm to assess the employees' trust of the CEO and top-management team as well. In this way, turnover intentions and the turnover decision can be better managed, utilizing trends in employee trust of the firm's top management as a guide. Defining the CEO/top-management trust construct with multiple sub-dimensions may also make sense. This study's CEO/top-management trust scale had two primary dimensions: competence (e.g., "Seem to do an efficient job") and integrity (e.g., "Would be quite prepared to gain advantage by deceiving workers"). Expanding the number of items and improving the quality of the items for each dimension in a top-management trust scale may provide a more precise measurement of top-management trust and its effects on the firm's employees.

Assessing CEO/top-management competence in different ways and at different times also seems prudent. The firm's vision, business strategy, and organization-wide HR processes reflect different aspects of competence, and each could be assessed accordingly. The suggestion of measuring CEO trust over time may seem controversial to some practitioners. Such a practice may be deemed off-limits due to the sacrosanct status given to the CEO. There is, however, a literature (e.g., Beslin & Reddin, 2004; McClelland, 1988) that supports the measurement of the employee's perception of senior-management trustworthiness in periodic audits.

Audit results can give information for better managing turnover, allowing the firm to shore up top-management trust (distrust) that is, in part, responsible for keeping or driving workers away from the organization. As for suggestions for shoring up sagging top-manager trust levels, Mayer and Davis (1999) demonstrated that employee's trust of top management improved over time when an inaccurate performance-appraisal system was replaced with a more effective system. Their findings suggest that organization-wide improvements in HR systems may be an effective strategy for elevating top-management trust levels. Other scholars (Beslin & Reddin, 2004; McClelland, 1988; Mishra, Mishra, & Spreitzer, 2009) have encouraged top management to adjust their communication styles when employee trust drops. Mishra et al. recommend more open and meaningful exchanges that involves dialog with junior-level employees. Face time with the CEO (i.e., small-group location visits, town-hall meetings, and direct-email access) can, in Beslin and Reddin's view, improve employee trust perceptions of top-management.

Our study is the only research effort that has directly compared the strength of trust of the supervisor and CEO/top-management trust to turnover intentions in Eastern Europe and the United States. We have found that the employee's trust of the CEO and top management is a stronger predictor of turnover intentions than overall trust of the boss across the three national samples. In our view, employees are basing their turnover intentions, in part, on a perception of the trust that they have in the CEO and top management, which is most likely driven by their competence and integrity and that is quite rational considering the importance of top-management decision making.

In their leadership book, Kouzes and Posner (2002) state that:

"A key factor in why people stay in organizations is their managers. It's equally important in why people leave organizations. People, in fact, don't generally quit companies, they quit managers" (p. 283).

Our findings challenge Kouzes and Posner's thinking. Clearly, employee turnover intentions are influenced by the trust level of the employee's direct manager. Our results show this. Our findings, however, also speak to the importance of CEO and top-management trust as a more powerful determinant of quit intentions. Such a conclusion is still open for debate and needs to be corroborated by more studies.

References

- Becker, T. E. (1992). Foci and bases of commitment: Are they distinctions worth making? *Academy of Management Journal*, 35: 232–244.
- Beslin, R., & Reddin, C. (2004). How leaders can communicate to build trust. *Ivey Business Journal Online*, November/December: G1–G8.
- Carl, D., Gupta, V., & Javidan, M. (2004). Power distance. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, leadership, and organizations* (pp. 513–565). Thousand Oaks, CA: Sage.
- Carnevale, D. G. (1988). *Organization trust: A test of a model of its determinants*. Unpublished dissertation, Florida State University, Tallahassee, Florida.
- Chung, K. H., Lee, H. C., & Jung, K. H. (1997). *Korean management: Global strategy and cultural transformation*. Berlin: Walter de Gruyter.
- Cook, J., & Wall, T. B. (1980). New work attitude measure of trust, organizational commitment, and personal non-fulfillment. *Journal of Occupational Psychology*, 53: 39–52.
- Costigan, R. D., Ilter, S. S., & Berman, J. J. (1998). A multi-dimensional study of trust in organizations. *Journal of Managerial Issues*, X: 303–317.
- Dawson, C. (2005). Emerging markets: Beyond the big four. *Business Week*, 3965: 94.
- Dirks, K. T., & Ferrin, D. L. (2002). Trust in leadership: Meta-analytic findings and implications for research and practice. *Journal of Applied Psychology*, 85: 611–628.
- Douglas, S. P., & Craig, S. (1983). *International marketing research*. Englewood Cliffs, NJ: Prentice Hall.
- Felfe, J., Yan, W., & Six, B. (2008). The impact of individual collectivism on commitment and its influence on organizational citizenship behaviour and turnover in three countries. *International Journal of Cross Cultural Management*, 8: 211–237.
- Fox, A. (1974). *Beyond contract: Work, power, and trust relations*. London: Faber and Faber.
- Gelfand, M. J., Bhawuk, D. P. S., Nishii, L. H., & Bechtold, D. J. (2004). Individualism and collectivism. In R. J. House, P. J. Hanges, M. Javidan, P. W. Dorfman, & V. Gupta (Eds.), *Culture, leadership, and organizations* (pp. 437–512). Thousand Oaks, CA: Sage.
- Ghiselli, E. E., Campbell, J. P., & Zedeck, S. (1981). *Measurement theory for the behavioral sciences*. San Francisco, CA: WH Freeman and Company.
- Griffeth, R. W., Hom, P. W., & Gaertner, S. (2000). A meta-analysis of antecedents and correlates of employee turnover: Update, moderator tests, and research implications for the next millennium. *Journal of Management*, 26: 463–488.
- Harris, K. J., Kacmar, K. M., & Witt, L. A. (2005). An examination of the curvilinear relationship between leader-member exchange and intent to turnover. *Journal of Organizational Behavior*, 26: 363–378.
- Hofstede, G. (1980). *Culture's consequences: International differences in work-related values*. Beverly Hills, CA: Sage.
- Hofstede, G., Neuijen, B., Ohayv, D. D., & Sanders, G. (1990). Measuring organizational cultures: A qualitative and quantitative study across twenty cases. *Administrative Science Quarterly*, 35: 286–316.
- Holmes, S. (2005). Why Boeing's culture breeds turmoil. *Business Week*, 3925: 34.
- Hotelling, H. (1931). The generalization of Student's Ratio. *Annals of Mathematical Statistics*, 2: 360–378.
- House, R. J., Javidan, M., Hanges, P., & Dorfman, P. (2002). Understanding cultures and implicit leadership theories across the globe: An introduction to project GLOBE. *Journal of World Business*, 37: 3–10.
- Howell, D. C. (1982). *Statistical methods for psychology*. Boston, MA: Duxbury Press.
- Khatri, N., Tsang, E., & Begley, T. M. (2006). Cronyism: A cross-cultural analysis. *Journal of International Business Studies*, 37: 61–75.
- Konovsky, M. A., & Cropanzano, R. (1991). Perceived fairness of employee drug testing as a predictor of employee attitudes and job performance. *Journal of Applied Psychology*, 76: 698–707.
- Korsgaard, M. A., Sapienza, H. J., & Schweiger, D. M. (2000). *Beaten before begun: The role of procedural justice in planning change*. Unpublished manuscript, University of South Carolina.
- Kouzes, J. M., & Posner, B. Z. (2002). *Leadership challenge*. San Francisco, CA: Jossey-Bass.
- Matthai, J. M. (1989). Employee perceptions of trust, satisfaction, and commitment as predictors of turnover intentions in a mental health setting (Doctoral dissertation, Vanderbilt University, 1989). *Dissertation Abstracts International*, 51: 972.
- 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: 123–136.
- Mayer, R. C., & Gavin, M. B. (2005). Trust in management and performance: Who minds the shop while employees watch the boss? *Academy of Management Journal*, 48: 874–888.
- McAllister, D. J. (1995). Affect and cognition-based trust as foundations for interpersonal cooperation in organizations. *Academy of Management Journal*, 38: 24–59.
- McCauley, D. P., & Kuhnert, K. W. (1992). A theoretical review and empirical investigation of employee trust. *Public Administration Quarterly*, Summer: 265–285.
- McClelland, V. A. (1988). Upward communication: Is anyone listening? *Personnel Journal*, 67: 124–130.
- Mishra, A. K., Mishra, K. E., & Spreitzer, G. M. (2009). Downsizing the company without downsizing morale. *Sloan Management Review*, 50(3): 39–44.
- Mobley, W. H., Griffeth, R. W., Hand, H. H., & Meglino, B. M. (1979). Review and conceptual analysis of the employee turnover process. *Psychological Bulletin*, 86: 493–522.
- Mowday, R. T. (1981). Viewing turnover from the perspective of those who remain: The relationship of job attitudes to attributions of the causes of turnover. *Journal of Applied Psychology*, 66: 120–123.
- Mullen, M. R. (1995). Diagnosing measurement equivalence in cross-national research. *Journal of International Business Studies*, 26: 573–596.
- Parra, L. F. (1995). Trust in management and job satisfaction as predictors of turnover intention (Doctoral dissertation, Bowling Green State University, 1995). *Dissertation Abstracts International*, 57: 744.
- Pavett, C., & Morris, T. (1995). Management styles within a multinational corporation: A five-country comparative study. *Human Relations*, 48: 1171–1191.
- Podsakoff, P. M., & Organ, D. W. (1986). Self-reports in organizational research: Problems and prospects. *Journal of Management*, 12: 531–544.
- Rhee, J. (1996). *Organizational justice in an employee participation program*. Unpublished doctoral dissertation, Ithaca, NY: Cornell University.
- Robinson, S. L. (1996). Trust and breach of the psychological contract. *Administrative Science Quarterly*, 41: 574–599.
- Scott, D. (1980). The causal relationship between trust and the assessed value of management by objectives. *Journal of Management*, 6: 157–175.
- World almanac and book of facts. (2009). New York: World Almanac Books.