

This article was downloaded by: [Kalyanaram Gurumurthy]

On: 17 October 2011, At: 10:03

Publisher: Routledge

Informa Ltd Registered in England and Wales Registered Number: 1072954 Registered office: Mortimer House, 37-41 Mortimer Street, London W1T 3JH, UK



The International Journal of Human Resource Management

Publication details, including instructions for authors and subscription information:

<http://www.tandfonline.com/loi/rjih20>

Boundary conditions for turnover intentions: exploratory evidence from China, Jordan, Turkey, and the United States

Hao Chen^a, David L. Ford Jr.^a, Gurumurthy Kalyanaram^b & Rabi S. Bhagat^c

^a School of Management, The University of Texas at Dallas, Richardson, USA

^b Amrita School of Business, Amrita Vishwa Vidyapeetham University, Coimbatore, India

^c Fogelman College of Business, University of Memphis, Memphis, USA

Available online: 17 Oct 2011

To cite this article: Hao Chen, David L. Ford Jr., Gurumurthy Kalyanaram & Rabi S. Bhagat (2011): Boundary conditions for turnover intentions: exploratory evidence from China, Jordan, Turkey, and the United States, *The International Journal of Human Resource Management*, DOI:10.1080/09585192.2011.610968

To link to this article: <http://dx.doi.org/10.1080/09585192.2011.610968>



PLEASE SCROLL DOWN FOR ARTICLE

Full terms and conditions of use: <http://www.tandfonline.com/page/terms-and-conditions>

This article may be used for research, teaching, and private study purposes. Any substantial or systematic reproduction, redistribution, reselling, loan, sub-licensing, systematic supply, or distribution in any form to anyone is expressly forbidden.

The publisher does not give any warranty express or implied or make any representation that the contents will be complete or accurate or up to date. The accuracy of any instructions, formulae, and drug doses should be independently verified with primary sources. The publisher shall not be liable for any loss, actions, claims, proceedings,

demand, or costs or damages whatsoever or howsoever caused arising directly or indirectly in connection with or arising out of the use of this material.

Boundary conditions for turnover intentions: exploratory evidence from China, Jordan, Turkey, and the United States¹

Hao Chen^a, David L. Ford Jr.^{a*}, Gurumurthy Kalyanaram^b and Rabi S.Bhagat^c

^a*School of Management, The University of Texas at Dallas, Richardson, USA;* ^b*Amrita School of Business, Amrita Vishwa Vidyapeetham University, Coimbatore, India;* ^c*Fogelman College of Business, University of Memphis, Memphis, USA*

This article examines the boundary conditions for the formation of turnover intention. We propose that the environment, both at the firm level and at the societal level, moderates the relationships among organizational commitment, job satisfaction, and turnover intention. Our findings show support for our model using professional employees from China, Jordan, Turkey, and the USA and reveal the similarities/differences across cultures. The results call for our attention in taking into consideration the environmental conditions (organizational, cultural, and economic) when studying antecedent factors of turnover intention. We also provide implications for researchers and practitioners in the human resource management (HRM) field and suggestions for giving attention to countries and regions that have been understudied.

Keywords: boundary factors; job satisfaction; organizational commitment; organizational, cultural, and economic environment; turnover intention

1. Introduction

Turnover intentions have been an important topic in human resource management (HRM) (Koh and Yer 2000; Parnell and Crandall 2003; Lam, Chen and Takeuchi 2009). By looking into employees' intention to leave, scholars identify factors that organizations should address when implementing policies designed to solve problems that turnover brings or to fit for their unique HRM systems. However, studies over the last decades provide explanations mainly on the antecedents of turnover intention. Among them, most of the studies focus on the single-country context and fail to provide a general model to explain what influences turnover intention and under what conditions (Fang 2001; Takeuchi and Takeuchi 2009). Due to the fact that there is no consistent model of the antecedent factors for turnover intention, we feel urged to look for these boundary conditions under which the antecedent factors for turnover intention may be consistent over different cultural contexts. In this study, we focus on the environmental conditions in which the firms are embedded. We also test our model by including countries that have been heavily studied – China and the USA (Zhang and Agarwal 2009), as well as countries that have been understudied – Jordan and Turkey (Abu-Doleh and Weir 2007; Budhwar and Mellahi 2007). By including these countries, we intend to enrich our knowledge of turnover intention across cultures and provide insight to scholars and practitioners in HRM.

A majority of the existing studies on turnover intention focus on job satisfaction as the main antecedent (Steers and Mowday 1981; Tan and Akhtar 1995; Currivan 1999; Tsai

*Corresponding author. Email: mzad@utdallas.edu

and Huang 2008). Especially for voluntary turnover, job satisfaction seems to explain most of the variance in turnover intention (Carsten and Spector 1987; Lucas, Babakus and Ingram 1990; Judge 1993; Trevor 2001). Other studies try to explain turnover intention by incorporating organizational commitment along with individual measures (Curry, Wakefield, Price and Mueller, 1986; Currivan 1999; Gaertner 2000). Building on the existing knowledge of turnover models, scholars have begun to pursue a new trend, which links the organizational environment with employees' turnover intention (see e.g. Koh and Boo 2001; Martin and Cullen 2006). This approach fills a missing gap in the literature and expands our interest in finding boundary conditions. Scholars argue that the organizational environment, especially the ethical environment in organizations, is related to job satisfaction and organizational commitment (Martin and Cullen 2006; Tsai and Huang 2008), and thus it should be considered when studying turnover intention.

However, the organizational environment is only one missing piece of the puzzle. What is still understudied is the cultural and economic environment, which sets the mindset of people in a country and influences their behaviors (Hofstede 1991; House and Javidan 2004). Employees in different countries may face different environments that influence their intentions to leave even though they may have comparable levels of commitment to the firms and satisfaction with their jobs. We believe that these environmental factors have the potential to modify the relationships among job satisfaction, organizational commitment, and turnover intention and are important to consider when building a general turnover intention model (Coyne and Ong 2007; Holtom, Mitchell, Lee and Eberly 2008). For example, labor market segregation is often associated with stereotypically male and female traits and their appropriateness for certain occupations (Powell 1999). Islamic practices of gender segregation in the work place in certain countries such as Jordan and Turkey may place restrictions on the deployment, training, and promotion opportunities for women and, thus, affect their turnover intentions (Metcalf 2006).

Aycan et al. (2000), in a 10-country study of managerial values and assumptions that included both China and Turkey, found that for a sample of nearly 300 Turkish managers working primarily in private sector organizations in Turkey, their perceptions of sociocultural values were most similar to that of Chinese, Pakistani, Indian, and Russian managers. Interestingly, Turkish managers were closer to Canadian and American managers, compared to European ones, with respect to sociocultural values (Aycan et al. 2000). In a later study (Aycan and Kirmanoglu 2007), it was expected that top managers in organizations that were members of the business association characterized by its support of Islamic ideology would hold more conservative sociocultural values compared to those in organizations that were members of more secular business associations. The findings of the study did not confirm the hypotheses. The two groups showed similar managerial values, which were parallel to those of Turkish managers and employees in Aycan et al.'s (2000) study. Thus, the role that societal culture might play in shaping employees' attitudes about turnover intentions is an intuitively appealing question.

Therefore, in light of research findings regarding different cultural contexts, in this study, we incorporate the environmental factors – the organizational environment, the cultural environment, and the economic environment – into our theoretical framework and attempt to highlight these environmental conditions that contribute to turnover intention. In the following sections, we will explain in detail how the environmental conditions affect the relationships among job satisfaction, organizational commitment, and turnover intention and present a theoretical model that guides our inquiry into these matters.

2. Theoretical framework and hypotheses development

Our study, represented by the conceptual model shown in Figure 1, is motivated by several considerations. First, environments – especially the cultural and economic environments – influence individuals when they make decisions and how they feel about their jobs (Mobley 1982; Iverson 1999; Coyne and Ong 2007). For example, people from different cultures exhibit differences in their decision-making approaches (Adair, Tinsley and Taylor 2006). In addition, culture has been found to affect employees' motivation in their jobs and influence their job satisfaction (Diener, Oishi and Lucas 2003; Sledge, Miles and Coppage 2008). Thus, culture serves as an important condition under which employees generate their decisions toward their jobs and the firms they are working for. Similar to the cultural environment, the economic environment also influences people's decisions (Mobley 1982; Du, Zhou, Liu and Picken 2006). In a weak economic environment as we have been experiencing in recent times, employees may be less willing to change jobs and are more likely to stay where they are. Thus, their commitment to the current job may lead to lower intentions to quit compared to when the economy is not as weak. By including both cultural and economic environmental conditions in our theoretical framework, we can begin to fill an important gap in the literature of HRM and better understand what drives an individual's decision regarding their intentions to leave, holding other individual considerations constant.

A second motivation for this study concerns the fact that the effects which job satisfaction and organizational commitment have on turnover intention have been the subject of extensive debate among scholars (Lum, Kervin, Clark, Reid and Sirola 1998; Chang 1999). Some argue that it is job satisfaction that directly leads to turnover intentions (Lum et al. 1998; Schnake and Dumler 2000). Others believe that (lack of) organization commitment largely influences an employee's intention to leave (Aranya, Pollock and Amervic 1981; Aryee, Wyatt and Min 1991). Job satisfaction and organizational commitment are positively related and they both contribute to the formation of turnover intention (Gamble and Huang 2008; Holtom et al. 2008). Since our major concern is the moderating effects and not the main effect, in this study, we treat organizational commitment as a mediating factor between job satisfaction and turnover intentions, given certain environmental conditions.

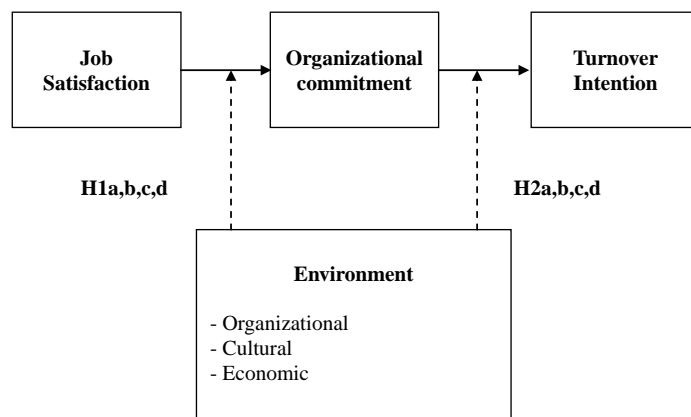


Figure 1. Multilevel conceptual framework.

A third motivation for our study considers the similarities among employees from different countries, which serves as a premise of our model in examining the conditions under which turnover intentions can vary across countries. By including in our study countries of different cultures and different levels of economic development, we provide a basis for broadening the international management literature into new directions. Our field is calling for scholarly attention to be paid to countries that have been understudied in the Middle East (Budhwar and Mellahi 2007). We respond to this call by including Jordan and Turkey as two such countries, as well as countries that have been studied modestly and heavily, namely China and the USA. However, our main intent in this study is to find support for our model *across* different countries and not to compare the differences *between* countries, which is beyond the scope of this study. Country and cultural values do not necessarily map one to one. Unlike many cross-cultural studies that use a country dummy variable as a proxy for culture, we have included direct measures of societal values in our analysis. Thus, we do believe that our study may serve as a starting point for future studies on turnover intentions designed to uncover other factors that organizations should address when implementing policies aimed at reducing turnover.

Last but not the least, the existing literature tends to view turnover intention as an individual's decision, which is under the constraints of the organizational environment. This view ignores the relational linkages among the individual, the firm, and the environment. It may be the reason why the findings on turnover intention are quite diverse and varied (Bluedorn 1982; Jansen and Chandler 1994; Schwepker 2001). In this article, we incorporate different levels of the environmental conditions to provide a cohesive framework in explaining the formation of turnover intentions. More specifically, an employee that is embedded in the external environment may psychologically give up known routines and established relations in the organization when they intend to leave and they may feel frustrated and stressed when they develop such turnover intentions (Boswell, Boudreau and Tichy 2005). The external environment thus serves as a moderator that may alter such intentions.

Based on the existing literature and our discussion above, the major components of our theoretical model are shown in Figure 1.

2.1 Organizational, cultural, and economic environments as moderators

The existing literature provides abundant examples of studies regarding the relationship between job satisfaction, organizational commitment, and turnover intentions (Mowday, Porter and Steers 1982; Tsai and Huang 2008). Strong evidence exists that job satisfaction is positively related to organizational commitment (cf. Curry et al. 1986; Brown and Peterson 1993; Gamble and Huang 2008). Employees that are more satisfied with their jobs seem to evaluate their organizational environment more favorably. Thus, they may be more committed to an organization because they believe in the organization and its mission (Dunham, Grube and Castaneda 1994; Chiu and Francesco 2003). Further, employees who are satisfied and committed to the organization tend to remain as a member of the organization (Mowday et al. 1982; Tsai and Huang 2008).

As members of the organization, employees are constrained by rules within the organizations (Mobley 1982; Iverson 1999; Coyne and Ong 2007). As members of the society, employees are also constrained by the cultural and economic environments in which the organizations are embedded (Holtom et al. 2008). These environmental aspects are naturally considered as boundary conditions that may impact the job satisfaction–organizational commitment and organizational commitment–turnover

intention relationships. In the following section, we will further explain why and how these environmental aspects matter.

2.1.1 Moderators of the job satisfaction–organizational commitment relationship

Employees as members of an organization often work under organizational constraints. Such constraints represent ‘situations or things that prevent employees from translating ability and efforts into high level of job performance’ (Spector and Jex 1998, p. 357). When employees are discouraged by the organizational constraints, they are likely to feel frustrated and dissatisfied (Villanova and Roman 1993). In addition, they may feel unable to achieve personal goals within the organizations, thus are gradually disconnected from the organization. Consequently, the organizational constraints may lead to a decrease in employees’ organizational commitment. The more constraints they experience, the more frustrated the employees get and less committed they feel. In other words, the positive relationship between commitment and satisfaction may be weakened by organizational constraints. Thus, we posit,

Hypothesis 1a: Organizational constraints moderate the relationship between job satisfaction and organizational commitment such that the positive relationship between satisfaction and commitment is weaker in organizations where the constraints are more severe compared to organizations where the constraints are less severe.

Employees are also members of the societal culture. As Redfield (1948, p.vii) defined, culture is the ‘shared understandings made manifest in act and artifact’. Triandis (2004, p. xv) provided additional views on culture in which he defined culture as practices and values, wherein practices are ‘the way things are done in this culture’ and values are ‘judgments about the way things should be done’. One of the key characteristics of cultural differences between different countries is individualism versus collectivism (Hofstede 1991; Gelfand, Bhawuk, Nishii and Bechtold 2004). For instance, people from collectivistic cultures such as China tend to make decisions based on the needs of the collective group more than on their own personal needs compared to people from individualistic cultures (Bond and Hwang 1995; Schaubroeck, Lam and Xie 2000). In addition, people from collectivistic countries tend to care more about the society’s perceptions of, or expectations placed on, individuals compared to people from individualistic cultures (Markus and Kitayama 1991; Schaubroeck et al. 2000). We would expect this to be especially true if the employees were not as satisfied with their jobs as they otherwise might be.

By adopting the cultural concepts from the GLOBE studies (Gelfand et al. 2004), in this study we consider in-group collectivism and institutional collectivism as the dimensions that represent the individualism versus collectivism aspects of the cultural environment. According to House and Javidan (2004, p. 12), in-group collectivism is ‘the degree to which individuals express pride, loyalty, and cohesiveness in their organizations’, and institutional collectivism is ‘the degree to which organizational and societal institutional practices encourage and reward collective distribution of resources and collective action’. In high in-group collectivism cultures, people tend to express stronger pride or loyalty to their organizations, regardless of their job satisfaction levels. Thus, the positive relationship between job satisfaction and organizational commitment may be weaker in high in-group collectivism cultures than in low in-group collectivism cultures. Similarly, in high institutional collectivism cultures, the norm is that the

collective activities are supported and favored. Employees may embrace their identity within an organization regardless of the satisfaction level they receive. Thus, the positive relations between job satisfaction and organizational commitment may be weaker in high institutional collectivism cultures. Therefore, we propose the following:

Hypothesis 1b: Societal cultural environment moderates the relationship between job satisfaction and organizational commitment such that the positive relationship between satisfaction and commitment is weaker in high in-group collectivism cultures compared to low in-group collectivism cultures.

Hypothesis 1c: Societal cultural environment moderates the relationship between job satisfaction and organizational commitment such that the positive relationship between satisfaction and commitment is weaker in high institutional collectivism cultures compared to low institutional collectivism cultures.

Similar to the cultural environment, the economic environment also influences people's decisions (Mobley 1982; Du et al. 2006). The economic development of a country determines how well people are living and what kind of job opportunities they enjoy. In countries that have high economic growth, more job opportunities are available and common citizens tend to have higher mobility in organizations. Thus, they may feel less committed to their organizations and may be choosier in evaluating their jobs. Alternatively, people in low-economic-growth cultures may have fewer job opportunities and, therefore, tend to remain in their current jobs longer and be more committed and satisfied with their situations. As a result, the positive relationship between job satisfaction and organizational commitment can be stronger in countries that have lower economic growth. Thus, we hypothesize that:

Hypothesis 1d: Economic environment moderates the relationship between job satisfaction and organizational commitment such that the positive relationship between satisfaction and commitment is stronger in cultures experiencing low economic growth compared to cultures experiencing high economic growth.

2.1.2 Moderators of the organizational commitment–turnover intentions relationship

Organizations that put constraints on their employees may cause job dissatisfaction among their employees, which leads to less commitment to the organizations (Carsten and Spector 1987; Villanova and Roman 1993). Constraints may also cause decrements in employee performance (Peters 1982), as well as lead to the employees' increased intentions of quitting (Spector and Jex 1998). Furthermore, as professionals in the organizations, employees desire the autonomy to work according to their own standards and traditions (Hall 1972; Meikins and Watson 1989). When their desires conflict with the organizational constraints, employees are likely to feel frustrated and may be less committed to their positions, which may lead to stronger intentions to quit. Thus, we posit:

Hypothesis 2a: Organizational constraints moderate the relationship between organizational commitment and turnover intentions such that the negative relationship between commitment and turnover intentions is stronger in organizations where the constraints are more severe compared to organizations where the constraints are less severe.

Employees who are from high in-group collectivism cultures tend to have more loyalty to their jobs (House and Javidan 2004) and thus may be more generous in evaluating their jobs and be less likely to leave, even if they struggle with commitment at times, compared to employees who are from low in-group collectivism cultures. Conversely, a combination of low commitment and low in-group collectivism most likely strengthens the employee's desire to seek other employment opportunities. As a result, the negative relationship between organizational commitment and turnover intentions may be stronger in such low in-group collectivism cultures. Similar to employees from low in-group collectivism cultures, employees from low institutional collectivism cultures may also tend to be less committed to their work organizations compared to employees who are from high institutional collectivism cultures. We, therefore, hypothesize that:

Hypothesis 2b: Cultural environment moderates the relationship between organizational commitment and turnover intentions such that the negative relationship between commitment and turnover intentions is stronger in low in-group collectivism cultures compared to high in-group collectivism cultures.

Hypothesis 2c: Cultural environment moderates the relationship between organizational commitment and turnover intentions such that the negative relationship between commitment and turnover intentions is stronger in low institutional collectivism cultures compared to high institutional collectivism cultures.

Continuing with the above arguments, we consider the economic environment in moderating the relationship between organizational commitment and turnover intention. In countries that have high GDP growth, the job opportunities are also increasing at a fast pace (Fagerberg, Verspagen and Caniels 1997). Professional employees may be choosier in jobs, have more opportunities at their disposal, and change jobs more often. Thus, they may be less willing to stay at their current organizations and seek to find other opportunities compared to employees from low GDP growth countries given the same level of commitment. Therefore, we hypothesize that:

Hypothesis 2d: Economic environment moderates the relationship between organizational commitment and turnover intentions such that the negative relationship between commitment and turnover intentions is weaker in cultures experiencing high economic growth compared to cultures experiencing low economic growth.

3. Methodology

3.1 Sample and data collection

Data were collected in 2005 from managers and staff members in the organizations in four countries: Jordan, Turkey, China, and the USA. Participants were 254 white-collar managers and executives most of whom were students in executive MBA programs offered at Jordanian University of Science and Technology (Jordan, $N = 35$), Jiangxi University of Finance and Economics (China, $N = 64$), and University of Texas at Dallas (USA, $N = 80$). The participants from Turkey were 75 middle managers involved in a 1-week executive development training program put on by a large beverage company headquartered in Istanbul, Turkey. Participants ranged in age from 19 to 54, with 72% being between the ages of 25 and 40. Fifty-one percent were female; 51% had at least a

bachelor's degree and another 7% had some college attendance. These four samples did not differ significantly in sex, age, education and organizational tenure. Average tenure in their work organizations ranged from 1 to 38 years, or an average of 7.1 years. All participants volunteered to take part in the study and their anonymity was assured. The response rates for each country's sample ranged from a low of 70% for Jordan to a high of 85% for China, with response rates for Turkey and the USA falling between these ranges. In addition, we collected economic data from the World Bank database for the years 2002 to 2005.

3.2 Measures

3.2.1 Dependent variable

Turnover intentions. Turnover intentions were measured by a four-item scale adapted from Spencer, Steers and Mowday (1983). Sample items include: 'I intend to remain on this job' (reverse scored), and 'I often follow up on job openings I read or hear about'. The items were measured using a five-point Likert scale, where 1 = *strongly disagree* and 5 = *strongly agree*.

3.2.2 Independent and mediating variables

Job satisfaction. A 14-item scale developed by Hackman and Oklham (1975) for the Job Diagnostic Survey (JDS) was used to measure specific job element satisfactions such as personal growth, challenge, opportunities for advancement, and pay and fringe benefits. The items were measured with a seven-point Likert scale where 1 = *extremely dissatisfied* and 7 = *extremely satisfied*.

Organizational Commitment. Organizational commitment was measured using a six-item scale adapted from Mowday, Steers and Porter (1979). Sample items include: 'I am proud to tell others that I am a part of this organization', and 'I feel very little loyalty to this organization' (reverse coded). Three of the six items were reverse coded. Responses were scored on seven-point Likert scales ranging from 1 = *strongly disagree* to 7 = *strongly agree*.

3.2.3 Moderator variables

Organizational culture (organizational constraints). Organizational constraints experienced at work were used as an indicator of organizational culture and was measured using an 11-item scale adapted from Spector and Jex (1998). The scale assessed the extent to which certain factors made it difficult or impossible for the respondent to do their job. Sample items include 'organizational rules and procedures' and 'interruptions by other people'. Responses were coded from 1 to 5, where 1 = *not at all* and 5 = *to a great extent*.

Societal cultural environment (in-group collectivism; institutional collectivism). Two dimensions of societal culture adapted from the GLOBE studies (cf. House and Javidan 2004) were used as indicators of societal culture with a focus on collectivism. *In-group collectivism* (values) was measured by four items that assessed the extent to which individuals should express pride, loyalty, and interdependence in their respective families. *Institutional collectivism*, on the other hand, was indicative of the extent to which institutional practices at the societal level should encourage and reward collective action and was also assessed by four items. Both measures used seven-point Likert scales where the scale anchors varied depending on the nature of the questions asked.

Economic environment (growth in GDP per capita). The average per capita growth in gross domestic product for each country (*GDP Per Capita Average Growth*, lagged by 1 year (2004)) was used as our measure of the economic environment, since it is a commonly used indicator for economic development (see, e.g., UNDP 2001). These data were obtained from the World Bank data sources (www.worldbank.org).

3.2.4 Control variables

Age. According to Hellman (1997), age is positively related to job satisfaction, thus may affect our model. We include employees' age as a control in our model. This is measured as the actual age of each employee.

Gender. In the turnover intention literature, gender is often used as a control in the model (Schaubroeck et al. 2000). Especially in Middle East, gender may influence professionals in their career development (Metcalf 2007). Here, we also include gender as a control in our model. This is measured as a dummy, while male = 1, female = 0.

Tenure. Tenure is a covariant of age, which is assumed to be having similar effects on job satisfaction as age (Bedeian, Ferris and Kacmar 1992; Hellman 1997). Thus, we also controlled for organizational tenure in our model. This is measured as the actual number of years an employee has worked in the organization.

3.3 Analysis

We recognize that our data is cross-sectional in nature, which makes it not possible to draw any causal inferences about the relationships examined. However, we incorporated Harman's one-factor test (Podsakoff, MacKenzie, Podsakoff and Lee 2003) to examine the extent to which common method variance was an issue for our study. EFA results that included the entry of all scales used in the study yielded a seven-factor solution in which the general factor explained 35.6% of the total variance, which suggests that a common method/source bias was not a problem in the study.

The interaction effects hypothesized in Hypotheses 1a–d and 2a–d were tested using hierarchical moderated regression procedures performed separately for each moderator variable. In the first step, the control variables were introduced to control for their potential influences on the relationships being examined. In the second step, the appropriate predictor (either organization commitment or job satisfaction) and the first hypothesized moderator (organizational constraints) were added to the equation to examine their unique main effects. In the third step, an interaction term, computed as the cross-product of the predictor and moderator variables, was entered into the equation. The change in R^2 associated with the third step compared to the second step is examined for significance to determine whether the moderator variable had any effect. This process was repeated for each moderator variable. As a precaution, all predictors were mean-centered per suggestions from Aiken and West (1991) prior to calculating the cross-product terms and undertaking the analyses to minimize effects due to multicollinearity.

However, prior to testing Hypotheses 1 and 2, an additional set of analyses was undertaken to insure that the moderated regressions were appropriate for this study. That is, while the variables of job satisfaction, organizational commitment, and turnover intentions are individual-level variables, our approach intended here is to examine the contingent effects of macro variables at the organization and societal levels of analysis. Therefore, the appropriateness of aggregating the individual measures to the organizational and societal levels was assessed in order to be certain that our

organizational constraints, in-group collectivism, and institutional collectivism measures represented country or societal level variation and not individual-level variation. This was not a concern for the economic measures because they already represented country or societal level variation.

The $r_{wg(J)}$ measure (James 1982; James, Demaree and Wolf 1984, 1993) and intraclass correlation coefficient – ICC(1) – (Shrout and Fleiss 1979; McGraw and Wong 1996) provide information regarding the appropriateness of aggregation, whereby $r_{wg(J)}$ compares the observed variance within a country or society to the variance expected if there is no within-country agreement and, therefore, reflects the level of consensus among raters of multiple-item measures. The ICC(1) compares the variance between countries with the variance within countries. Evidence of convergence is obtained as the ICC(1) index becomes larger than zero. James (1982) reported an acceptable range for aggregation to be between 0.00 and 0.50 for ICC(1), and James et al. (1984) suggested that $r_{wg(J)}$ indices greater than 0.70 reflect that the aggregation of individual-level responses to the country level is appropriate.

4. Results

Descriptive statistics and reliabilities were estimated for each of the study variables. The means, standard deviations, correlations, and reliability coefficients for the total sample are provided in Table 1. As expected and as seen in Table 1, job satisfaction was positively correlated with organizational commitment ($p < 0.01$) and negatively correlated with turnover intentions ($p < 0.01$). In addition, organizational commitment was significantly negatively correlated with turnover intentions ($p < 0.01$).

When turnover intentions was regressed on both job satisfaction and organizational commitment, the relationship between job satisfaction and turnover intentions was weaker than its initial value though still significant ($\beta = -0.23$, $p < 0.01$). Therefore, the relationship between job satisfaction and turnover intentions was partially mediated by organizational commitment in this study.² Although these results replicate much of the previous research, they are, nonetheless, important because these relationships had not been previously examined extensively for two of the subsamples included in this study (Turkey and Jordan). And they serve an important basis for our search, for support, and for proposed moderating effects.

The results of our aggregation analyses are presented in Table 2 for the scaled measures used as moderator variables. The country means for the organizational culture measure (organizational constraints) and societal culture measures (in-group collectivism and institutional collectivism) were compared via one-way analysis of variance (ANOVA) with Turkey's test of mean differences. For each variable, the mean values across countries were significantly different from each other at $p < 0.05$. That is, there were no homogeneous subsets of two or more countries on either of the moderator variables. It confirms our prediction that there is a general model for turnover intention across countries.

As shown in Table 2, the aggregated organizational constraints scale had very high $r_{wg(J)}$ values across all four countries. The $r_{wg(J)}$ values for the in-group collectivism and institutional collectivism were all in the acceptable range with the exception of the values for Turkey which are indicative of very low consensus among the raters concerning the collectivism measures. On the other hand, the ICC(1) values were all acceptable across countries for the organizational constraints scale and were marginally acceptable for the two collectivism scales. According to James (1982), the average ICC(1) index reported in

Table 1. Descriptive statistics, reliabilities, and intercorrelations of study variables (total sample).

Variable	Scale		Intercorrelations										
	M	SD	1	2	3	4	5	6	7	8	9	10	
1. Age	22.73	15.10	-										
2. Gender ^a	1.51	0.50	0.11	-									
3. Org. tenure	7.05	6.62	0.14*	-0.21**	-								
4. Job satisfaction	4.70	1.01	-0.12	-0.10	0.10	0.86^d							
5. Commitment	4.99	1.24	0.02	-0.06	0.22**	0.57**	0.70						
6. Turnover intention	2.55	1.04	-0.03	-0.01	-0.13*	-0.31**	-0.33**	0.81					
7. Constraints	2.95	0.73	0.20**	0.01	-0.15*	-0.20**	-0.08	0.19**	0.85				
8. Collectivism I ^b	4.75	1.04	-0.19**	0.02	0.04	-0.02	0.06	-0.12	-0.07	0.69			
9. Collectivism II ^c	4.48	0.95	0.23**	0.04	0.05	0.01	0.10	-0.10	0.02	0.24**	0.49		
10. GDP growth/capita	6.70	2.70	0.89**	0.18**	0.03	-0.20**	-0.07	-0.04	0.17**	-0.16*	0.25**	-	

* $p < 0.05$; ** $p < 0.01$.

^aGender (1, male, 0, female).

^bCollectivism I, in-group collectivism.

^cCollectivism II, institutional collectivism.

^dDiagonal values = coefficient α reliability values.

Table 2. Sub-sample means and aggregation indices for moderator variables by the country.

Country	Organizational constraints			In-group collectivism			Institutional collectivism		
	Mean	$r_{wg(J)}$	ICC(1)	Mean	$r_{wg(J)}$	ICC(1)	Mean	$r_{wg(J)}$	ICC(1)
China	2.97	0.99	0.22	4.35	0.79	0.06	4.32	0.82	0.12
Jordan	3.39	0.98	0.19	4.22	0.85	0.16	4.08	0.94	0.20
Turkey	3.01	0.99	0.34	4.96	-0.12	0.09	5.07	0.26	0.07
USA	2.68	0.98	0.40	5.10	0.67	0.19	40.23	0.82	0.08

Table 3. Results of hierarchical moderated regression analyses predicting organizational commitment and turnover intentions.

Regression steps and effect tested	Organizational Commitment		Turnover Intentions	
	β	ΔR^2	β	ΔR^2
Step 1		0.05**		0.02
Age	-0.17*		-0.13	
Gender	-0.01		-0.04	
Organizational tenure	0.22**		-0.01	
Step 2		0.29**		0.13**
Job satisfaction	0.06		Org. commitment	-1.12
Org. constraints	0.19*		Org. constraints	0.20
Step 3		0.00		
Interaction	0.47		Interaction	0.77
R^2		0.34**	R^2	0.16**
Step 2		0.29**		0.17**
Job satisfaction	2.08**		Org. commitment	-0.19
In-group collectivism	-0.15*		In-group collectivism	-0.32**
Step 3		0.01*		0.00
Interaction	-1.56*		Interaction	-0.54
R^2		0.35**	R^2	0.19**
Step 2		0.29**		0.16**
Job satisfaction	2.63**		Org. commitment	-1.69**
Institutional collectivism	-0.13*		Institutional collectivism	-0.27**
Step 3		0.04**		0.02*
Interaction	-2.11**		Interaction	1.35*
R^2		0.38**	R^2	0.20**
Step 2		0.29**		0.12**
Job satisfaction	0.89**		Org. commitment	-0.71**
GDP growth/capita	-0.27		GDP growth/capita	-0.17
Step 3		0.02		0.02*
Interaction	-0.39*		Interaction	0.38*
R		0.35**	R^2	0.16**

the literature is 0.12, and several of our ICC(1) indices were less than this average value. Nevertheless, given these results, we felt comfortable in proceeding with using the aggregated constraints and collectivism measures as country-level measures.

Hypothesis 1 predicted a moderated effect on the relationship between job satisfaction and organizational commitment, while Hypothesis 2 predicted a moderated effect on the organizational commitment–turnover intentions relationship. The results of the hierarchical moderated regression analyses are summarized in Table 3. The demographic control variables accounted for a significant proportion of variance in organizational commitment but not turnover intentions. In addition, the second step in the regression procedure also contributed a highly significant amount of variance to the prediction of both outcome variables.

Most importantly, however, are the interaction effects determined by the introduction of the two-way interaction terms to the regression equations in Step 3. The interaction term added a significant amount of incremental variance to the prediction of organizational commitment for the in-group collectivism, institutional collectivism, and GDP per capita growth moderators and also added significant incremental variance to the prediction of turnover intentions for institutional collectivism and the GDP per capita growth economic indicator. Organizational constraints did not have a significant moderating effect on the relationships examined. Therefore, Hypotheses 1a and 2a were not supported. The forms of the significant interactions in each instance are plotted in Figures 2–6.

As seen in Figures 2–6, different moderators have different influences on the relationship between job satisfaction–organizational commitment and organizational commitment–turnover intentions. For example, in Figure 2, we can see that as in-group collectivism increases, the relationship between job satisfaction and organizational commitment is altered in a way that their positive relationship is weakened. We see similar results for the moderator, institutional collectivism, in Figure 3. These two figures support our Hypotheses 1b and 1c, respectively. Again, in Figure 4, we see support for Hypothesis 1d, whereby as GDP per capita growth increased, it weakened the positive relationship between job satisfaction and organizational commitment when job satisfaction was high.

As for the moderating effects of the environmental factors on the relationship between organizational commitment and turnover intentions, we also find support for two of our

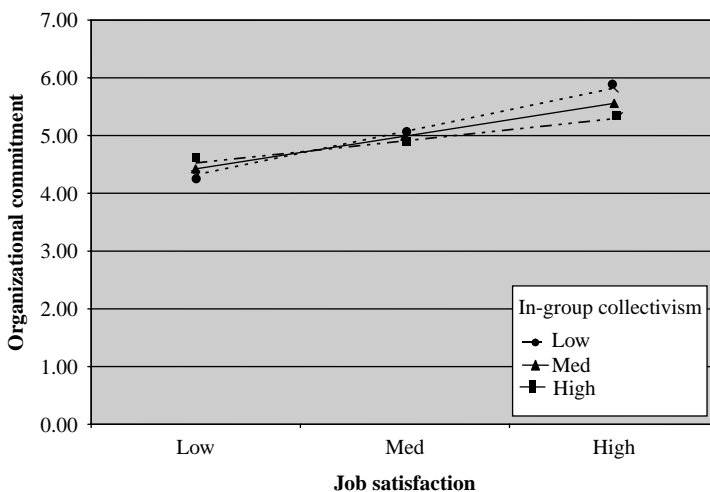


Figure 2. Moderating effect of in-group collectivism on the relationship between job satisfaction and organizational commitment.

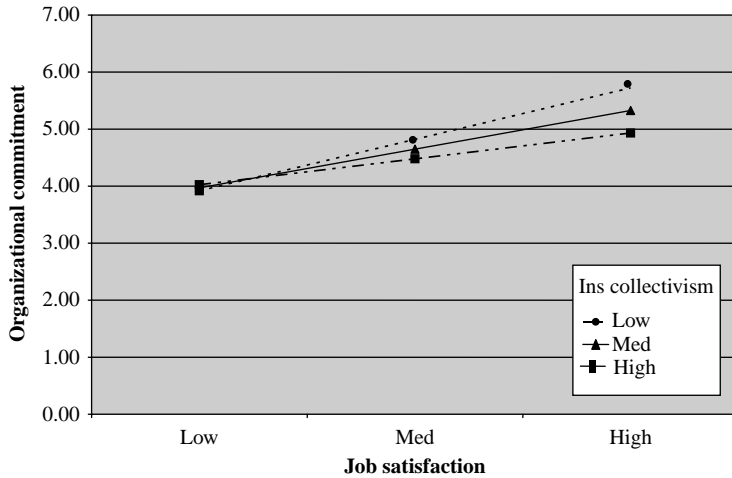


Figure 3. Moderating effect of institutional collectivism on the relationship between job satisfaction and organizational commitment.

sub-hypotheses. Results are as shown in Figures 5 and 6. Hypothesis 2c predicted a negative moderating effect for institutional collectivism and we see in Figure 5 that the combination of low organizational commitment and low institutional collectivism results in a stronger relationship between organizational commitment and turnover intentions compared to when organizational commitment is high. Thus, Hypothesis 2c was supported. Finally, the form of the significant moderating effect for GDP per capita growth was as predicted in Hypothesis 2d. The negative relationship between organizational commitment and turnover intentions was weakened under conditions of high GDP per capita growth.

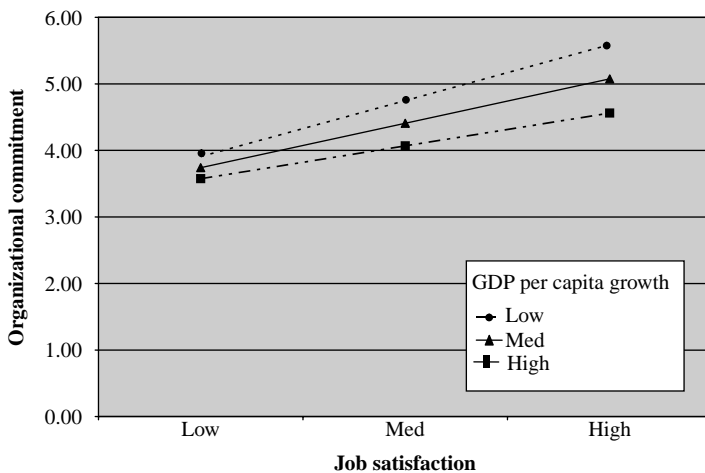


Figure 4. Moderating effect of GDP per capita growth on the relationship between job satisfaction and organizational commitment.

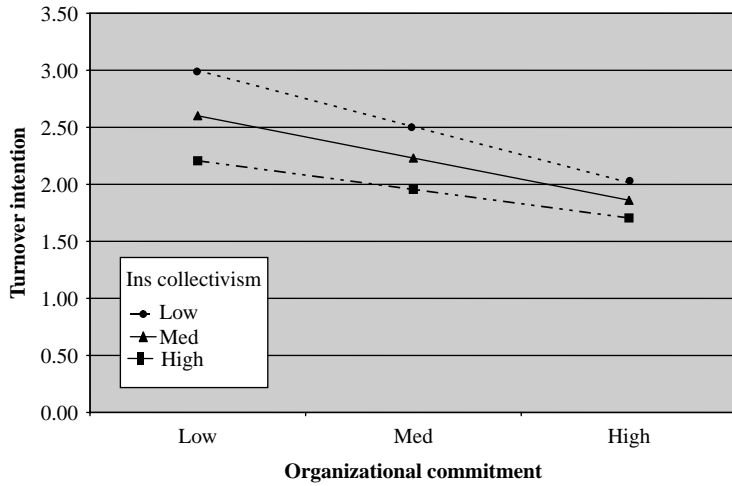


Figure 5. Moderating effect of institutional collectivism on the relationship between organizational commitment and turnover intentions.

5. Discussion

By probing into the question of turnover intention, we find that the environmental factors are important moderators in influencing the relationships between job satisfaction, organizational commitment, and turnover intentions. They are also clues to connect employees from different countries. Data from China, Jordan, Turkey, and the USA support the general model for turnover intentions we proposed. The findings show that given certain conditions, employees are more likely to leave/stay. More specifically, employees from a country that favors collective behavior may feel more committed to the organization they are working for when they see themselves as members of the organization. In addition, when the economy is growing slowly, employees are more likely

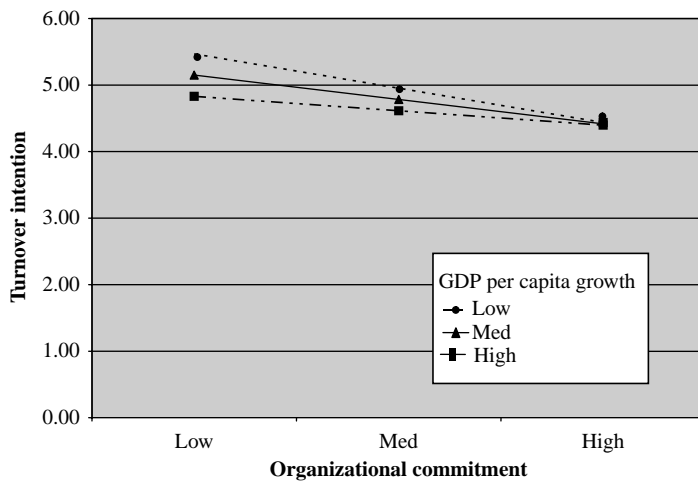


Figure 6. Moderating effect of GDP per capita growth on the relationship between organizational commitment and turnover intentions.

to seek better opportunities outside of their current organizations especially when they are less committed to their jobs. Thus, organizations' HR managers may need to find ways to provide incentives for these employees to stay, and these incentives may not necessarily be designed to increase commitment or satisfaction.

Another interesting finding is that gender is not a significant predictor and does not have an effect in our model. Studies involving Jordan and Turkey have viewed gender as an important factor that influences organizations' HRM systems (Metcalf 2007; Syed 2008). However, from an employee's perspective, especially those who are hired as professionals and managers, gender may not be one of their primary concerns for changing jobs. Our findings do not allow us to speculate about existing HRM practices in our sample countries and whether they are equally beneficial to men and women alike. Instead, we simply suggest that for professionals and managers, working in a mixed-gender setting may not be a concern that would encourage a person to change jobs, which may be equally true for men as well (Metcalf 2008).

Our findings contribute to the literature in three ways. First, we introduced the macro-level variables reflecting the external environment – i.e. organizational, cultural, and economic factors – to help explain individual-level withdrawal attitudes in terms of turnover intention. By considering such a multilevel framework, we bring added rigor and relevance to our study. Much of the existing literature tends to focus mainly on individual employee characteristics and the organizational environment in trying to explain withdrawal attitudes and behavior. However, our study takes into consideration the bigger picture of the macro cultural and economic environment in which individuals and organizations are embedded. Such a macro perspective has helped us understand better the societal and economic forces that can affect relationships among job satisfaction, organizational commitment, and turnover intentions.

Second, even though we did not hypothesize about the mediating effect of organizational commitment, we did find support for it as a mediator between job satisfaction and turnover intentions. This is confirming to the existing literature and adds to the body of evidence in favor of organizational commitment as a mediator of the job satisfaction–turnover intentions relationship.

Our third contribution is related to the specific examination of societal cultural influences on the job satisfaction, organizational commitment, and turnover intentions relationships. In particular, some of our predictions were seen to hold for countries included here that have previously not been included in studies examining these relationships, namely Turkey and Jordan. All the four countries included in our study have different cultural and economic environments, which lends to the generalizability of our model. We are aware, however, of the limitation of our study whereby our sample sizes across countries were insufficient to allow for more specific cross-country comparisons of the relationships examined. Such comparisons might be informative because culture is not necessarily synonymous with country. For example, we see from Table 2 that with respect to the in-group collectivism measure, the USA, which is typically thought of as an individualistic country/culture, scored significantly higher (more collectivistic) than China, which is typically thought of as a collectivistic country/culture. Thus, in our findings we can only address the outcomes relative to low/high collectivism and not specific countries per se because we did not use a country dummy variable in our analyses.

While both in-group collectivism and institutional collectivism were shown to be significant moderators of the organizational commitment–job satisfaction relationship, and institutional collectivism was shown to be a significant moderator of the

organizational commitment–turnover intentions relationship, it is likely that low/high levels of in-group collectivism and low/high levels of institutional collectivism involved different combinations of countries, respectively. For instance, a one-way ANOVA of sample mean values on in-group collectivism scores showed that Jordan and China were similar and Turkey and the USA were similar. On the other hand, a one-way ANOVA of sample mean values on institutional collectivism scores showed that Turkey stood apart from Jordan, china, and the USA, which were all similar. Thus, further comparative studies are welcomed and encouraged to test our model.

5.1 Limitations and directions for future research

There are several limitations in our study which may serve as possible extensions for future studies. First, we have a relatively small sample for each country and it was impossible to compare our model separately in each of the countries we chose. In addition, due to lack of information on the industries participants were from, we could not include industrial sector as a control in our model as some studies have suggested (Wang, Chen, Hyde and Hsieh 2010). Even though our intent was to propose a general model that suggests conditions under which turnover intentions may be altered across countries – and we do find support for it – we believe it is necessary to consider the differences in countries and differences in the industries in the future by conducting comparative studies across the countries. However, that was beyond the scope of this study. Also, two interesting findings to tease out in future studies are: (1) the finding of a significant negative effect of age in predicting organizational commitment (older workers were less committed to the organization), and (2) a significant positive effect of organizational tenure in predicting organizational commitment (longer tenured workers were more committed to the organization) (see Table 3). Since age and tenure were significantly positively related (see Table 1), these results present interesting questions to examine in future studies.

Second, we use turnover intention instead of actual turnover due to the nature of our sample. As for practitioners and researchers, an actual turnover model may be more attractive. That is why including actual turnover in future studies is a natural logical extension to our study and may provide further insights and support for our model. In addition, by considering the environmental variables proposed, we may be able to find the boundary conditions under which the relationship between turnover intentions and actual turnover might be altered.

Third, turnover intentions are formed gradually over time (Holtom et al. 2008). They may change when conditions change. In future studies, it would be useful to incorporate a longitudinal component to our model and revisit our respondent members to see whether their turnover intentions changed over time and how this affected their actual turnover behavior. Finally, it might be informative to also examine other variables in our model to enrich our study, such as information sharing and job significance (cf. Ng and Butts 2009), education and income levels of respondents (cf. Smyth, Zhai and Li 2009), or industry-specific descriptions.

6. Conclusion

Our study has provided a unique framework to examine the boundary conditions of turnover intention and has revealed that the formation of turnover intentions is a complex process with different levels of conditions. Environmental factors as examined in this

article help us better understand the relationships between job satisfaction–organizational commitment and organizational commitment–turnover intentions. Our findings have shed light on this important subject and provide new directions for future research in HRM.

Notes

1. An earlier version of this article was presented at the Eastern Academy of Management International Conference, *Managing in a Global Economy*, in Rio de Janeiro, Brazil, June 21–25, 2009.
2. The mediation results are not shown here but are available from the authors upon request. Baron and Kenny's (1986) mediation test was used to examine this relationship.

References

- Abu-Doleh, J., and Weir, D. (2007), 'Dimensions of Performance Appraisal System in Jordanian Private and Public Organizations,' *International Journal of Human Resource Management*, 18, 1, 75–84.
- Adair, W.L., Tinsley, C.H., and Taylor, M.S. (2006), 'Managing the Intercultural Interface: Third Cultures, Antecedents and Consequences,' in *National Cultures and Groups* (Vol. 9), ed. Y.R. Chen, Oxford: JAI Press, pp. 205–232.
- Aiken, L., and West, S. (1991), *Multiple Regression: Testing and Interpreting Interactions*, Newbury Park, CA: Sage.
- Aranya, N., Pollock, J., and Amervic, J. (1981), 'An Examination of Professional Commitment in Public Accounting,' *Accounting Organizations and Society*, 6, 4, 271–280.
- Aryee, S., Wyatt, T.E., and Min, M.K. (1991), 'Antecedents of Organizational Commitment and Turnover Intentions among Professional Accounts in Different Employment Settings in Singapore,' *Journal of Social Psychology*, 131, 4, 545–556.
- Aycan, Z., and Kirmanoglu, H. (2007), 'Managerial Subcultures in Turkey: How Does Membership in Business Associations Impact Managerial Values and Assumptions?' *European Journal of International Management*, 1, 111–128.
- Aycan, Z., Kanungo, R., Mendonca, M., Yu, K., Deller, J., Stahl, G., and Khursid, A. (2000), 'Impact of Culture on Human Resource Management Practices: A Ten country Comparison,' *Applied Psychology: An International Review*, 49, 1, 192–220.
- Baron, R., and Kenny, D. (1986), 'The Moderator-Mediator Variable Distinction in Social Psychological Research: Conceptual, Strategic, and Statistical Considerations,' *Journal of Personality and Social Psychology*, 51, 1173–1182.
- Bedeian, A.G., Ferris, G.R., and Kacmar, K.M. (1992), 'Age, Tenure, and Job Satisfaction: A Tale of Two Perspectives,' *Journal of Vocational Behavior*, 40, 33–48.
- Bluedorn, A.C. (1982), 'The Theories of Turnover: Causes, Effects, and Meaning,' *Research in the Sociology of Organizations*, 1, 75–128.
- Bond, M.H., and Hwang, K.K. (1995), 'The Social Psychology of Chinese People,' in *The Psychology of the Chinese People*, ed. M.H. Bond, Hong Kong: Oxford University Press.
- Boswell, W.R., Boudreau, J.W., and Tichy, J. (2005), 'The Relationship between Employee Job Change and Job Satisfaction: The Honeymoon-Hangover Effect,' *Journal of Applied Psychology*, 90, 882–892.
- Brown, S., and Peterson, R. (1993), 'Antecedents and Consequences of Salesperson Job Satisfaction: Meta-Analysis and Assessment of Causal Effects,' *Journal of Marketing Research*, 30, 63–77.
- Budhwar, P., and Mellahi, K. (2007), 'Introduction: Human Resource Management in the Middle East,' *International Journal of Human Resource Management*, 18, 1, 2–10.
- Carsten, J.M., and Spector, P.E. (1987), 'Unemployment, Job Satisfaction, and Employee Turnover: A Metal-analytic Test of the Muchinsky Model,' *Journal of Applied Psychology*, 72, 3, 374–381.
- Chang, E. (1999), 'Career Commitment as a Complex Moderator of Organizational Commitment and Turnover Intentions,' *Human Relations*, 52, 3, 284–298.
- Chiu, R.K., and Francesco, A.M. (2003), 'Dispositional Traits and Turnover Intention: Examining the Mediating Role of Job Satisfaction and Effective Commitment,' *International Journal of Manpower*, 24, 3, 284–298.

- Coyne, I., and Ong, T. (2007), 'Organizational Citizenship Behavior and Turnover Intention: A Cross-Cultural Study,' *International Journal of Human Resource*, 18, 6, 1085–1097.
- Curry, D.B. (1999), 'The Causal Order of Job Satisfaction and Organizational Commitment in Models of Employee Turnover,' *Human Resource Management Review*, 9, 4, 495–624.
- Curry, J.P., Wakefield, D.S., Price, J.L., and Mueller, C.W. (1986), 'On the Causal Ordering of Job Satisfaction and Organizational Commitment,' *Academy of Management Journal*, 29, 4, 847–858.
- Diener, E., Oishi, S., and Lucas, R.E. (2003), 'Personality, Culture, and Subjective Well-being: Emotional and Cognitive Evaluations of Life,' *Annual Review of Psychology*, 54, 403–425.
- Du, J.J., Zhou, J., Liu, C., and Picken, D. (2006), 'Exploring Turnover Intention of Construction Managers in China,' *Journal of Construction Research*, 7, 191–205.
- Dunham, R.B., Grube, J.A., and Castaneda, M.B. (1994), 'Organizational Commitment: The Utility of an Integrative Definition,' *Journal of Applied Psychology*, 79, 3, 370–380.
- Fagerberg, J., Verspagen, B., and Caniëls, M. (1997), 'Technology, Growth and Unemployment across European Regions,' *Regional Studies: The Journal of the Regional Studies Association*, 31, 5, 457–566.
- Fang, Y.Q. (2001), 'Turnover Propensity and its Causes among Singapore Nurses: An Empirical Study,' *International Journal of Human Resource Management*, 12, 5, 859–871.
- Gaertner, S. (2000), 'Structural Determinants of Job Satisfaction and Organizational Commitment in Turnover Models,' *Human Resource Management Review*, 9, 4, 479–493.
- Gamble, J., and Huang, Q. (2008), 'Organizational Commitment of Chinese Employees in Foreign Invested Firms,' *International Journal of Human Resource Management*, 19, 5, 896–915.
- Gelfand, M.J., Bhawuk, D.P.S., Nishii, L.H., and Bechtold, D.J. (2004), 'Individualism and Collectivism,' in *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, eds. R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta, Thousand Oaks, CA: Sage.
- Hackman, J.R., and Oklham, G.R. (1975), 'Development of the Job Diagnostic Survey,' *Journal of Applied Psychology*, 60, 2, 159–170.
- Hall, R.H. (1972), 'Professionalization and Bureaucratization,' in *The Formal Organization*, ed. R.H. Hall, New York, NY: Basic Books, pp. 143–163.
- Hellman, C.M. (1997), 'Job Satisfaction and Intent to Leave,' *The Journal of Social Psychology*, 137, 6, 677–689.
- Hofstede, G. (1991), *Culture and Organizations: Software of the Mind*, London: McGraw-Hill.
- Holtom, B.C., Mitchell, T.R., Lee, T.W., and Eberly, M.B. (2008), 'Turnover and Retention Research: A Glance at the Past, a Closer Review of the Present, and a Venture into the Future,' *The Academy of Management Annals*, 2, 1, 231–274.
- House, R.J., and Javidan, M. (2004), 'Overview of GLOBE,' in *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, eds. R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta, Thousand Oaks, CA: Sage.
- Iverson, R.D. (1999), 'An Event History Analysis of Employee Turnover: The Case of Hospital Employees in Australia,' *Human Resource Management Review*, 9, 4, 397–418.
- James, L.R. (1982), 'Aggregation Bias in Estimates of Perceptual Agreement,' *Journal of Applied Psychology*, 65, 219–229.
- James, L.R., Demaree, R.G., and Wolf, G. (1984), 'Estimating Within-Group Interrater Reliability with and without Response Bias,' *Journal of Applied Psychology*, 69, 85–98.
- James, L.R., Demaree, R.G., and Wolf, G. (1993), ' r_{wg} : An Assessment of Within-Group Interrater Agreement,' *Journal of Applied Psychology*, 78, 306–309.
- Jansen, E., and Chandler, E.D. (1994), 'Innovation and Restrictive Conformity among Hospital Employees-Individual Outcomes and Organizational Considerations,' *Hospital and Health Services Administration*, 39, 1, 63–80.
- Judge, T.A. (1993), 'Does Affective Disposition Moderate the Relationship between Job Satisfaction and Voluntary Turnover?' *Journal of Applied Psychology*, 78, 3, 395–401.
- Koh, H.C., and Boo, E.H.Y. (2001), 'The Link Between Organizational Ethics and Job Satisfaction: A Study of Managers in Singapore,' *Journal of Business Ethics*, 29, 4, 309–324.
- Koh, W.L., and Yer, L.K. (2000), 'The Impact of the Employee-Organization Relationship on Temporary Employees' Performance and Attitude: Testing a Singaporean Sample,' *International Journal of Human Resource Management*, 11, 2, 366–387.

- Lam, W., Chen, Z.G., and Takeuchi, N. (2009), 'Perceived Human Resource Management Practices and Intention to Leave of Employees: The Mediating Role of Organizational Citizenship Behaviour in a Sino-Japanese Joint Venture,' *International Journal of Human Resource Management*, 20, 11, 2250–2270.
- Lucas, G.H. Jr., Babakus, E., and Ingram, T.N. (1990), 'An Empirical Test of the Job Satisfaction-Turnover Relationship: Assessing the Role of Job Performance for Retail Managers,' *Journal of the Academy of Marketing Science*, 18, 3, 199–208.
- Lum, L., Kervin, J., Clark, K., Reid, F., and Sirola, W. (1998), 'Explaining Nursing Turnover Intent: Job Satisfaction, Pay Satisfaction, or Organizational Commitment,' *Journal of Organizational Behavior*, 19, 3, 305–320.
- Markus, H., and Kitayama, S. (1991), 'Culture and Self: Implications for Cognition, Emotion, and Motivation,' *Psychological Review*, 98, 224–253.
- Martin, K.D., and Cullen, J.B. (2006), 'Continuities and Extensions of Ethical Climate Theory: A Meta-Analytic Review,' *Journal of Business Ethics*, 69, 2, 175–194.
- McGraw, K.O., and Wong, S.P. (1996), 'Forming Inferences About Some Intraclass Correlation Coefficients,' *Psychological Methods*, 1, 30–46.
- Meiksins, P.F., and Watson, J.M. (1989), 'Professional Autonomy and Organizational Constraints: The Case of Engineers,' *Sociological Quarterly*, 30, 4, 561–585.
- Metcalfe, B.D. (2006), 'Exploring Cultural Dimensions of gender and management in the Middle East,' *Thunderbird International Business Review*, 48, 1, 93–107.
- Metcalfe, B.D. (2007), 'Gender and Human Resource Management in the Middle East,' *International Journal of Human Resource Management*, 18, 1, 54–74.
- Metcalfe, B.D. (2008), 'Women, Management and Globalization in the Middle East,' *Journal of Business Ethics*, 83, 85–100.
- Mobley, W.H. (1982), *Employee Turnover: Causes, Consequences, and Control*, Reading, MA: Addison–Wesley.
- Mowday, R., Porter, L., and Steers, R. (1982), *Employee–Organization Linkages: The Psychology of Commitment, Absenteeism, and Turnover*, New York, NY: Academic.
- Mowday, R., Steers, R., and Porter, L. (1979), 'The Measurement of Organizational Commitment,' *Journal of Vocational Behavior*, 14, 2, 224–247.
- Ng, T.W.H., and Butts, M.M. (2009), 'Effectiveness of Organizational Efforts to Lower Turnover Intentions: The Moderating Role of Employee Locus of Control,' *Human Resource Management*, 48, 289–310.
- Parnell, J.A., and Crandall, W.R. (2003), 'Propensity for Participative Decision-Making, Job Satisfaction, Organizational Commitment, Organizational Citizenship Behavior, and Intentions to Leave among Egyptian Managers,' *The Multinational Business Review*, 11, 1, 45–65.
- Peters, L.W. (1982), 'The Joint Influence of Situational Constraints and Goal Setting on Performance and Affective Outcomes,' *Journal of Management*, 8, 2, 7–20.
- Podsakoff, P.M., MacKenzie, S.B., Lee, J.Y., and Podsakoff, N.P. (2003), 'Common Method Biases in Behavioral Research: A Critical Review of the Literature and Recommended Remedies,' *Journal of Applied Psychology*, 88, 879–903.
- Powell, G.N. (1999), *Handbook of Gender and Work*, Thousand Oaks, CA: Sage.
- Redfield, R. (1948), *Introduction to B. Malinowski, Magic, Science, and Religion*, Boston, MA: Beacon.
- Schaubroeck, J., Lam, S.S.K., and Xie, J.L. (2000), 'Collective Efficacy versus Self-Efficacy in Coping Responses to Stressors and Control: A Cross-Cultural Study,' *Journal of Applied Psychology*, 85, 4, 512–525.
- Schnake, M., and Dumler, M.P. (2000), 'Predictors of Propensity to Turnover in the Construction Industry,' *Psychological Reports*, 86, 3 pt 1, 1000–1002.
- Schwepker, C.H., Jr (2001), 'Ethical Climate's Relationship to Job Satisfaction, Organizational Commitment, and Turnover Intention in the Sales Force,' *Journal of Business Research*, 54, 39–52.
- Shrout, P., and Fleiss, J. (1979), 'Intraclass Correlations: Uses in Assessing Rater Reliability,' *Psychological Bulletin*, 86, 420–428.
- Sledge, S., Miles, A., and Coppage, S. (2008), 'What Role does Culture Play? A Look at Motivation and Job Satisfaction among Hotel Workers in Brazil,' *International Journal of Human Resource Management*, 19, 9, 1667–1682.

- Smyth, R., Zhai, Q., and Li, X. (2009), 'Determinants of Turnover Intentions among Chinese off Farm Migrants,' *Economic Change and Restructuring*, 42, 189–209.
- Spector, P.E., and Jex, S.M. (1998), 'Development of Four Self-Report Measures of Job Stressors and Strain: Interpersonal Conflict at Work Scale, Organizational Constraints Scale, Quantitative Workload Inventory, and Physical Symptoms Inventory,' *Journal of Occupational Health Psychology*, 3, 4, 356–367.
- Spencer, D.G., Steers, R.M., and Mowday, R.T. (1983), 'An Empirical Test of the Inclusion of Job Search Linkages into Mobley's Model of the Turnover Decision Process,' *Journal of Occupational Psychology*, 56, 2, 137–144.
- Steers, R.M., and Mowday, R.T. (1981), 'Employee Turnover and the Post Decision Accommodation Process,' in *Research in Organizational Behavior* (Vol. 3), eds. B.M. Staw and L.L. Cummings, Greenwich, CT: JAI Press, pp. 235–281.
- Syed, J. (2008), 'A Context-Specific Perspective of Equal Employment Opportunities in Islamic Societies,' *Asia Pacific Journal of Management*, 25, 135–151.
- Takeuchi, N., and Takeuchi, T. (2009), 'A Longitudinal Investigation on the Factor Affecting Newcomers' Adjustment: Evidence from Japanese Organizations,' *International Journal of Human Resource Management*, 20, 4, 928–952.
- Trevor, C.O. (2001), 'Interactions among Actual Ease-of-Movement Determinants and Job Satisfaction in the Prediction of Voluntary Turnover,' *Academy of Management Journal*, 44, 4, 621–638.
- Triandis, H.C. (2004), 'Foreword,' in *Culture, Leadership, and Organizations: The GLOBE Study of 62 Societies*, eds. R.J. House, P.J. Hanges, M. Javidan, P.W. Dorfman, and V. Gupta, Thousand Oaks, CA: Sage.
- Tsai, M.T., and Huang, C.C. (2008), 'The Relationship Among Ethical Climate Types, Facets of Job Satisfaction, and the Three Components of Organizational Commitment: A Study of Nurses in Taiwan,' *Journal of Business Ethics*, 80, 565–581.
- UNDP (2001), *Development Report 2001*, New York: UN.
- Villanova, P., and Roman, M.A. (1993), 'A Meta-Analytic Review of Situational Constraints and Work-Related Outcomes: Alternative Approaches to Conceptualization,' *Human Resources Management Review*, 5, 147–175.
- Wang, C.Y.P., Chen, M.H., Hyde, B., and Hsieh, L. (2010), 'Chinese Employees' Work Values and Turnover Intentions in Multinational Companies: The Mediating Effect of Pay Satisfaction,' *Social Behavior and Personality*, 38, 7, 871–894.
- Zhang, H.Y., and Argarwal, N.C. (2009), 'The Mediating Roles of Organizational Justice on the Relationships between HR Practices and Workplace Outcomes: An Investigation in China,' *International Journal of Human Resource Management*, 20, 3, 676–693.