Work–Family Conflict and Organisationally Valued Outcomes: The Moderating Role of Decision Latitude in Five National Contexts

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The moderating role of decision latitude on the relationship between work–family conflict and psychological strain was examined across five countries. It was hypothesised that decision latitude would moderate the relationship more strongly in the individualistic countries (the United States and Canada) than in the collectivistic countries (India, Indonesia, and South Korea). The results supported the hypotheses of this five-country-based cross-national investigation. The implications of the findings for theory and practice in the area of international and cross-cultural research on work and family conflicts in the organisational context are discussed.

INTRODUCTION

The relationship between the work and family lives of individuals is a major area of research in organisational behavior (Bellavia & Frone, 2005; Carlson, Grzywacz, & Kacmar, 2010; Green, Schaefer, MacDermid, & Weiss, 2011; Greenhaus & Allen, 2011; Pitt-Catsouphes, Kossek, & Sweet, 2006). The complex interdependencies between work and family have been examined in the context of several competing theoretical models (see Burke & Greenglass, 1987). In addition, moderating influences from person-specific, occupation-specific, organisation-specific, and culture-specific factors are also being considered in research studies in this area (Bellavia & Frone, 2005; Poelmans, 2005). While the moderating role of several theory-specific constructs can be examined, the role of job decision latitude (i.e. an individual's ability to perform various aspects of his or her role-related duties and responsibilities at his or her discretion) is particularly important (Conley, 2009). The rationale for this argument is based on (1) the classic work of Karasek (1979) and Karasek and Theorell (1990), which revealed the importance of job decision latitude in two distinct national contexts (i.e. the United States and Sweden); and (2) relevance of alternative work arrangements such as telecommuting and flexible work schedules that increase the amount of control that one has in one's work role in reducing work–family conflict (Golden, Veiga, & Simsek, 2006; Macik-Frey, Quick, Quick, & Nelson, 2009). However, in examining the recent research findings on work–family relationships (see Bellavia & Frone, 2005; Pitt-Catsouphes et al., 2006; Frone, 2003; Kossek & Lambert, 2005; Poelmans, 2005), we did not locate any empirical study that examined the moderating role of decision latitude on the relationship between work–family conflict and psychological strain. In particular, it is not clear to what extent decision latitude moderates this relationship in distinct national contexts. Therefore, we designed this study to address this issue of the degree of moderating influences of decision latitude on this relationship in five national contexts.

In the current era of globalisation and increasing economic interdependence among countries, it becomes important to understand the relationship between work and family as it exists in dissimilar national contexts (Gelfand

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Globalisation is changing the nature of work in emerging economies such as India, China, and the Philippines. According to the International Labour Organization (ILO), developing countries top the list of the highest numbers of hours worked (ILO, 2007). Working long hours and taking work home are becoming common practices for individuals working in these countries. This is certainly changing the nature of interaction between work and family lives in these collectivistic contexts (Ling & Powell, 2001). Organisations in these countries are also providing employees with more flexibility and latitude to deal with the ever-increasing demands of work (De Cieri & Bardoel, 2009; Masuda, Poelmans, Allen, Spector, Lapierre, Cooper, Abarca, Brough, Ferreiro, Fraile, Lu, Lu, Siu, O’Driscoll, Simoni, Shima, & Moreno-Velazquez, 2012). The question that arises at this point is to what extent employees in these predominantly collectivistic countries (e.g. India, South Korea) use decision latitude to ameliorate the effects of work–family conflict on psychological strain. Hence, the purpose of the present study is to examine the moderating role of decision latitude in a research model of work–family conflict in five differing national contexts: the United States, Canada, India, Indonesia, and South Korea (Figure 1). In this study, work–family conflict is conceptualised as an inter-role conflict that arises due to mutually incompatible demands and pressures emanating from one’s work and family life (Greenhaus & Beutell, 1985). Psychological strain is hypothesised to mediate the relationship between work–family conflict and the organisationally valued outcomes of job satisfaction, organisational commitment, and turnover intentions.

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THEORETICAL FRAMEWORK

Since the pioneering work of Pleck (1985), a general consensus that has guided research in the domain of work–family conflict is based on the notion that work and family influence each other. It has been well established in the literature that the conflicting expectations associated with the demands of work and family have detrimental effects on the well-being of the individual (Allen, Herst, Bruck, & Sutton, 2000; Cohen & Kirchmeyer, 2005; Eby, Casper, Lockwood, Bordeaux, & Brinley, 2005; Kossek & Ozeki, 1998). Psychological strains experienced due to work–family conflict act as immediate predictors of both organisationally and personally valued outcomes. This rationale, which is inherent in our approach, is consistent with the logic of an organisational stress–psychological strain model (Beehr, 1995; Cohen & Wills, 1985; Karasek & Theorell, 1990).

Earlier research into the nature of the effects of work–family conflict on various organisationally valued outcomes has produced fairly consistent results. The positive and significant relationship between work–family conflict and strain has been confirmed in many studies (Burke, 1988; Greenglass & Burke, 1991; Kinnunen & Mauno, 1998; Netemeyer, Boles, & McMurrian, 1996). Work to family conflict has also been positively related with important negative work outcomes such as job tension (Netemeyer et al., 1996; Stewart & Barling, 1996), work stress (Frone, Russell, & Cooper, 1992; Frone, Yardley, & Markel, 1997; Grandey & Cropanzano, 1999; Judge, Boudreau, & Bretz, 1994), and substance abuse (Frone et al., 1997). Job burnout (an intense form of psychological strain), in particular, as an outcome has received much attention. In the meta-analysis conducted by Allen et al. (2000), the weighted mean correlation between work to family conflict and job burnout was 0.42.

While the research on the relationship between work and family is not new, it is only recently that this relationship has begun to be examined for its generalisability in non-Western organisational contexts (Aryee, Fields, & Luk, 1999; Hill, Yang, Hawkins, & Ferris, 2004; Spector, Allen, Poelmans, Lapiere, Cooper, O’Driscoll, Sanchez, Abarca, Alexandrova, Beham, Brough, Ferreiro, Fraile, Lu, Lu, Moreno-Velazquez, Pagon, Pitariu, Salamatov, Shima, Simoni, Siu, & Widerszal-Bazyl, 2007). Recent findings clearly indicate the nature of relationships between work and family, and related outcome variables such as experience of stress and subjective well-being are governed by similar processes (Aryee, Srinivas, & Tan, 2005; Glazer & Beehr, 2005; Yang, 2005). However, it is likely that cultural variations might affect the strength of relationships between work–family conflict and outcomes in different national contexts (Spector et al., 2007; Yang, 2005; Yang, Chen, Choi, & Zou, 2000). Yang et al. (2000) found that work–family conflict had similar effects on valued work outcomes for both American and
Chinese employees. Similar results have been found in cross-cultural research where differences are found only in the strength of the relationship between stressors and stress across national and cultural boundaries (e.g. Glazer & Beehr, 2005). We propose that individuals are likely to respond in a similar fashion to negative experiences like work–family conflict regardless of their national origins; however, the effects of national differences may be present in influencing the strength of the relationship between work–family conflict and psychological strain. This discussion leads to the first hypothesis:

**Hypothesis 1**: Work–family conflict is positively related to psychological strain. We expect this pattern of relationship to be valid in all five national contexts (i.e. the United States, Canada, India, Indonesia, and South Korea).

**Moderating Role of Decision Latitude**

Karasek (1979) conceptualised decision latitude as the extent to which the work environment enables one to exercise greater control over the pace of one’s work activities and in the process allows for some discretion in the structuring of duties and responsibilities. In other words, it conceptualises autonomy in a work setting (Westman, 1992). Past research has been largely concerned with the direct relationship between decision latitude/job autonomy and work–family conflict (Ahuja, Chudoba, Kaemar, McKnight, & George, 2007; Anderson, Coffey, & Byerly, 2002; Andreassi & Thompson, 2007; Bakker & Geurts, 2004). The central argument is that control over work allows employees to manage the simultaneous demands of work and family and therefore may lower the experience of work–family conflict (Anderson et al., 2002; Bond, Thompson, Galinsky, & Protto, 2003; Galinsky, Bond, & Friedman, 1996; Masuda et al., 2012). However, it must be noted that many studies find no support for this argument (e.g. Ahuja et al., 2007; Andreassi & Thompson, 2007). On the contrary, the findings of the National Study of the Changing Workforce show that autonomy is negatively related to work–family synergy for women (Beutell, 2010). The evidence for the direct effect of decision latitude/job autonomy in lowering work–family conflict is somewhat mixed. Hence, there is a clear need to move beyond examining the direct effects of decision latitude and to test the moderating influence of decision latitude on work–family conflict processes.

The major thesis of the job demands–control model is that though excessive work demands are associated with higher levels of psychological strain, the impact of these demands is reduced or moderated by the amount of control that the employee has over important aspects of his or her work role.

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1 We use “job autonomy” and “decision latitude” interchangeably in this article.
(Karasek, 1979). Although Karasek’s model does not include family variables, work–family conflict can be conceptualised as a form of work-related stressor. We suggest that due to the blurring of boundaries between work and family, work–family conflict has become a common occurrence in an individual’s work life (Conley, 2009). Based on Karasek’s theory, it is argued that when employees lack control in their job to deal with the competing demands of work and family, it manifests as anxiety and psychological strain. The rationale for this is rooted in “learned helplessness” (Maier & Seligman, 1976; Wright & Grant, 2010), a situation characterised by a psychological state where people feel powerless to change their self or situation regardless of the circumstances. In a demanding work environment (as was the case in Karasek’s, 1979, cross-national investigation) or in a situation of persistent work–family conflict, a lack of decision latitude or responsibility is likely to lead to feelings of learned helplessness.

When an employee with high decision latitude experiences conflict between work and family, he or she can more effectively organise the various duties and responsibilities associated with work (Grzywacz & Marks, 2000; Kossek, Lautsch, & Eaton, 2005). Given the changing nature of the workplace and the increasing overlap of work- and family-related demands, it is likely that individuals who have more decision latitude in their work roles are able to deal with work–family conflicts more effectively and hence experience lower levels of psychological strain (Schieman & Glavin, 2008). Hence, we hypothesise:

**Hypothesis 2a**: Decision latitude moderates the relationship between work–family conflict and psychological strain in such a way that it reduces the strength of the relationship between work–family conflict and psychological strain.

**Cross-Cultural Differences in the Moderating Role of Decision Latitude**

Based on the discussion above, it is clear that decision latitude is an important moderator of the relationship between work–family conflict and psychological strain. However, it is not clear to what extent decision latitude is able to exercise moderating influences in countries that are dissimilar from Western countries such as the United States, Canada, and the UK. One cannot assume that decision latitude is likely to moderate the relationship between work–family conflict and psychological strain in similar fashion across national and cultural boundaries. There are significant variations in the way individuals construe the meaning of work (MOW International Research Team, 1987), as well as in how far work-related responsibilities and duties should be allowed to intrude into the domain of family and personal lives (Cleveland, McCarthy, & Himelright, 2008; Triandis, 1973, 1994).

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The organisational practices that encourage higher levels of decision latitude in Western countries are based on the assumption that when individuals experience greater control over the flow and schedule of their work activities, they tend to be more motivated and satisfied and at the same time better able to cope with stressful job experiences (Boyd, Bakker, Pignata, Winefield, Gillespie, & Stough, 2011; Hirst, Budhwar, Cooper, West, Long, Chongyuan, & Shipton, 2008; Nauta, Liu, & Li, 2010; Smith, Peterson, & Wang, 1996). However, the validity of this assumption is open to question when we take this notion for further testing in non-Western contexts characterised by high power distance. Power distance as a cultural dimension refers to the “extent to which less powerful members of society expect power to be unequally distributed and/or accept this unequal distribution” (Hofstede, 2001, p. xix). In countries characterised by high levels of power distance, decision latitude may not be valued, as the cultural norms dictate that one must be obedient and respect the authority of one’s supervisor (Smith & Hume, 2005). Performing independently and exercising decision latitude may be viewed as challenging the supervisor’s authority and may even be seen as threatening the supervisor’s power (Aryee & Chen, 2006; Hofstede & Hofstede, 2005; Tata, 2000). Employees in these countries are expected to perform their work-related duties and responsibilities in line with the formal expectations of their supervisors and others in the organisational hierarchy (Chen & Farh, 2001; Hofstede, 1994; Hofstede & Hofstede, 2005).

As a result, there is likely to be reluctance on the part of employees to seek a relative sense of autonomy and freedom in performing the duties and responsibilities associated with their work role (Hampden-Turner & Trompenaars, 1993; Ollo-López, Bayo-Moriones, & Larraza-Kintana, 2011). Also, it has been found that power distance negatively moderates the relationship between empowerment and job satisfaction in high power distance countries (Hui, Au, & Fock, 2004). Hence, work organisations that emphasise the importance of job autonomy and decision latitude are not likely to be perceived as being motivating in high power distance contexts (Hirst et al., 2008). In fact, providing greater autonomy may sometimes be incongruent with cultural expectations concerning the role of authority in the organisational hierarchy. As a result, organisational interventions such as increasing decision latitude could indeed be perceived as confusing by employees.

In addition, the cultural dimension of collectivism is likely to influence the efficacy of the moderating role of decision latitude. The cultural values of a society largely determine the nature of the relationship between work and family (Cleveland et al., 2008; Frone, 2003; Powell et al., 2009; Quick, Henley, & Quick, 2004). In collectivistic countries, family-related concerns usually take precedence over work-related duties and responsibilities (Spector et al., 2007; Yang, 2005). The centrality of the work or the family role influences the decisions made by the individual (Carlson & Kacmar, 2000). Given the low
centrality of work life in collectivistic contexts, individuals are not likely to strongly rely on work-related strategies such as decision latitude in dealing with work–family conflict. Rather, it is our contention that the high salience of family life in collectivistic contexts leads individuals to seek support from family members in dealing with conflicts between work- and family-related demands. Collectivists are also likely to view work and the economic rewards of working in organisations as important means for sustaining their families. In collectivistic countries, members of one’s family are keenly aware of the various demands that are present in the work context of the working family member. They are socialised to provide ample amounts of support to the individual to perform work-related duties and responsibilities and also make sure that the relationship between the demands of work and those of the family is not particularly troubling or stressful (Poelmans, 2005; Yang et al., 2000). As a result, one does not necessarily require a great deal of job autonomy or decision latitude in order to manage the interface between work- and family-related roles and expectations.

Based on the above discussion, we expect the moderating role of decision latitude to be weaker in the high power distance and collectivistic contexts of India, Indonesia, and South Korea than in the low power distance and individualistic contexts of the United States and Canada. This is due to the relatively low levels of importance attached to job decision latitude in high power distance countries. Coupled with this is the lack of need for higher levels of decision latitude due to greater support from the workers’ families. This leads to a further hypothesis:

**Hypothesis 2b**: The moderating effect of decision latitude on the relationship between work–family conflict and psychological strain will be stronger in the United States and Canada than in India, Indonesia, and South Korea.

**Mediating Role of Psychological Strain**

Although many studies of the domain of work–family conflict have examined the direct relationship between work–family conflict and the organisationally valued outcomes of job satisfaction, organisational commitment, and turnover intentions, the mediating effects of psychological strain have not been extensively examined. Many researchers have cautioned that these studies miss an important mediator between negative experiences and work outcomes (Beehr, 1995; Beehr & Bhagat, 1985; Beehr & Glazer, 2001). Negative experiences such as work–family conflict have some direct human consequences such as anxiety (a form of psychological strain), which then influences organisationally important consequences such as job satisfaction and organisational commitment (Glazer & Beehr, 2005). According to this perspective, work–family conflict is likely to initiate a quick response in an

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individual (e.g. anxiety or tension), which results in strain either in psychological or physiological form. This outcome of strain is likely to have a direct impact on the organisationally valued outcomes of job satisfaction, organisational commitment, and turnover intentions. Psychological strain in our research model is the immediate outcome of work–family conflict, which, in turn, adversely affects job satisfaction and organisational commitment and positively affects turnover intentions. Hypothesis 3 is concerned with the mediating role of psychological strain in the relationship between work–family conflict and the work outcomes of job satisfaction, organisational commitment, and turnover intentions.

**Hypothesis 3**: Psychological strain fully mediates the relationship between (1) work–family conflict and job satisfaction; (2) work–family conflict and organisational commitment; and (3) work–family conflict and turnover intentions. We expect this to hold across the five national contexts (i.e. the United States, Canada, India, Indonesia, and South Korea).

**METHODS**

**Selection of Countries**

The guiding principle in selecting the countries was to choose countries that reflect as far as possible the maximum range of cultural differences and other variations. In doing this, we followed the recommendations made in van de Vijver and Fischer (2009), van de Vijver and Leung (1997), and Bhagat and McQuaid (1982). The collection of data from several countries takes a considerable amount of effort and time in addition to raising methodological issues of translation and measurement equivalence. The starting point in our data collection was to form collaborations with countries in which the principal investigator (first author) had academic and professional partnerships (i.e. the United States, India, and South Korea). The principal investigator also recruited collaborators at professional conferences and meetings. These collaborations were formed not only to maximise the cultural differences in the sample but also to ensure that there were some similarities among the countries included in our study. Therefore, Canada and Indonesia were chosen along with the United States, India, and South Korea. Even though we started our data collection based on convenience sampling, we believe the five countries involved in this study represent a wide range of cultural dissimilarities (e.g. between the United States and Indonesia, and between Canada and South Korea) and similarities (e.g. between the United States and Canada, and between India and Indonesia). These countries range from being highly globalised and predominantly individualistic in orientation to countries that are not so globalised and are largely characterised by high levels of collectivism.

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Based on Hofstede’s research on cultural variations (1994, 2001), the five countries that we selected differed on the dimension of individualism–collectivism as follows: the United States (91), Canada (80), India (48), South Korea (18), and Indonesia (14). On the dimension of power distance, Indonesia had the highest score, with Canada scoring the lowest: the United States scored 40, Canada 38, India 77, Indonesia 78, and South Korea 60 (Hofstede, 1994, 2001). In addition, according to the 2009 CIA world factbook, these countries differ a great deal in terms of economic development, with per capita GDP (in 2009 US dollars) as the prime indicator: the United States had a per capita GDP of $46,400, Canada $38,400, South Korea $28,000, Indonesia $4,000, and India $3,100. In addition, these countries differ in terms of religion: Protestantism is predominant in the United States and Canada, Hinduism in India, and Islam in Indonesia, with a mixture of Buddhism, Taoism, and Christianity in South Korea.

The questionnaires used in this cross-national investigation were developed based on US-based organisational studies. The English-language version was used in the United States, Canada, and India. English is widely spoken in India and is the official language or lingua franca of business, and therefore there was no need to translate and back-translate the instrument. In South Korea and Indonesia, the instrument was translated into the Korean and Bhasa languages, respectively, following the recommendations of Brislin, Lonner, and Thorndike (1973), Bhagat and McQuaid (1982), and van de Vijver and Leung (1997). The first step in the process involved the translation of the questionnaires by the country collaborators from South Korea and Indonesia. These collaborators had extensive research experience in the collection of data in their own country contexts.

In the second step, a different translator (from each country) back-translated the instruments into English. After the process of translation and back-translation was completed, the original, translated, and back-translated versions were compared to remove minor discrepancies.

Sample

Data were collected by managers and white-collar workers in the United States, Canada, India, Indonesia, and South Korea. The country collaborators contacted the human resources (HR) managers of the different organisations in their respective countries. They explained the nature of the research investigation to these HR managers. In the United States, data were collected from two organisations in manufacturing and health services sectors. Data from Canada were collected from a healthcare organisation. In India, we collected data from two different organisations in the manufacturing and high-technology sectors. Data were collected from an electronics organisa-
tion in South Korea. Finally, in Indonesia data were collected from a healthcare organisation and a financial organisation. Questionnaires were randomly distributed to individuals at different levels in these organisations. Respondents were asked to voluntarily fill out the questionnaires and anonymously return them to the human resources department. Since senior managers of the organisations initiated the data collection, we had a high response rate in most countries involved in the study: in the United States the rate was 70 per cent, in Canada 41 per cent, in India 61 per cent, in Indonesia 55 per cent, and in South Korea 75 per cent.

A total of 2,371 valid responses were collected across the five countries involved in our study. Data collected from respondents who were not citizens of the country where the data were collected were excluded from the analyses. This led to the exclusion of about 16 per cent of the respondents from the United States and about 6 per cent from the Canadian sample, leaving a final sample of 2,292 employees. The US sample consisted of 292 individuals (29.4% male, mean age 29.7 years, and 56.3% married). The Canadian sample consisted of 115 individuals (14.7% male, mean age 41.89 years, and 61.5% married). The sample from India consisted of 801 individuals (70% male, mean age 32.1 years, and 85.7% married). The Indonesian sample consisted of 722 individuals (34.6% male, mean age 27.8 years, and 71.5% married). The sample from South Korea consisted of 362 individuals (78.4% male, mean age 38.3 years, and 61.5% married).

Measures

*Work–Family Conflict.* Work–family conflict was measured using a scale adapted from Beehr, Faulkner, Drexler, and McMullin (1993). The items in the scale referred to conflicts between overall work and family expectations, for example: “My work and family lives seem to get in the way of each other” and “What I should do on my job and what my family wants of me are two different things.” The scale consists of five items on a scale of 1 to 7, with 7 indicating strong agreement.

*Psychological Strain.* A scale adapted from House and Rizzo’s (1972) Anxiety-Stress Questionnaire was used to measure psychological strain. Sample items include “I work under a great deal of tension” and “Problems associated with my job have kept me awake at night.” Respondents were asked to indicate their degree of agreement with the statements on a scale of 1 to 7, with 7 indicating strong agreement.

*Decision Latitude.* Decision latitude was measured using a four-item scale developed by Karasek (1979). The scale items were presented to determine the degree to which respondents had the freedom to decide how to
organise their work, had control over what happened in their jobs, had sufficient resources to make and implement decisions regarding their jobs, and had input into decisions that affected their work. Responses to the items were made on a scale of 1 to 5, with 5 indicating strong agreement.

**Job Satisfaction.** Job satisfaction was measured using the Job Diagnostic Survey (JDS) (Hackman & Oldham, 1975). The items were anchored on 7-point scales, with 1 indicating extreme dissatisfaction and 7 indicating extreme satisfaction. A sample item is “The amount of independent thought and action I can exercise in my job.”

**Organisational Commitment.** Organisational commitment was measured using a scale adapted from Mowday, Steers, and Porter (1979). Sample items included statements such as “I am willing to put in a great deal of effort beyond that which is normally expected in order to help this organisation be successful” and “I am proud to tell others that I am part of this organisation.” Responses were scored on a 7-point scale ranging from 1, which equated to strong disagreement, to 7, which equated to strong agreement.

**Turnover Intentions.** An individual’s propensity to leave the job was measured with a four-item scale developed by Spencer, Steers, and Mowday (1983). Sample items include the following: “I am currently looking for a job with a different company” and “I plan to quit my job soon.” Responses were scored from 1 to 5, with 1 indicating strong disagreement and 5 indicating strong agreement.

**Control Variables.** The control variables were gender, marital status, and job level. Gender was recorded as 1 for male and 2 for female. Marital status was measured using 1 for single and 2 for married. Job level was classified into four occupational categories from 1 to 4: 1 (senior management), 2 (middle management), 3 (first level supervisors), 4 (non-managerial staff).

**Measurement Equivalence**

The need to establish measurement equivalence when the same measures are used in a cross-national study is crucial (see Leung, Bhagat, Buchan, Erez, & Gibson, 2005; Robert, Lee, & Chan, 2006; van de Vijver & Fischer, 2009; van de Vijver & Leung, 1997). We followed the measurement equivalence procedure suggested by Byrne, Shavelson, and Muthen (1989) and Rensvold and Cheung (1998) to test the fit of the model using a multigroup confirmatory measurement model with the expected factor structure across the five countries. The first step involved in measurement equivalence is to establish
configural equivalence, which indicates that the participants from different groups (i.e. cultures in our study) conceptualise the constructs in the same fashion. To achieve this, confirmatory factor analyses (CFAs) were conducted separately in each country. The results show that the six-factor model fits reasonably well across the United States ($\Delta \chi^2_{614} = 1372.66$, RMSEA = 0.07), Canada ($\Delta \chi^2_{614} = 1320.79$, RMSEA = 0.08), India ($\Delta \chi^2_{614} = 1868.82.15$, RMSEA = 0.05), Indonesia ($\Delta \chi^2_{614} = 1903.20$, RMSEA = 0.06), and South Korea ($\Delta \chi^2_{614} = 1752.89$, RMSEA = 0.07).

In the next step, we tested for metric equivalence, which is an assessment of whether groups respond to the different items in the same way. To achieve this, a series of multigroup confirmatory factor analyses were conducted in order to examine the measurement equivalence across the five countries involved. Since our study involved six constructs in five countries measured using 44 items (a total of 220 items), it was impractical to perform confirmatory factor analyses of all the constructs together in one syntax. Therefore, each instrument was compared separately using LISREL 8.51 (Jöreskog & Sörbom, 1993). The model fit statistics from this step are shown in Table 1.

In the initial analysis, the measurement model for a given construct was estimated freely across five groups. Next, the factor loadings were constrained to be equal across all five groups; however, the chi-square and other fit statistics increased significantly for most constructs. Hence, full metric equivalence could not be established. It must be noted that establishing full measurement equivalence using chi-square difference tests is quite rare beyond configural invariance (Steenkamp & Baumgartner, 1998). In many instances, researchers can establish partial metric equivalence by relaxing some of the item loading constraints (Steenkamp & Baumgartner, 1998). The well-accepted criterion for partial metric invariance is to constrain at least two items per construct across all the groups (Hair, Black, Babin, Anderson, & Tatham, 2006; Steenkamp & Baumgartner 1998). In addition to the chi-square difference test, change in CFI and change in McDonald’s non-centrality were used to assess the metric equivalence, as suggested by Meade, Johnson, and Braddy (2008). As seen in Table 1, the change in chi-square was not significant for all the variables at $p < .05$ except for decision latitude. However, the chi-square difference test is insignificant for decision latitude at $p < .01$. In addition, changes in CFI, and McDonald’s non-centrality fit indices were not significant ($p < .05$). Hence, partial metric equivalence was established.

The convergent validity of measures was examined using CFAs on a six-factor (work–family conflict, decision latitude, strain, job satisfaction, organisational commitment, and turnover intentions) measurement model in five countries. The results of this analysis show that each item had a significant factor loading ($t > 2.0$), indicating good convergent validity (Anderson & Gerbing, 1988). To test for discriminant validity, a series of
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* Change in $\chi^2$ is significant at $p < .05$. 

Note: * Change in $\chi^2$ is significant at $p < .05$. 

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CFAs were conducted between each pair of constructs (Anderson & Gerbing, 1988). This was done by comparing a two-factor model for each pair of constructs to a one-factor model (i.e. a model in which measures of two constructs were imposed onto just one factor). The results of these CFAs showed that the chi-square value for the single-factor model was significantly larger than the chi-square value obtained from the two-factor model in each case. That is, chi-square difference tests showed that model fit deteriorated significantly when two sets of items, intended to measure two distinct constructs, were forced to load on a single underlying factor. This provides support for the proposition that the six multi-item measures used in our study exhibit discriminant validity. The means, standard deviations, reliabilities, and correlations among the variables for the five countries involved in the study are presented in Table 2. Significant correlations are noted in the correlation matrices.

Path Analyses and Test of Hypotheses

The model in Figure 1, including all of the proposed direct, indirect, and moderator relationships, was estimated by path analysis. To test the hypothesised relationships, multigroup path analyses were conducted for the model as shown in Figure 1. The control variables of gender, marital status, and job level were also included. The hypothesised path model (Figure 1), without any constraints across groups, fits the data moderately well ($\chi^2_{115} = 788.44; \text{NFI} = .85; \text{CFI} = .87, \text{GFI} = .90$). The results show that the path coefficient between work–family conflict and psychological strain is significant across all five national contexts. The estimated path coefficients range from 0.32 in Indonesia to 0.22 in the United States (Table 3). This provides full support for Hypothesis 1.

Hypothesis 2a predicted that decision latitude negatively moderates the relationship between work–family conflict and psychological strain. The results of the path analyses suggest that the path coefficient for the interaction term (between decision latitude and work–family conflict) and psychological strain is significant in the United States ($-0.13, p < .05$), and Canada ($-0.18, p < .05$) (Table 3). Figures 2a and 2b depict the moderating effects of decision latitude for the United States and Canada, respectively. However, decision latitude did not moderate the relationship between work–family conflict and psychological strain in any of the countries that are predominantly collectivistic and emphasise high levels of power distance (i.e. India, Indonesia, and South Korea). Thus, Hypothesis 2a is supported only in the United States and Canada. Hypothesis 2b predicted that decision latitude would be a stronger moderator of the work–family conflict–psychological strain path in individualistic countries than in collectivistic countries. As mentioned above, decision latitude moderates the
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<td>.43*</td>
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<tr>
<td>3. Job Level</td>
<td>2.94</td>
<td>.92</td>
<td>.46*</td>
<td>.58*</td>
<td>1.00</td>
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<tr>
<td>4. Work–Family Conflict</td>
<td>3.66</td>
<td>.76</td>
<td>.65</td>
<td>-0.09</td>
<td>-0.02</td>
<td>-0.04</td>
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<td>5. Decision Latitude</td>
<td>4.49</td>
<td>1.04</td>
<td>.86</td>
<td>-0.19*</td>
<td>-0.31</td>
<td>-0.35**</td>
<td>-0.19**</td>
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<td>6. Psychological Strain</td>
<td>3.80</td>
<td>.88</td>
<td>.85</td>
<td>.05</td>
<td>.05</td>
<td>-0.05</td>
<td>.30**</td>
<td>-0.19**</td>
<td>1.00</td>
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<tr>
<td>7. Job Satisfaction</td>
<td>4.51</td>
<td>.92</td>
<td>.89</td>
<td>-0.19**</td>
<td>-0.14*</td>
<td>-0.20**</td>
<td>-0.19**</td>
<td>.47**</td>
<td>-0.10</td>
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<td>8. Organisational Commitment</td>
<td>4.63</td>
<td>.88</td>
<td>.78</td>
<td>-0.13*</td>
<td>-0.19**</td>
<td>-0.19**</td>
<td>-0.25**</td>
<td>-.35**</td>
<td>-0.24**</td>
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<td>9. Turnover Intentions</td>
<td>2.33</td>
<td>.81</td>
<td>0.77</td>
<td>.05</td>
<td>.19*</td>
<td>.13*</td>
<td>.18**</td>
<td>-0.23**</td>
<td>.26**</td>
<td>-0.37**</td>
<td>-0.55**</td>
<td>1.00</td>
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Note: * p < .05; ** p < .01.
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<th>Structural parameter</th>
<th>United States</th>
<th>Canada</th>
<th>India</th>
<th>Indonesia</th>
<th>South Korea</th>
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<td>Work–Family Conflict → Strain</td>
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<td>0.25/2.56*</td>
<td>0.25/7.44*</td>
<td>0.32/9.27*</td>
<td>0.25/4.94*</td>
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<td>-0.15/-1.35</td>
<td>-0.20/-5.88*</td>
<td>-0.12/-3.52*</td>
<td>-0.14/-2.80*</td>
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<td>-0.18/-2.13*</td>
<td>0.01/0.31</td>
<td>0.01/0.27</td>
<td>-0.05/-0.92</td>
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<td>-0.29/-2.90*</td>
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<td>-0.21/-5.8*</td>
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<td>-0.25/-2.53*</td>
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<td>-0.32/-9.33*</td>
<td>-0.29/-4.95*</td>
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<td>0.34/3.52*</td>
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<td>0.22/5.69*</td>
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<td>0.00/0.05</td>
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<td>0.23/6.13*</td>
<td>0.11/2.78*</td>
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</tbody>
</table>

Note: * p < .05; WFC*DL represents the interaction between work–family conflict and decision latitude.
said relationship only in individualistic contexts. Hence, Hypothesis 2b is partially supported.

Next, attention was directed to testing the mediating role of psychological strain between work–family conflict and various valued job outcomes. Significant coefficients were found for the path between psychological strain and job satisfaction (the path coefficients range from $-0.19$ to $-0.29$, $p < .05$), psychological strain and organisational commitment (the path coefficients range from $-0.21$ to $-0.34$, $p < .05$), and psychological strain and turnover intentions (the path coefficients range from $0.22$ to $0.34$, $p < .05$). The model shown in Figure 1 (Model 1) is hypothesised to be a full mediation model. To test for mediation of psychological strain, the proposed theoretical model (Model 1) was compared with three nested alternative models. In the first

FIGURE 2A. Work–family conflict and decision latitude interaction on psychological strain in the United States ($n = 292$).

FIGURE 2B. Work–family conflict and decision latitude interaction on psychological strain in Canada ($n = 115$).
nested alternative model (Model 2), a direct path from work–family conflict to job satisfaction was added. In the next model (Model 3), we specified a direct path from work–family conflict to organisational commitment. Next, a direct path from work–family conflict to turnover intentions was added (Model 4). All these nested alternative models were compared with the base model (Model 1) using chi-square difference tests to assess whether the addition of a direct path from work–family conflict to an outcome variable improves model fit. The results of the chi-square difference test for the five groups in three models suggest that psychological strain partially mediates the relationship between work–family conflict and organisational commitment ($\Delta \chi^2 = 32.01; p < .05$) and work–family conflict and turnover intentions ($\Delta \chi^2 = 12.96; p < .05$). For the direct path between work–family conflict and job satisfaction, the change in chi-square was insignificant ($\Delta \chi^2 = 7.99; p < .05$), suggesting that psychological strain fully mediates the relationship between work–family conflict and job satisfaction. Thus, Hypothesis 3 is partially supported.

**Testing for Equality of Paths**

In addition to testing the overall fit of the model to the data simultaneously across the five countries, we also examined the equality of paths by simultaneously setting the individual paths to be equal across the countries (e.g. if the path from work–family conflict to psychological strain was constrained to be equal, then the path from psychological strain to job satisfaction was set to be equal and so forth). The resulting chi-square was compared to the adjusted model’s chi-square and the significance of the difference was tested. The results of this analysis indicated that there were significant differences between countries on three paths: the interaction term examining the moderating role of decision latitude on the work–family conflict and psychological strain relationship ($\Delta \chi^2 = 23.98; p < .05$); psychological strain and turnover intentions ($\Delta \chi^2 = 9.87; p < .05$), and work–family conflict and organisational commitment ($\Delta \chi^2 = 10.4; p < .05$). All other paths were equal across the five countries. The estimated path coefficients for all the relationships are depicted in Figure 3.

Next, we conducted pairwise comparisons of the three paths that were different across the five national contexts. The results show only significant differences for the interaction–psychological strain path between the US and India ($\Delta \chi^2 = 4.35; p < .05$), the US and Indonesia ($\Delta \chi^2 = 5.49; p < .05$), Canada and India ($\Delta \chi^2 = 4.12; p < .05$), and Canada and Indonesia ($\Delta \chi^2 = 4.68; p < .05$), with decision latitude only moderating in individualistic cultures of the US and Canada. For the psychological strain-turnover intentions path, India and Indonesia again significantly differed from each other ($\Delta \chi^2 = 6.68; p < .05$) with the path coefficient being stronger in India (0.22) than in

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Indonesia (0.13). Similar differences were observed between Canada and India ($Dc = 6.59; p < .05$), with the relationship being stronger in India (0.13) than in Canada (0.11).

**DISCUSSION**

The main objective of this cross-national investigation was to analyze the moderating effect of decision latitude on the relationship between work-family conflict and psychological strain in five dissimilar countries. It was hypothesized that decision latitude would have stronger moderating effects in the United States and Canada (characterised by high levels of individualism and moderate levels of power distance) than in India, Indonesia, and South Korea (characterised by high levels of collectivism and power distance). In addition, a related objective of this research was to examine the applicability of a US-based research model in dissimilar national contexts. The fact that the research model is found to be valid in all five national contexts is important. Most studies in the area of work-family conflict have employed a somewhat fragmented approach to analyzing the nature of work-family conflict in work organisations. In terms of generalisability across nations and cultures, the typical research design has involved bivariate comparisons. About 30 years ago, Bhagat and McQuaid (1982) noted

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that the trend toward two-country comparisons severely restricts the significance of the results in terms of their applicability and validity in dissimilar countries and cultures.

The findings of the study clearly reveal that employees in predominantly individualistic countries (e.g. Canada) are better able to deal with work–family conflict and do not experience as much psychological strain when they have sufficient decision latitude or job autonomy in performing the duties and responsibilities associated with their work roles. However, decision latitude did not moderate the relationship between work–family conflict and psychological strain in any of the three collectivistic contexts. Our expectation was that decision latitude would moderate the relationship between these two variables in a somewhat weaker fashion in the collectivistic countries. However, the finding that decision latitude did not have any moderating effects raises interesting questions pertaining to the dynamics of work–family interaction in the context of countries that are characterised by high levels of collectivism and power distance. This finding lends credence to the theoretical arguments we presented earlier, i.e. that the degree of emotional interconnectedness among the members of the family is stronger in collectivistic countries compared to those found in individualistic countries. Such interconnectedness makes it easier for members of collectivistic families to seek counsel and guidance from each other during times of work–family conflict (Bhagat, Steverson, & Segovis, 2007). Thus, it may not be necessary for a working member of the family to either seek or have decision latitude in order to mitigate the effects of work–family conflicts on the development of psychological strain (Sanchez-Burks & Lee, 2007).

In addition, the absence of moderating effects of decision latitude can be explained in that power distance that characterises work relationships in these countries makes it difficult for individuals to make effective use of decision latitude or job autonomy in ameliorating psychological strains that emerge from work–family conflicts. It is clear from our findings that socio-cultural processes directly influence the efficacy of Western organisational practices designed to increase one’s independence at work. Recent findings from call center operations in India reported in Little, Nelson, Quade, and Ward (2011) also support this line of reasoning. Their study was concerned with the role of close supervision in India, that is characterised by high power distance, which showed that while micromanaging call center employees in the US may produce frustration (i.e. symptoms of psychological strains), it has the opposite effect in India. They interpret their findings by noting that Indian employees are likely to construe close supervision (resulting in low levels of autonomy on the part of call center employees) using display rules as positive resources in their jobs as call-center employees. We believe that future research should incorporate the role of cultural differences in the way they affect decision latitude and other important moderating influences on
the relationship between work–family conflicts and organisationally and personally valued outcomes.

With respect to the mediating role of psychological strain between work–family conflict and work outcomes, we found that psychological strain only partially mediates the relationship between work–family conflict and turnover intentions and organisational commitment. A rationale for this may lie in that the experience of severe work–family conflict may motivate an employee to search for alternative employers (Ahuja et al., 2007). This pattern is found to be valid across all five countries. Although there are many social and economic differences among these five countries, the consistency of the direct relationship between work–family conflict and turnover intentions and organisational commitment has important implications for employers. Organisations, whether they operate primarily in domestic, multinational, or global contexts, should offer support mechanisms (e.g. flexible work arrangements, child care, elder care, etc.) to help employees balance pressures emanating from the domains of work and family. However, as alluded to earlier, the effectiveness of such mechanisms (including providing additional decision latitude or autonomy) varies in accordance with the cultural variations of individualism–collectivism and power distance. Therefore, it is important that work organisations which operate in multi-cultural contexts offer organisational intervention programs such as employee assistance programs (EAPs) that are congruent with the cultural context (Bhagat et al., 2007).

In addition to testing the hypotheses, post-hoc analyses were also conducted in order to explore the role of cultural differences in the strength of the relationships as depicted in the research model. With the exception of three paths (the moderating role of decision latitude, psychological strain–turnover intentions, and work–family conflict–organisational commitment), all others paths were similar across the five countries. Findings of these post-hoc analyses reveal some interesting patterns. It was found that psychological strain has similar effects on the attitudinal work outcomes of job satisfaction and organisational commitment but not on turnover intentions. This suggests that individuals react similarly to psychological strain when it comes to attitudinal job outcomes (i.e. job satisfaction and organisational commitment) but differences emerge with respect to the intention to leave the work organisation. It is quite likely that various factors related to the conditions prevailing in the labor market (i.e. unemployment rate) and organisational, national, and cultural expectations affect an individual’s intention to leave the organisation. For example, in highly collectivistic countries such as Japan, South Korea, Greece, etc., experience of work–family conflict may not necessarily strengthen the desire to leave one’s organisation.

In continuing with the above line of arguments, it is interesting to note that the negative relationship between work–family conflict and organisational
commitment is strongest in Indonesia. However, the positive relationship between psychological strain and turnover intentions was much weaker in Indonesia when compared to other countries. This is indeed an interesting finding. It may be explained based on dissimilar economic conditions prevailing in these countries at the time the data were being collected. Given that Indonesia experienced the highest unemployment rate, 10.6 per cent (South Korea 3.1%, the US 6.2%, Canada 7.6%, and India 8.8%) (*CIA world factbook*, 2003), it is to be expected that employees in the Indonesian work organisations were more likely to continue working for their organisations despite the adverse effects of work–family conflicts and the resulting psychological strains. The fact that individuals may continue to work for their organisations despite experiencing lower levels of organisational commitment has important implications. Past research has shown that organisational commitment directly influences organisational citizenship behavior (Lavelle, Brockner, Konovsky, Price, Henley, Taneja, & Vinekar, 2009; Williams & Anderson, 1991) and lack of commitment is directly related to counterproductive behavior (Dalal, 2005; LePine, Erez, & Johnson, 2002). This suggests that even though work–family conflict might not necessarily have adverse impact on turnover intentions—especially in less affluent countries such as Venezuela—it might nevertheless have dysfunctional effects on other organisationally valued outcomes such as citizenship behaviors. Therefore, it is recommended that multinational and global organisations operating in less affluent countries should be cognisant of the possible adverse effects of work–family conflict on organisational commitment (an attitudinal outcome) although turnover (a behavioral outcome) may not necessarily be affected.

**Limitations and Directions for Future Research**

The results of this cross-national investigation reveal some interesting findings that are clearly relevant for the integration of the growing body of empirical literature on work–family conflict and its outcomes. In examining the generalisability of a Western model of work–family conflict, psychological strain, and organisationally valued work outcomes, the findings of this present study also provide some insightful results. However, some limitations of the present investigation need to be discussed. While the empirical results support the conceptual model in a cross-sectional design, it is important to address the nature of the causal relationships that are inherent in this framework. Longitudinal research exploring the nature of the causal relationships will provide more insights into the role of work–family conflict in creating psychological strain and how strain affects organisationally valued outcomes such as job satisfaction, organisational commitment, and turnover intentions. Problems of method variance are also addressed in longitudinal analyses (see Evans, 1985; Judd & Kenny, 2010).
Another possible limitation is concerned with the origin of the research instruments. They were designed and validated in US-based studies and, therefore, might reflect a strong Western bias. However, the results of the measurement equivalence analyses clearly suggested that the questionnaire items were interpreted in the same fashion across the five nations involved. In future research investigations, it will be important to use some culture-specific items that reflect the *emic* components of the constructs. Once again, to ensure that the culture-specific nature of the items was taken into consideration, the principal investigator met with the country collaborators and discussed with them the content validity of the questionnaires in the context of each collaborator’s country.

In this study, we employed the cultural psychology constructs of individualism–collectivism and power distance in explaining the differential importance of the moderating role of decision latitude in the five countries studied. Oyserman, Coon, and Kemmelmeier’s (2002) review clearly highlights the significance of individualism–collectivism as reflecting the “deep structures” of cultural differences across nations. Therefore, there was a compelling theoretical rationale for using these two dimensions of cultural variation. However, there are other cultural dimensions that are perhaps of some relevance and should be incorporated into future research. Lytle, Brett, Barsness, Tinsley, and Janssens (1995) and Gelfand, Erez, and Aycan (2007) provide a list of cultural variations, and we recommend that future researchers refer to this list and incorporate other theory-specific dimensions. In addition, closer attention needs to be paid to culture-specific (*emic*) aspects of work–family conflicts.

The results of this study should motivate future research to examine the efficacy of Western organisational practices in non-Western cultures. Telecommuting and flexible work arrangements and time schedules are extensively employed in Western organisational practice as interventions in order to manage the dysfunctional consequences of work–family conflict. Multinational and global organisations often apply the practices that are found to be effective in their home countries (Hirst et al., 2008). However, the results of our study suggest the importance of examining the culture-specific factors that may influence the efficacy of Western organisational techniques in resolving work–family conflict. That is, the notion that “one size fits all” needs to be discarded in favor of case-by-case analyses.

**Conclusion and Implications for Practice**

Work–family conflict has been an important area of research into organisational behavior. However, there has been an absence of investigations examining the moderating role of decision latitude in work–family conflict, psychological strain, and valued work outcomes. Based on the work of
Karasek and his colleagues (Karasek, 1979; Karasek & Theorell, 1990), a research model was developed and validated for its generalisability in five countries (the United States, Canada, India, Indonesia, and South Korea). The findings clearly provide support for the moderating role of decision latitude in the United States and Canada. These are Western countries with strong individualistic orientations. The lack of a moderating role of decision latitude in the non-Western countries (India, Indonesia, and South Korea) is explained by incorporating the cultural and economic underpinnings of the dynamic relationship between work and family in these countries. The relationship of psychological strain with the valued work outcomes in the five countries was also analyzed and explained with reference to the economic and cultural variations in the various contexts.

It has been noted that despite many years of research investigating the relationship between work and family, the problem of how to handle or manage competing demands remains a significant managerial issue. To be sure, some innovative practices are being designed and implemented in both highly globalised and not so globalised countries (Lambert & Kossek, 2005; Poster, 2005; Rapport, Bailyn, Lewis, & Gambles, 2005). These practices include on-site child-care centers, concierge services, meals-to-go, shorter periods of work during summer months, elder care referral services, flexible work schedules, the sharing of job- and role-related duties and responsibilities, telecommuting, and even on-site gyms and healthcare centers. The assumption is that these innovative programs and interventions can eliminate some of the persistent friction between work- and family-related obligations—particularly for married women with young children at home. However, according to a survey by the Bureau of Labor Statistics, only 5 per cent of US employers provide flexible work policies and only 4 per cent provide referrals for child care (see Kossek, 2006). Another survey, by the Alliance for Work Life Progress, found that even when such practices are formally implemented, the use of such interventions is much lower among high-income employees and executives (see Kossek, 2006). This is not to suggest that managers earning higher salaries do not experience work–family conflict; indeed they do. However, there is a social stigma attached to seeking out employee assistance programs (EAPs) and other interventions for managing work–family conflicts in Western countries. This stigma is much stronger in collectivistic countries such as India, Indonesia, China, Japan, and South Korea. In these countries, individuals are likely to seek religious counseling and spiritual guidance as well as help from the members of their in-groups (Bhagat et al., 2007). It is suggested that immediate supervisors act as guides in suggesting appropriate methods for coping with excessive work–family conflicts that might be a major source of strain among employees (Hopkins, 2005). All in all, it is hoped that the results of this large-scale cross-national investigation will motivate future cross-sectional and longitudinal research in the area.
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