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The Work–Family Interface in the United States and Singapore: Conflict Across Cultures

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This article examines the work–family interface in a cross-cultural comparison between two nationally representative samples from the United States (n = 1,860) and Singapore (n = 1,035) with emphasis on work–family conflict. Family-to-work conflict was negatively related to marital satisfaction in both Singapore and the United States, although the effect was stronger in the United States. Similarly, family-to-work conflict was positively related to job satisfaction in the United States but was negatively related in Singapore. As expected, schedule flexibility was negatively related to depression in the United States, but in Singapore the relationship was positive. These findings suggest that theoretical relationships in the work–family interface developed in the more culturally individualistic West may need to be adapted when studying populations in the more collectivist East.

Keywords: work–family interface, work–family conflict, schedule flexibility, cross-cultural research, collectivism/individualism

Much of the research regarding the work–family interface has been conducted in the United States and Western Europe, leading to the development of Westernized models. Understanding the consequences of work and family conflict in Western cultures has been important for developing organizational and community practices to support working adults and their families. However, less research has been conducted in other cultures. Recently, work–family studies have proliferated, especially in the East (e.g. Aryee, Luk, Leung, & Lo, 1999), and have demonstrated that Western models may not yield expected results in other cultures.

With economies becoming more globalized, discerning cultural differences in the way individuals experience conflict between their work and family roles (work–family conflict) is increasingly important. This study extends extant cross-cultural research by comparing the work–family interface using nationally representative samples from the United States (n = 1,860) and Singapore (n = 1,035). To frame this article, we use Hofstede’s (2001) model of differences between individualistic and collectivistic cultures to evaluate the cross-cultural salience of Voydanoff’s (2007) model of the work–family interface.

Review of Literature

Singaporean and Asian Culture

Globalization of the workforce is more prevalent, and Singapore offers several features which may enhance our understanding of the work–family interface in general, and work–family conflict in particular. The workplace in Singapore is more demanding than in the United States. For example, Hill (2007) found that two thirds of couples were dual-earner families. Men work an average of 51 hr/week and women work an average of 48 hr/week, more than in many developed countries. In most households, both spouses work full time. Hill reported that the fertility rate is one of the lowest in the world, at 1.24 children per couple. Furthermore, regardless of long work hours, only 13% of Singaporeans report having flexibility in work schedules, compared with 38% in the United States (2007). Singapore offers an important perspective because little work–family research has been conducted within the country and because of the rigid schedules and unique family dynamics embedded within a collectivist culture.

Work–Family Conflict Defined

Such rigidity in the workplace in Singapore leads to questions of how Singaporeans experience work–family conflict.
conflict. Greenhaus and Beutell (1985) have defined work–family conflict as “a form of inter-role conflict in which the role pressures from the work and family domains are mutually noncompatible in some respect . . . . [Thus,] participation in the work (family) role is made more difficult by virtue of participation in the family (work) role” (p. 77). The amount of demands and resources create varying degrees of work–family conflict for individuals. Resources are defined as structural or psychological assets that are used to aid work performance or create more resources, Demands are structural or psychological claims related to role requirements and norms that a person must exert mental or physical effort to adapt or fulfill (Voydanoff, 2007).

Work–family conflict has two forms: work-to-family conflict and family-to-work conflict. Repetti, Wang, and Saxbe (2009) clarify that work-to-family conflict is the residue of stressors at work that carry over into the home and may shape the rhythms of family life. Likewise, stressors within family life may carry over into the workplace. Studies generally reveal that work demands are associated with work-to-family conflict, whereas family demands are associated with family-to-work conflict (Frone & Yardley, 1996; Voydanoff, 2007). These pressures of work and family reflect social and self-expectations (Greenhaus & Beutell, 1985). In this study, our model examined both work-to-family conflict and family-to-work conflict in the United States and Singapore.

Work and Family Research in Asia

Work–family conflict needs more empirical study in non-Westernized countries (Lu, Kao, Chang, Wu, & Cooper, 2008). Work–family research in the East has suffered from methodological shortcomings, such as the use of convenience samples and relatively few outcome variables (Spector et al., 2004). In addition, results have been inconsistent. For instance, in Hong Kong, family demands were significantly related to family-to-work conflict, but family-to-work conflict was not related to four types of life strain (Matsui, Ohsawa, & Onglatco, 1995); whereas in Japan, there was no significant relationship between work–family conflict and job, family, or life satisfaction (Aryee et al., 1999). In a comparison of British and Taiwanese workers, work and family demands were related to both work-to-family conflict and family-to-work conflict (Lu, Gilmour, Kao, & Huang, 2006). Lu et al. (2008) argued that inconsistencies could be ameliorated by using representative samples and comprehensive research frameworks (e.g., including demands, conflict, and consequences in both the family and work domains). These limitations and inconsistencies preclude strong conclusions about the work–family interface in the East and provide an impetus for the present study.

Guiding Theoretical Models

Our research is guided by two conceptual models. First, we use an ecological systems model (Bronfenbrenner, 1986) and, more specifically, Voydanoff’s (2007) use of the model in the work and family domains. Voydanoff’s model asserts that work and family are distinct microsystems. The interaction between work and family makes up the work–family mesosystem. The ways in which these domains interact and are interrelated vary over time according to the structure of the society and economy. Voydanoff’s model also considers work-to-family conflict and family-to-work conflict as mediators between individual and family characteristics and various work and family outcomes. For example, increased flexibility is hypothesized to be related to less family-to-work and work-to-family conflict, which, in turn, is thought to lead to greater marital and job satisfaction. The present study focuses on several proposed psychological resources and demands to understand the influence these have on work–family conflict. For example, work hours is defined as a demand, whereas family income is viewed as a resource. Voydanoff’s model was the basis for choosing variables in our model and making comparisons between Singapore and the United States.

Bronfenbrenner’s ecological theory (1986) asserts that through proximal processes more inclusive systems can influence less inclusive systems. Thus, in Voydanoff’s (2007) model, the work-family mesosystem may be influenced by the broader cultural macrosystem. Hofstede’s (2001) cultural model was used as a second conceptual model in our study to assist in understanding different macrosystemic (cultural) aspects between the two countries. That said, we acknowledge that, in making cross-cultural comparisons, we have simplified cultural differences within countries.

Hofstede studied work-related values of employees of IBM from 53 different countries. A key component of Hofstede’s theory is collectivism versus individualism. It has previously been used in comparing the work–family interface in the East and West (Lu et al., 2008). Hofstede stated that, in individualistic countries such as the United States, individuals are self-oriented and value personal time, freedom, and challenge. In collectivist cultures, such as Singapore, individuals are intrinsically connected through strong ties based on loyalty to the group, especially the family. In the present study, we apply collectivism versus individualism as a cultural framework to examine differences between the United States and Singapore in the work–family interface.

Expanding Work–Family Conflict Research

Researchers have begun to examine work–family conflict outside of the United States. Work and family demands are formed by values, beliefs, and role conceptions that occur through socialization. These values, beliefs, and roles are often transmitted in the community through various cultural and social norms. Demands from the domain with the higher priority are greater than those from the domain with lower priority, on the basis of the cultural value assigned to both work and the family (Shenkar & Ronen, 1987). Western, individualistic societies value family time more than their Eastern collectivist counterparts (Hofstede, 2001). Eastern societies place greater priority on work and assign lower
importance to family and personal time (Shenkar & Ronen, 1987). For example, Chinese individuals strive to bring honor to their families through the work they perform (Redding, 1993). In compliance with this ethic, extra work hours may be seen as a sacrifice made for the family and not a selfish pursuit. Therefore, longer work hours in collectivist societies, such as Singapore, may not be seen as a demand to the degree it is in Westernized, individualist cultures.

Collectivist societies differ from individualist societies on the family level as well as the work level. In collectivist countries, family usually consists of more than just immediate family members but reaches out to include extended family (Hofstede, 2001). A sense of broadened family ties teaches individuals from a young age that they are part of a larger group, which becomes a source of identity and protections against trials throughout life. It may be that in such a family, individuals are socialized to seek help from extended family members to alleviate conflict between work and family (Ling & Powell, 2001), therefore, decreasing the demands that work places on family and family places on work.

**Influences on Work-to-Family Conflict and Family-to-Work Conflict**

In harmony with Voydanoff’s (2007) assertion that individual, family, and work demands and resources influence work–family conflict, our model has five exogenous variables. Both income and satisfaction with income are seen as resources because they have the ability to create positive spillover into family relationships and individual outcomes. Flexibility is also seen as a psychological resource. Research has consistently revealed that flexibility has a positive relationship with individual, job, and marital outcomes (e.g., Glass & Finley, 2002), although one study in Singapore made the distinction between perceived versus used workplace flexibility (Jones et al., 2008). Finally, our model included demands: weekly work hours for participant and partner. A dual-earner couple may experience more work–family conflict (e.g., Aryee et al., 1999).

Our model also included several control variables (education, age, gender, and presence of young children). Past research demonstrates the experience of the work–family interface varies based on education, age, and gender (Voydanoff, 2007). Furthermore, having young children creates demands that increase work–family conflict. In the United States, the age of the family’s youngest child is related to perceived importance of family supportive programs at work (Fronc & Yardley, 1996).

**Correlates of Work–Family and Family–Work Conflict**

We examine three correlates of work-to-family and family-to-work conflict: depression, marital satisfaction, and job satisfaction. These variables were chosen to represent the individual (depression), family (marital satisfaction), and work (job satisfaction).

**Depression.** Depression is sensitive to minor variations within work and family domains (Fronc, 2000). The work-place can create psychological demands, which may negatively influence mental health. Work stress may result in higher levels of depressive symptoms (Allen, Herst, Bruck, & Sutton, 2000). In the United States, family-to-work conflict was more detrimental to mental health than was work-to-family conflict (Glass & Finley, 2002). However, work-to-family conflict occurred more frequently than family-to-work conflict, and work demands were more likely to increase work-to-family conflict, leading to greater emotional exhaustion (Rupert, Stevanovic, & Hunley, 2009). However, some studies have also reported finding no relationship between work hours, work–family conflict, and depression (e.g., Major, Klein, & Ehrhart, 2002).

In one of the few studies in Asia, Lai (1995) utilized a framework derived from American research to examine a Chinese sample and found that work and family stress were related to psychological well-being. Stress associated with work exerted a stronger relationship on psychological well-being than did stress associated with the family. Because of the centrality of work roles among Asians, it is plausible to assume that work-to-family conflict will have a smaller impact in the Singapore than in the United States and that family-to-work conflict will have a smaller impact in the United States than Singapore. Although this provides insight into work–family conflict and depression among Asians, further research is needed to compare frameworks.

**Marital satisfaction.** Increased work–family conflict has been consistently related to lower marital satisfaction (e.g., Hill, 2005). Allen et al. (2000) reported, in their meta-analysis of mostly American studies, that the negative relationship between work-to-family conflict and marital satisfaction was moderately strong. Story and Repetti (2006) found that husbands and wives reported greater marital anger and withdrawal on heavy workload days. Furthermore, Saxbe, Repetti, and Nishina (2008) found that marital satisfaction appeared to help women, but not men, recover from stressful workdays. To our knowledge, no research has examined the relationship of work–family conflict to marital satisfaction in any Asian country.

**Job satisfaction.** As a demand, work–family conflict has been consistently related to lower job satisfaction (e.g., Allen et al., 2000). In a meta-analysis on the relationship between work–family conflict and job satisfaction, Kossek and Ozeki (1998) reported that work–family conflict and job satisfaction were strongest for general bidirectional measures, followed by work-to-family conflict and then family-to-work conflict. When examining work–family conflict and job satisfaction, directionality seems to make a difference.

Among studies done in Asia, few have examined job satisfaction and its relation to work–family conflict. A study that examined role stressors and work–family conflict, completed in Hong Kong, found that family-to-work conflict was negatively related to job satisfaction for some people but that work-to-family conflict was not significantly related to job satisfaction (Aryee et al., 1999). The same study suggested that perhaps work-to-family conflict is expected, but when family-to-work conflict arises, it interferes with work and decreases job satisfaction for some workers. The
limited findings in this area have not clearly explained the relationship between job satisfaction and work–family conflict, leaving more to be examined.

**Research Question and Hypotheses**

Little cross-cultural research has examined the work–family interface with large, representative samples, especially in Asia (Lu et al., 2008; Spector et al., 2004). This article adds to this research by addressing the principal research question: How are respondents in Singapore and the United States similar and different on measures related to the work–family interface? On the basis of our theoretical orientation (Voydanoff, 2007) and Hofstede’s (2001) conceptualization of macrosystemic differences between U.S. and Asian cultures, we propose five hypotheses.

Both work-to-family conflict (Hypothesis 1) and family-to-work conflict (Hypothesis 2) will be positively related to depression and negatively related to marital satisfaction and job satisfaction in both Singapore and the United States. Next, perceived schedule flexibility (Hypothesis 3) will be negatively related to work-to-family conflict, family-to-work conflict, and depression and positively related to marital satisfaction and job satisfaction in both Singapore and the United States. In addition, work-to-family conflict (Hypothesis 4) will have a smaller impact on depression, marital satisfaction, and job satisfaction in Singapore than in the United States; and finally, family-to-work conflict (Hypothesis 5) will have a smaller impact on depression, marital satisfaction, and job satisfaction in the United States than in Singapore.

**Method**

**Sample and Procedures**

This study used two nationally representative samples of employed persons from Singapore and the United States. The Singapore sample comes from the 2006 Singapore National Study of Work–Life Harmony (see Hill, 2007). The U.S. sample comes from the 2008 National Study for the Changing Workforce (NSCW) [see Galinsky, Aumann, & Bond, 2009]. Only workers who were married were included in the analysis, as the focus of this study was to determine how committed couples balance their work and family life. Furthermore, only a small percentage of the Singaporean sample comprised single-parent households (n = 55). The data in both samples were gathered in English, which is the official language of both Singapore and the United States. However, because there were substantive differences in the procedures and measurements of each survey, each sampling method is discussed separately, beginning with Singapore.

The Singapore sample consisted of 1,035 employed and married men (n = 568) and women (n = 467). The sample was selected to be nationally representative with regard to gender, age, race, and socioeconomic status as recorded by the Singapore Department of Statistics (Hill, 2007). Researchers from the United States, Australia, and Singapore developed a conceptual model of the work–family interface and then drafted a questionnaire. Focus groups, consisting of 93 employed workers in Singapore, were used to ensure that questionnaire items were culturally relevant and test the validity of the conceptual model. As a final step, a pilot study was conducted with 435 employed workers in Singapore. The original 223 questions were then pared to 155 items.

The surveys were administered by an independent company, as a one-time face-to-face interview. During the questionnaire, each of 155 potential items was read aloud to participants in English. The interviews lasted 35-45 min for each respondent. The ages of the participants ranged from 21 to 71, with a mean age of 41.20 years (SD = 9.30). The median education level completed by participants was secondary education (equivalent to high school education). The mean education level approached upper secondary (equivalent to some post-high school education). Just over an eighth of the sample (13%) had a college or graduate degree. The mean annual family income was US $34,140 (SD = $19,828; Mdn = $27,823), which was measured using a categorical ranges from 1,000 to 10,000 or more per month (Singapore dollars) as explained later. The ethnicity of the sample was 68% Chinese, 22% Malay, 9% Indian, and 1% other.

The sample from the 2008 NSCW in the United States consisted of 1,860 employed and married men (n = 947) and women (n = 923) and is representative of employed persons in the United States. The sample was gathered with a random digit dialing method. Interviewers conducted a 50-min interview (595 potential items) using a computer-assisted telephone interviewing system. The NSCW has been administered every 5–6 years since 1992, and many of the items have remained constant since then. The sample was limited to those who were at least 18 years old, who were employed in the civilian labor force, who resided in the contiguous 48 states, and who lived in a noninstitutionalized household with a telephone. The sample was weighted to be representative of the U.S. population utilizing data from the March 2007 Current Population Survey (U.S. Census Bureau, 2007). Participants ranged from 18 to 91 years old, with a mean age of 46.26 years (SD = 11.57). Just over a fifth (22%) of the sample had a high school diploma or less education, whereas the majority (57.5%) had obtained at least an associate’s degree. The average annual family income for the participants was $108,424 (SD = $192,162; Mdn = $82,000). The ethnicity of the sample was 87% Caucasian, 6% African American, 1% Native American, and 7% other.

**Measures**

**Work-to-family conflict.** Work-to-family conflict was measured by a scale consisting of 5 items. The scale was identical in both countries and was developed for the 1992 NSCW. The scale asked questions such as, “How often have you NOT had enough time for your family because of your job?” and “How often have you NOT been in as good a mood at home because of your job?” For the Singaporean sample, responses were based on a 4-point Likert-type scale...
(1 = very often, 2 = often, 3 = sometimes, and 4 = rarely/never). The U.S. sample had five categories, and we collapsed the rarely and never categories in the U.S. scale to a 4-point Likert-type scale. The Cronbach’s alpha of the scale was 0.84 in the U.S. sample and 0.92 in the Singaporean sample.

**Family-to-work conflict.** Family-to-work conflict was measured by a scale consisting of 5 items. The scales were identical in the Singaporean and U.S. samples and were developed for the 1992 NSCW. Examples of the five questions are, “How often has your family life drained you of the energy you needed to do your job?” and “How often has your family life kept you from concentrating on your job?” In the Singaporean sample, responses were based on a 4-point Likert-type scale (1 = very often, 2 = often, 3 = sometimes, 4 = rarely/never). The U.S. sample had five categories, and we collapsed the rarely and never categories for a 4-point Likert-type scale. The Cronbach’s alpha was 0.79 in the U.S. sample and 0.91 in the Singaporean sample.

**Influences on work-to-family and family-to-work conflict.** Our study incorporated five exogenous variables that influence work-to-family and family-to-work conflict (family income, schedule flexibility, satisfaction with earnings, partner work hours, and participant work hours) and four control variables (education, age, gender, and presence of young children in the home). In the Singaporean sample, participants indicated their monthly family income (in Singaporean dollars, converted to annual income and U.S. dollars for this study) by choosing one of nine income ranges. Responses ranged from less than $1,000 to $10,000 or more. Income in the U.S. sample was measured with an open-ended question that combined the annual incomes of both partners. Responses could be given as an exact amount or a dollar range. For comparison in the structural equation model (SEM), income in the United States was recoded to be equivalent to the nine Singapore income ranges. Mean comparison analysis used the actual dollar amounts in the United States and the midpoint of each range for Singapore.

Flexibility was measured in both Singapore and the United States samples by a 1-item question that asked “Overall, how much control would you say you have in scheduling your work hours? This was rated on a 4-point Likert-type scale ranging from 1 (very little/none) to 4 (complete). Satisfaction with earnings was measured in the United States on a 4-point Likert-type scale ranging from 1 (lowest satisfaction) to 4 (highest satisfaction). This was equated with a measure in Singapore asking if the household income was sufficient to meet the household members’ needs. Similar to the United States, agreement that income was sufficient was measured on a 4-point Likert-type scale ranging from 1 (agreement) and 4 (disagreement). This item was reverse coded to be equivalent to U.S. responses. Respondents were asked to report how many hours they and their partner worked each week. In the United States, participants indicated their education level as one of 6 options: less than high school, high school diploma or general equivalency degree (GED), some college, associate’s degree, 4-year degree, or graduate or professional degree. In Singapore, participants reported their education at one of 9 levels ranging from “no qualification” to “postgraduate.” The nine categories were collapsed into 6 to correspond with the education levels in the United States. The presence of children under age 7 was coded dichotomously (yes or no), with the presence of a young child (or children) associated with a higher score.

**Correlates of Work-to-Family and Family-to-Work Conflict**

**Depression.** Depression in both the Singapore and the U.S. samples was measured by 7 items in the NSCW based on the Center for Epidemiologic Studies—Depression Scale (Radloff, 1977). The questions in this scale ask respondents various questions such as, “How frequently have you had trouble feeling down?” “How frequently have you been bothered by minor health problems?” and “How frequently have you felt unable to overcome difficulties?” Responses were on a 5-point Likert-type scale (1 = never, 2 = almost never, 3 = sometimes, 4 = fairly often, 5 = very often). The Cronbach’s alpha was 0.92 for the Singapore sample and 0.83 for the U.S. sample.

**Marital satisfaction.** Marital satisfaction was assessed by a one-item question. For both countries, it asked for overall satisfaction with relationship. Responses were based on a 4-point Likert-type scale ranging from 1 (not too satisfied) to 4 (extremely satisfied).

**Job satisfaction.** For job satisfaction, Singaporean participants responded to a single item: “All in all, how satisfied are you with your job?” In the U.S. sample, the single item was, “How satisfied are you with your job?” Responses were based on a 4-point Likert-type scale ranging from 1 (not at all satisfied) to 4 (very satisfied).

**Results**

**Mean Comparison Analysis**

We first addressed our research question about similarities and differences on measures related to the work–family interface. To determine whether mean scores in the model were significantly different between countries, we conducted a multivariate analysis of covariance (MANCOVA), with gender, age, education, and presence of young children as control variables (see Table 1 for means and standard deviations). The MANCOVA was significant, Wilk’s $\lambda = .698, F(10, 2690) = 116.16, p < .001$; indicating that there were differences between countries, with the effect for country being moderate (partial $\eta^2 = .30$). The covariate gender also was significant, Wilk’s $\lambda = .779, F(10, 2690) = 76.42, p < .001$; as was age, Wilk’s $\lambda = .912, F(10, 2690) = 25.84, p < .001$; with the effects being small to moderate (partial $\eta^2 s = .22$ and .09, respectively). Also significant were the covariates education, Wilk’s $\lambda = .881, F(10, 2690) = 36.42, p < .001$; and presence of young children, Wilk’s $\lambda = .975, F(9, 2708) = 7.02, p < .001$; with the effects being small (partial $\eta^2 s = .12$ and .03, respectively). We conducted a univariate analysis of covari-
several paths that were significantly different (see Figure 1 and Table 2). We used maximum likelihood Monte Carlo bootstrapping to extract 200 bootstrap samples to obtain the bias-corrected significance levels for the direct, indirect, and total effects (see Table 2).

Hypothesis Testing

Hypothesis 1 was partially supported. As hypothesized, work-to-family conflict was positively related to depression in both the U.S. sample ($\beta = 0.46$, $p < .01$) and the Singaporean sample ($\beta = 0.25$, $p < .01$). However, work-to-family conflict was significantly related to job satisfaction only in the U.S. sample ($\beta = -0.47$, $p < .01$) but not in the Singaporean sample ($\beta = -0.04$, ns). Finally, in both the U.S. and Singaporean samples, work-to-family conflict was unrelated to marital satisfaction ($\beta = 0.03$ for both countries, ns). Table 2 lists the direct, indirect, and total effects, along with their significance levels, and it notes significant between country differences.

Hypothesis 2 was also partially supported. As hypothesized, family-to-work conflict was significantly and positively related to depression in both the U.S. ($\beta = 0.20$, $p <$
.01) and the Singaporean (β = 0.34, p < .01) samples. In addition, family-to-work conflict was significantly and negatively related to marital satisfaction in both the U.S. (β = −0.33, p < .01) and the Singaporean (β = −0.18, p < .01) samples. However, contrary to our hypothesis, family-to-work conflict was significantly and positively related to job satisfaction in the U.S. (β = 0.13, p < .01) sample. As predicted, in the Singaporean sample, family-to-work conflict was significantly and negatively related to job satisfaction (β = −0.15, p < .01).

Hypothesis 3 received limited support. As hypothesized, in the U.S. sample, schedule flexibility was negatively related to work-to-family conflict (β = −.11, p < .01). However, in the Singaporean sample, contrary to our hypothesis, schedule flexibility was positively related to work-to-family conflict (β = 0.07, p < .05). Contrary to our hypothesis, in the Singaporean sample, schedule flexibility was positively related to family-to-work conflict (β = 0.14, p < .01). In the U.S. sample, it was unrelated to family-to-work conflict (β = −0.03, ns). Also, contrary to our hypothesis, in the Singaporean sample, schedule flexibility was positively related to depression (β = 0.10, p < .01). In the U.S. sample, it was unrelated to depression (β = −0.01, ns). As hypothesized, schedule flexibility was positively related to job satisfaction in both the U.S. (β = 0.12, p < .01) and the Singaporean (β = 0.11, p < .01) samples. Finally, as hypothesized, schedule flexibility was positively related to marital satisfaction in the Singaporean sample (β = 0.08, p < .05) but unrelated to it in the U.S. sample (β = 0.00, ns).

Hypothesis 4 was also partially supported. As hypothesized, in the Singaporean sample, work-to-family conflict had a significantly smaller influence on depression (critical ratio [CR] = 5.33, p < .01) and job satisfaction (CR = 9.50, p < .01) than it did in the U.S. sample. Work-to-family conflict did not have a significant influence on marital satisfaction in either country (β = 0.03, ns).

Hypothesis 5 was supported. As hypothesized, in the U.S. sample, family-to-work conflict had a significantly smaller influence on depression (CR = 2.47, p < .05) and marital satisfaction (CR = 3.92, p < .01) than it did in the Singaporean sample. It is interesting that family-to-work conflict had a significant positive influence on job satisfaction in the U.S. sample (β = 0.13, p < .05) but a negative influence in the Singaporean sample (β = −0.15, p < .05), with the difference between countries being statistically significant (CR = 5.98, p < .01).

Discussion

Using an ecological systems perspective, we have sought to understand the degree to which theories and research about the work–family interface developed in the culturally individualistic West (United States) are transportable to the culturally collectivistic East (Singapore). We focused on how macrosystemic, cultural differences between countries may influence the work–family mesosystem. Results revealed numerous instances when the direction, strength, and significance of these relationships were different than expected between the United States and Singapore. This highlights the importance of carefully considering culture when interpreting work–family findings in the East. Below, we examine some of these differences and attempt to explain them by considering the meaning that individuals in each culture may ascribe to the work–family interface.

As predicted by our hypotheses, work-to-family conflict and family-to-work conflict were positively associated with depression in both countries. However, the strength of these relationships differed significantly by country. In the United States, work-to-family conflict was more strongly associ-
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-**.02** **.21** **.14** **.19** -**.18** -**.04** -**.23** **.20**
-**.02** -**.02** -**.02** -**.01** -**.39** -**.39** -**.22** -**.28** -**.28**

Work-to-family conflict was significantly and negatively related to job satisfaction in the United States but not Singapore. Thus, Voyerdanoff’s (2007) model defining work-to-family conflict as a demand on a person’s job satisfaction is not supported by the data from Singapore in our sample. One explanation may be that macrosystemic influences in individualistic cultures tend to place a higher value on discretionary, individual time than in collectivist cultures (Hofstede, 2001). In the United States, as work time infringes on personal time, job satisfaction may wane. In a collectivist culture, a certain degree of work-to-family conflict may be anticipated, perhaps with the cognitive appraisal that work–family conflict is evidence of one’s self-sacrifice in the workplace for the benefit and honor of the family. Hence, it is more understandable why work-to-family conflict would be unrelated to job satisfaction.

As predicted, family-to-work conflict was significantly and negatively related to marital satisfaction in both the United States and Singapore. Apparently, when family demands conflict with work, this causes strain in the marital relationship regardless of whether the culture is individualistic or collectivist. Conversely, work-to-family conflict was unrelated to marital satisfaction in either country, perhaps indicating that work-to-family conflict is seen as something beyond a spouse’s control and, therefore, is not transferred to the marital relationship.

In the United States, contrary to our hypothesis, family-to-work conflict was positively related to job satisfaction. There may be a cultural explanation for this anomaly. Employees in Western individualistic cultures with high job satisfaction may spend more time at work because they personally enjoy it. Extra time at work may then create more opportunity for family to interfere with work and may increase work-to-family conflict. Conflict at home about work may then carry over to the workplace. As predicted, family-to-work conflict was significantly and negatively related to job satisfaction in Singapore.

As hypothesized, schedule flexibility was positively associated with job satisfaction in both Singapore and the
United States. In both countries, the flexibility to choose when one engages in work-related tasks is related to a more positive cognitive assessment of one’s job.

In Singapore, contrary to our hypotheses, schedule flexibility was associated with higher levels of work-to-family, family-to-work conflict, and depression. That said, flexibility has been little studied in collectivist cultures, and future studies may help us understand this issue. One explanation for these surprising findings is the relative scarcity of flexible work options in Singapore. In a recent national study (Hill, 2007), only 13% of Singaporeans reported that they had schedule flexibility in their jobs. Perhaps, schedule flexibility is given to only those employees who are in the higher ranks of the workplace hierarchy, positions that require even more commitment and longer working hours. Another explanation may possibly be that there is flexibility in jobs that are temporary or insecure, swing shift, or lower level with little guarantee of scheduled hours. Thus, although they may have greater flexibility, they may also have more work–family conflict and more depression. Hence, flexibility may not be viewed as a resource in Eastern models, but perhaps a demand.

Implications of this study can help those who have business dealings in multiple countries to be aware that culture is an important factor in understanding the work–family interface. The interesting findings regarding flexibility may be an indication that caution should be used for global companies to implement policies without understanding the needs of the employees. In Eastern, collectivist cultures, work and family may have different meanings than in the Westernized, individualistic cultures.

**Limitations and Directions for Future Research**

This study contains only cross-sectional self-report data; thus, casual relationships cannot be inferred. A multimethod longitudinal design might be helpful in understanding work–family interface in each country. Also, the data sets were not collected simultaneously, nor did all the questions match exactly. In addition, we did not discuss the influence of gender. Future research would benefit by examining the role that gender plays in cross-cultural studies related to the work–family interface. Furthermore, Hofstede’s (2001) model has been criticized for being overly simplistic by not accounting for within-country differences and ignoring the interplay between macro- and microscopic levels of culture (McSweeney, 2002). Whenever broad comparison is made between cultures, it is inevitable that within-culture diversity is lost. Indeed, our findings relevant to the influence of gender, age, education, and income suggest within-culture diversity (see Table 2). Therefore, caution should be used in generalizing the findings to specific cultures or groups within each country. The present study focused on the macrosystemic differences between cultures, and future studies may help us to understand this issue. One explanation for these surprising findings is the relative scarcity of flexible work options in Singapore. In a recent national study (Hill, 2007), only 13% of Singaporeans reported that they had schedule flexibility in their jobs. Perhaps, schedule flexibility is given to only those employees who are in the higher ranks of the workplace hierarchy, positions that require even more commitment and longer working hours. Another explanation may possibly be that there is flexibility in jobs that are temporary or insecure, swing shift, or lower level with little guarantee of scheduled hours. Thus, although they may have greater flexibility, they may also have more work–family conflict and more depression. Hence, flexibility may not be viewed as a resource in Eastern models, but perhaps a demand.

Implications of this study can help those who have business dealings in multiple countries to be aware that culture is an important factor in understanding the work–family interface. The interesting findings regarding flexibility may be an indication that caution should be used for global companies to implement policies without understanding the needs of the employees. In Eastern, collectivist cultures, work and family may have different meanings than in the Westernized, individualistic cultures.
Table 2
Decomposition of Effects From the Structural Equation Model on Conflict and Outcome Variables

<table>
<thead>
<tr>
<th>Variable</th>
<th>Direct Singapore</th>
<th>Direct U.S.</th>
<th>Indirect Singapore</th>
<th>Indirect U.S.</th>
<th>Total Singapore</th>
<th>Total U.S.</th>
</tr>
</thead>
<tbody>
<tr>
<td>Effects on marital satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.034</td>
<td>-0.041</td>
<td>0.015**</td>
<td>0.037**</td>
<td>-0.019</td>
<td>-0.003</td>
</tr>
<tr>
<td>Education</td>
<td>0.051**</td>
<td>0.055**</td>
<td>-0.005</td>
<td>-0.012</td>
<td>0.046</td>
<td>0.043</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.042</td>
<td>-0.041</td>
<td>-0.012**</td>
<td>-0.023**</td>
<td>-0.054**</td>
<td>-0.064**</td>
</tr>
<tr>
<td>Weekly hours worked</td>
<td>0.018</td>
<td>0.022</td>
<td>0.003</td>
<td>0.039*</td>
<td>0.059</td>
<td>0.021</td>
</tr>
<tr>
<td>Sufficient earnings/satisfaction with earnings</td>
<td>0.058</td>
<td>0.076*</td>
<td>0.013**</td>
<td>0.032*</td>
<td>0.072*</td>
<td>0.108*</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td>0.099*</td>
<td>-0.009</td>
<td>-0.023**</td>
<td>0.005</td>
<td>0.076*</td>
<td>-0.004</td>
</tr>
<tr>
<td>Family-to-work conflict</td>
<td>-0.178*</td>
<td>-0.330**</td>
<td>NA</td>
<td>NA</td>
<td>-1.78**</td>
<td>-0.330**</td>
</tr>
<tr>
<td>Effects on job satisfaction</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>0.075**</td>
<td>0.081**</td>
<td>0.020*</td>
<td>0.050**</td>
<td>0.095*</td>
<td>0.131**</td>
</tr>
<tr>
<td>Education</td>
<td>0.034</td>
<td>0.033</td>
<td>-0.008</td>
<td>-0.026**</td>
<td>0.026</td>
<td>0.008</td>
</tr>
<tr>
<td>Gender</td>
<td>0.121**</td>
<td>0.106**</td>
<td>-0.012**</td>
<td>-0.008</td>
<td>0.109**</td>
<td>0.098**</td>
</tr>
<tr>
<td>Children &lt;7 years old in home</td>
<td>0.077**</td>
<td>0.060**</td>
<td>-0.002</td>
<td>0.003</td>
<td>0.075**</td>
<td>0.063**</td>
</tr>
<tr>
<td>Weekly hours worked</td>
<td>0.122**</td>
<td>0.112*</td>
<td>0.005</td>
<td>-0.108**</td>
<td>0.126*</td>
<td>0.004</td>
</tr>
<tr>
<td>Partner’s work hours</td>
<td>-0.095**</td>
<td>0.011</td>
<td>-0.001</td>
<td>0.011</td>
<td>-0.096*</td>
<td>0.022</td>
</tr>
<tr>
<td>Family income</td>
<td>0.119</td>
<td>0.043</td>
<td>-0.006</td>
<td>-0.006</td>
<td>0.115</td>
<td>-0.049</td>
</tr>
<tr>
<td>Sufficient earnings/satisfaction with earnings</td>
<td>0.090*</td>
<td>0.295*</td>
<td>0.016</td>
<td>0.093**</td>
<td>0.105*</td>
<td>0.388*</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td>0.142**</td>
<td>0.059*</td>
<td>-0.024**</td>
<td>0.050**</td>
<td>0.118*</td>
<td>0.109**</td>
</tr>
<tr>
<td>Work-to-family conflict</td>
<td>-0.038</td>
<td>-0.473*</td>
<td>NA</td>
<td>NA</td>
<td>-0.038</td>
<td>-0.473*</td>
</tr>
<tr>
<td>Family-to-work conflict</td>
<td>-0.152*</td>
<td>0.132*</td>
<td>NA</td>
<td>NA</td>
<td>-0.152*</td>
<td>0.132*</td>
</tr>
<tr>
<td>Effects on depression</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.012</td>
<td>-0.014</td>
<td>-0.063**</td>
<td>-0.090**</td>
<td>-0.076</td>
<td>-0.104**</td>
</tr>
<tr>
<td>Education</td>
<td>0.000</td>
<td>0.093*</td>
<td>0.028*</td>
<td>0.039*</td>
<td>0.027</td>
<td>0.055*</td>
</tr>
<tr>
<td>Gender</td>
<td>-0.002</td>
<td>0.095**</td>
<td>0.033</td>
<td>0.031*</td>
<td>0.032</td>
<td>0.126*</td>
</tr>
<tr>
<td>Children &lt;7 years old in home</td>
<td>-0.060*</td>
<td>-0.047*</td>
<td>0.003</td>
<td>0.001</td>
<td>-0.056*</td>
<td>0.047*</td>
</tr>
<tr>
<td>Weekly hours worked</td>
<td>-0.044**</td>
<td>-0.042*</td>
<td>0.027*</td>
<td>0.108**</td>
<td>-0.017</td>
<td>0.066*</td>
</tr>
<tr>
<td>Partner work hours</td>
<td>0.040*</td>
<td>0.057*</td>
<td>-0.001</td>
<td>-0.007</td>
<td>0.039</td>
<td>0.030</td>
</tr>
<tr>
<td>Family income</td>
<td>-0.070*</td>
<td>-0.057**</td>
<td>0.039*</td>
<td>0.006</td>
<td>-0.031</td>
<td>-0.051**</td>
</tr>
<tr>
<td>Sufficient earnings/satisfaction with earnings</td>
<td>-0.091*</td>
<td>-0.110**</td>
<td>-0.046</td>
<td>-0.128*</td>
<td>-0.137*</td>
<td>-0.239*</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td>0.039*</td>
<td>0.045*</td>
<td>0.065</td>
<td>-0.057**</td>
<td>0.104*</td>
<td>0.012</td>
</tr>
<tr>
<td>Work-to-family conflict</td>
<td>0.252*</td>
<td>0.460*</td>
<td>NA</td>
<td>NA</td>
<td>0.252*</td>
<td>0.460*</td>
</tr>
<tr>
<td>Family-to-work conflict</td>
<td>0.340**</td>
<td>0.198*</td>
<td>NA</td>
<td>NA</td>
<td>0.340**</td>
<td>0.198*</td>
</tr>
<tr>
<td>Effects on family-to-work conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.100*</td>
<td>-0.125*</td>
<td>NA</td>
<td>NA</td>
<td>-0.100*</td>
<td>-0.125*</td>
</tr>
<tr>
<td>Gender</td>
<td>0.071*</td>
<td>0.072*</td>
<td>NA</td>
<td>NA</td>
<td>0.071*</td>
<td>0.072*</td>
</tr>
<tr>
<td>Weekly hours worked</td>
<td>-0.085*</td>
<td>0.010</td>
<td>NA</td>
<td>NA</td>
<td>-0.085*</td>
<td>0.010</td>
</tr>
<tr>
<td>Sufficient earnings/satisfaction with earnings</td>
<td>-0.085*</td>
<td>-0.116*</td>
<td>NA</td>
<td>NA</td>
<td>-0.085*</td>
<td>-0.116*</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td>0.142**</td>
<td>-0.025</td>
<td>NA</td>
<td>NA</td>
<td>0.142**</td>
<td>-0.025</td>
</tr>
<tr>
<td>Effects on work-to-family conflict</td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>-0.116**</td>
<td>-0.141**</td>
<td>NA</td>
<td>NA</td>
<td>-0.116**</td>
<td>-0.141**</td>
</tr>
<tr>
<td>Education</td>
<td>0.060**</td>
<td>0.066*</td>
<td>NA</td>
<td>NA</td>
<td>0.060**</td>
<td>0.066**</td>
</tr>
<tr>
<td>Weekly hours worked</td>
<td>0.223*</td>
<td>0.230*</td>
<td>NA</td>
<td>NA</td>
<td>0.223*</td>
<td>0.230**</td>
</tr>
<tr>
<td>Family income</td>
<td>0.155</td>
<td>0.014</td>
<td>NA</td>
<td>NA</td>
<td>0.155</td>
<td>0.014</td>
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<tr>
<td>Sufficient earnings/satisfaction with earnings</td>
<td>-0.068</td>
<td>-0.229*</td>
<td>NA</td>
<td>NA</td>
<td>-0.068</td>
<td>-0.229*</td>
</tr>
<tr>
<td>Schedule flexibility</td>
<td>0.068*</td>
<td>-0.113**</td>
<td>NA</td>
<td>NA</td>
<td>0.068*</td>
<td>-0.113**</td>
</tr>
</tbody>
</table>

Note. When a variable had no significant direct, indirect, or total effect in either country, it was removed from the table. NA = not applicable.

a Direct effects were significantly different between countries at p < .05.

* p < .05. ** p < .01. (Bootstrap bias-corrected p values.)

Conclusions

This study emphasized that culture is important in understanding the work–family interface. Work–family research models developed in the individualistic West may not be directly transportable to countries in the collectivist East. Using nationally representative samples has shown that work-to-family conflict and family-to-work conflict are important to studies of the work–family interface in both the United States and Singapore. However, notable differences were found between countries. In general, the difference

studies could seek to better understand diversity within cultures.

The focus of the present study was to determine how committed couples balance their work life and family life. Future research should examine the role of work–family balance with single parents, possibly comparing them with married parents. Furthermore, it should be noted that depression was the only mental health variable that was investigated. Future studies could focus on the role of the work–family interface on other mental health symptoms such as anxiety.
between collectivist and individualist cultures and the rigid work ethic in Singapore yielded logical explanations for the differences. The meanings that individuals associate with interactions in the work–family interface may be more important than the actual interactions. Further quantitative and qualitative exploration of cross-cultural work–family dynamics and developing models for the Eastern work–family interface could be helpful for our growing international workforce and economy.

References


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