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The Influence of Family Relationship Satisfaction and Perceived Work-Family Harmony on Mental Health Among Asian Working Mothers in Singapore

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The Influence of Family Relationship Satisfaction and
Perceived Work-Family Harmony on Mental Health
Among Asian Working Mothers in Singapore

Jerevie Malig Canlas

A dissertation submitted to the faculty of
Brigham Young University
in partial fulfillment of the requirements for the degree of

Doctor of Philosophy

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ABSTRACT

The Influence of Family Relationship Satisfaction and Perceived Work-Family Harmony on Mental Health Among Asian Working Mothers in Singapore

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Women's participation in the labor force has increased in Singapore in the recent years. Research has suggested that women's attempt to relate their traditional roles as wife and mother with the expectations of their modern role as a paid employee may have an impact on their mental health. Data from a cross-sectional national probability sample of 284 employed mothers in Singapore were used to investigate the relationships between work hours, marital satisfaction, child relationship satisfaction, work-family harmony, and mental health.

Based on the results of the Structural Equation Model, mothers who worked long hours experienced more positive mental health. This is perhaps attributable to paid work being considered as a means by which women can contribute to the family's welfare and well-being, instead of competing with one's finite resources. Results of the mediation analysis suggested that marital satisfaction had a positive, albeit small, effect on mental health through work-family harmony. This renders support to the family stress model theory, suggesting that for Asian women who actively participate in the work force, family relationships play an important role on their work-life experience, which ultimately has a significant impact on their mental health. Recognizing the unique cultural meanings Asian societies ascribe to work and family can facilitate a better understanding of Asian women's work-family experience.

Keywords: Work-family harmony, mental health, marital satisfaction, Asian women

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The Influence of Family Relationship Satisfaction and Perceived Work-Family Harmony on Mental Health among Asian Working Mothers in Singapore

Families and households in Asia have experienced a drastic transformation in recent decades, driven mainly by the socio-cultural and economic changes that have taken place in the region. In Singapore, in particular, educational opportunities that are now made available to women have given rise to a subpopulation of highly credentialed women who participate in the work force as professionals (Aryee, 1992; Hill, 2007; Stivens, 2007; Yuen & Lim, 1992). Singapore's Ministry of Manpower recently reported that, in fact, the growth in the country's labor force participation rate is mostly driven by women. The labor force participation rate of women in Singapore rose from 39.4% in 1989 to 58.1% in 2013 (Singapore Ministry of Manpower, 2013; Yuen & Lim, 1992). The Singapore government also attests that this growth was propelled by an improved educational profile of their population, as women with better educational backgrounds were more likely to join and stay in the labor force. Because of this phenomenon, considerable attention from scholars has turned towards women's experiences in paid employment in post-industrialized Asia (e.g., Hong Kong, Japan, Taiwan).

Although Asian ethnic groups vary considerably in terms of religion, language, and culture, most researchers suggest that Asians have common experiences and values that enhance their pan-ethnicity (Yee, DeBaryshe, Yuen, Kim, & McCubbin, 2007). Singapore's ethnic composition in 2013 was predominantly Chinese (74.2%), while the rest of its population consisted of Malays (13.3%), Indians (9.1%), and small group (3.3%) of residents coming from other ethnic backgrounds. Because of this cultural diversity, Singapore is a suitable proxy for modern/post-industrialized Asian society. While Singapore's ethnic groups participate in different religions, what they have in common is how these religio-cultural systems assign

women traditionally gendered roles, which has had repercussions on women's participation in society as a whole (Aryee, 1992; Devasahayam & Yeoh, 2007). To grasp the extent to which women's participation in the workforce is a distinctive social phenomenon, it is important understand how religio-cultural systems (Confucianism, Hinduism, Islam, and Christianity) influence gender and family relations in Asia.

Similar to the rest of Asia, Singapore has experienced immense economic expansion with a demanding workplace environment that has little schedule flexibility (Fackrell, Galovan, Hill, & Holmes, 2013; Hill, 2007; Jones, Scoville, Hill, Childs, Leishman, & Nally, 2008). Being a highly developed market economy with a per capita income of \$67,385 in 2013 (Singapore Department of Statistics, 2014), Singapore's socio-economic picture is that of a modern/post-industrialized society. The coexistence of traditionalism and modernism in Singapore, as with other Asian countries (e.g., Japan, Hong Kong), may create an inner tension in women's attitudes toward their roles as wife, mother, and employee (Aryee, Luk, Leung, & Lo, 1999; Coffey, Anderson, Zhao, Liu, & Zhang, 2009; Lu, Kao, Chang, Wu, & Cooper, 2008).

Scholars agree that work-family issues are influenced by the broader social and cultural milieu (Aryee, 1992; Aryee et al., 1999; Coffey et al., 2009; Devasahayam & Yeoh, 2007; Lu et al., 2008). Stivens (2007) explained that the idea of a "working mother" embodies the attempt to relate tradition with modernity. This effort can be quite taxing among Asian women, as the weaving of work and family obligations proves to be complicated in a culture where womanhood is strongly grounded on principles of mothering, which demands women to continue being the primary executors of household work and caregiving even as they participate in the labor force. Therefore, working mothers are expected to be fully committed to their profession like their male counterparts, while being required to give top priority to their family (Aryee, 1992; Hsu, Chou,

& Wu, 2001; Lu, Gilmour, Kao, & Huang, 2006). As aptly described by Malaysian Women and Family Development minister Datuk Shahrizat Abdul Jalil in 2001, "Only strong women can carry out the multifarious roles of mother, child and worker effectively while remaining pillars of the family and country" (New Straits Times, 2001). Hirao (2007) explained that Japanese working mothers are experiencing ambivalent and often contradicting attitudes toward their maternal roles because their definition of good mothering clearly contradicts the demands of being outside the home as paid workers. As Asian societies traditionally put the family above self interest, taking on paid employment is considered a means to ensure family prosperity and financial security. While this seems to be common ground between work and family, Lu and colleagues (2008) explained that working hard in modern Asian societies is not merely a demonstration of adherence to traditional values, but that devotion to work (i.e., working long hours) has become a necessary evil that is tolerated just so the family can cope with the high cost of living in a modern and urbanized Asian society.

While research on women's work-family issues and mental health is robust among Western societies (Barnett & Baruch, 1985; Beutell & Greenhaus, 1982; Greenhaus, Allen, & Spector, 2006; Grzywacz & Bass, 2003; Holmes, Erickson, & Hill, 2012; Hughes & Galinsky, 1994; Sandberg, Harper, Hill, Miller, Yorgason, & Day, 2013; Usdansky & Gordon, 2011), there is a need to explore the work-family interface in the East, especially because findings based in a Western context might not necessarily generalize to Eastern populations. This is because work-family issues are influenced by the broader socio-economic, political, and cultural milieu (Aryee, 1992; Aryee et al., 1999; Coffey et al., 2009; Devasahayam & Yeoh, 2007; Lu et al., 2008; Wang & Walumbawa, 2007; Yang, Chen, Choi, & Zou, 2000). Empirical studies on work-family issues in Asia have grown in numbers; however, they are limited by sampling setbacks and lack of

breadth in terms of work-family variables (Lu et al., 2008). Research on married women's work-family experience has, in particular, received much attention in the West (Chatterji & Markowitz, 2012; DeMeis, Hock, & McBride, 1986; Garey, 1999; Higgins, Duxbury, & Lee, 1994; Holmes et al., 2012; Fackrell et al., 2013). Similar research in Asian population, however, is limited (Choi, 2008; Fackrell et al., 2013; Rodd, 1993; Thein, Austen, Currie, & Lewin, 2010).

The focus of this study is the interaction of family relationships, particularly the relationship with one's spouse and children, and one's perception of work-family harmony on women's mental health. Specifically, using a large, national quota sample of women in Singapore, the study will examine how work environment, marital satisfaction, and child relationship satisfaction influence work-family harmony, which in turn can buffer the negative impact of a demanding work environment on the mental health of employed women in Singapore.

Theoretical Background

The theoretical underpinning for work-family research is drawn from Bronfenbrenner's (1989) ecological systems model. Bronfenbrenner considers the individual as being part of a microsystem occupying roles and having relationships, a mesosystem where two or more microsystems meet, an exosystem, and a macrosystem or culture. This implies that the self, in its lifetime, exists in relation to the systems where the individual exists. Voydanoff (2007) built upon this premise and emphasized the interaction of work and family microsystems in relation to the individual. To aptly incorporate the ecological systems model to Asian working women's experience, it is important to understand that she is a part of a larger system where she has to act upon traditionally prescribed roles, while adapting to the demands of a modernized society.

As Stivens (2007) explained, Asian women weave family roles with the demands of paid work. While some scholars deem this context as leading to ambivalence and consequently psychological distress (Hirao, 2007), others consider the permeability of work and family spheres in Asian culture as resources upon which employed women draw meaning and fulfillment (Lu et al., 2006).

Psychological distress is one of the outcomes most working women experience due to their efforts to balance work and family roles (Voydano ff, 2002). It has been a longstanding viewpoint among many scholars that married women's experiences in the workplace are unique in the sense that they are more likely to be willing to put family first before their career and feel that it is their responsibility to negotiate work-family issues on a daily basis (Aryee & Luk, 1996, Devasahayam & Yeoh, 2007; Hochschild, 1989). This is usually the case because, as Hall (1972) explained, women tend to fulfill their roles simultaneously.

Nevertheless, psychological distress (i.e., depression) can be alleviated, if not averted, depending on an individual's access to resources and the definition the individual makes of the event (Hill, 1958). Hill's ABC-X model of family stress is an important perspective to consider in understanding Asian women's work-family experience because of the unique cultural meanings Asian societies ascribe to family and work, particularly these two spheres' permeability (Lu et al., 2006; Shenkar & Ronen, 1987; Yang et al., 2000).

Considering Asian women's relatively recent entrance to the workforce, employment, particularly long hours, could be considered as a stressor (A), an event which disrupts normative gender roles that mainly puts women in homemaking and caretaking positions (see Figure 1). However, in a collectivist society such as Singapore, where people's focus is mainly on the family's welfare, work is essentially a means to an end (i.e., work to live) (Lu et al., 2006).

Consequently, the family is an important resource for working women in Asia. Lu and colleagues (2006) argue that even when work demands (e.g., long work hours) and family demands (e.g., childcare) are high, collectivists will experience low distress related to work-to-family and/or family-to-work interference. Family relationships are perceived as resources (B), in a sense, upon which employed wives and mothers define their work-family experience. This brings us to the definition Asian women make of their work outside the home (C). The interaction of these factors leads or not leads to a crisis (X).

The interaction of a demanding work environment and work-family permeability result in a subjective meaning of Asian women's participation in the labor force. Rather than seeing paid work as a competing with family, it is regarded as a contributor to family welfare (Aryee et al., 1999; Lu et al., 2006, Lu et al., 2008). This theoretically appeals to the idea of work-life harmony, where work and life roles are interwoven into one storyline (McMillan, Morris, & Atchley, 2011); that is, work values are congruent with family values (Choi, 2008; Yang et al., 2000). Stum (2001) explained that the ability to balance work and family roles provides employees a sense of self-fulfillment. Conversely, numerous researchers have found that women often experience psychological distress in the absence of a sense of harmony (e.g., work-to-family conflict, family-to-work conflict) (Frone, Russell, Cooper, 1997; Holmes et al., 2012; Hughes & Galinsky, 1994; Lu et al., 2006).

Work-Family Interface in Asia

Shenkar and Ronen (1987) explained that in collectivist societies such as Asia, family and personal time is attributed with lesser value than work. This goes hand in hand with Asian ideological tradition that puts the family and its interests in precedence over the self (Aryee et al., 1999; Lu et al., 2008). Asians' work values are congruent with their family values; thus, devotion

to work regardless of its demands constitutes an honorable sacrifice for the sake of the family (Fackrell et al., 2013; Yang et al., 2000).

Worth mentioning is the role of spouse and parent, and the quality of these family roles, as predictors and outcomes of work-family fit. Hill and colleagues (2008) explained that work-family fit is one's ability to incorporate work and family life in such a way that resources are available to successfully meet the demands from each sphere. While the literature on family factors and work-family interface is abundant, only a few have examined spousal and parental factors together (Jones et al., 2008). Even then, marital satisfaction and child relationship satisfaction were considered outcomes of work-family fit, rather than predictors. This distinction is important, particularly for employed women, because they tend to take into account the needs of their family when making career decisions (Greenhaus & Beutell, 1985; Hall, 1972; Holmes et al., 2012).

Women have been found to experience more conflict in family interference with work (Watai, Nishikido, & Murashima, 2008). This suggests that employed women's relationships with their spouses and children have a profound impact on their perception of work-family harmony. This is central to the understanding of work-family issues among Asian women, mainly because the cultural mandate on women is that their primary allegiance should be to the family (Aryee, 1992).

Working women in Singapore. With the entrance of women in the workforce, the straightforward philosophical ideology of putting family before self might prove to be problematic in understanding women's work-family interface in Asia. Women's participation in Singapore's workforce could be understood through an economic perspective, where women were needed either in the home or in the labor force depending on how their contribution to the

economy is perceived to be more important. According to Yuen & Lim (1992), Singapore's policy towards women is divided in two historical phases. In the 60s and 70s, women were regarded as homemakers in a society that controls fertility rates in such a way that families needed to be small, and in the 80s when women were encouraged to join the labor force in a society that promoted building families and rearing children.

Today, the women's labor force participation rate in Singapore is 58.1% (Singapore Ministry of Manpower, 2013). Based on national quota sample, Hill (2007) reported that employees in Singapore worked an average of 48 hour per week with little flexibility. In Western societies (e.g., United States, Canada), working long hours is considered a time strain that conflicts with the time demands of the family (Hofstede, 2001). In contrast, Eastern societies consider devotion to work as valuable time spent so that they can provide for their families (Lu et al., 2006; Shenkar & Ronen, 1987; Yang et al., 2000). Thein and colleagues (2010) reported that among Asian women, working was perceived as caring for the family in and of itself.

The trouble, however, is the gendered definition of "caring" for the family. Among Asian men, being the breadwinner largely constitutes the idea of making sure the family is cared for (Greenhaus & Beutell, 1985; Holmes et al., 2012). Among women, on the other hand, the weaving of family and work is carried out with an ideology of what a good mother is (Hattery, 2001). In Japan, for example, there is great emphasis on the mother's role in childrearing and its consequent product, "high quality children" (Hirao, 2007). These expectations raise the threshold for Asian working mothers, as they are expected to equally devote themselves in both spheres if they choose to join the labor force. Choi (2008) found that among Chinese working women, family demands were a significant predictor of life stress. This is not surprising because not only do women have more family demands, they are also more likely to be sanctioned if they are not

able to meet the normative expectations of traditional family values (Frone, Russell, & Barnes, 1996; Greenhaus & Beutell, 1985; Major, 1993).

Aryee (1992) identified this type of internal strain as ambivalence, particularly when a desire for self-fulfillment through career advancement is influenced by high expectations on women in fulfilling their roles as wife-employee and mother-employee. Connidis and McMullin (2002) explained that "ambivalence arises when an actor is faced with a specific situation that simultaneously values opposing courses of action that are rooted within the social structure" (p. 563). A woman's role in Asian society is deeply entrenched in the socio-cultural sex-role ideology ascribing her secondary status to men (Aryee, 1992). The role of wives and mothers is central to Asian women's identity, so much so that even in a non-traditional economy where women work outside the home, the cultural standard of maternal caregiving is still strongly emphasized and internalized regardless of work status (Hirao, 2007). Likewise, Matsunobu (2002) reported that, among employed women, almost no one agreed that work responsibilities should be more important than childcare, and a majority agreed that it is unfortunate for children less than three years of age to be in daycare because their mothers are working.

At face value, these findings are in stark contrast with socio-cultural expectations which puts the family first. However, it is crucial to bear in mind that work and family in Asian societies are very permeable spheres. Given this, it is imperative to understand how employed Asian women weave family resources and demands into their work roles. Family demands on women have not changed in spite of their active participation in the workforce. Bu and McKeen (2000) explained that employed women might expect that homemaking and caregiving tasks will be lessened (e.g., equitable division of labor), but they still take on the bulk of domestic tasks even when they spend a large amount of time working outside the home. This can be particularly

frustrating, and family demands eventually increase employed women's life stress (Choi, 2008). Watai and colleagues (2008) found that female participants in their study experienced high total family-to-work conflict. Choi (2008) similarly found that family demands were a significant predictor of life stress among females. Fackrell and colleagues (2013) also found that both work-to-family and family-to-work conflict predicted depression among married women in Singapore.

Marital satisfaction. Having and being a spouse who provides support, whether tangible or emotional, plays an important role in determining positive work-family outcomes (Clarke, Koch, & Hill, 2004; Law, 2011). For example, McAllister, Thornock, Hammond, Holmes, and Hilla (2012) found that both mothers' and fathers' couple emotional intimacy predicted fewer job concerns, more job rewards, less work-to-family conflict, and less family-to-work conflict for her- and himself. Research has found that among employed married women, marital quality is positively associated with role balance (Clarke et al., 2004; Dilworth, 2004; Marks, Huston, Johnson, & MacDermid, 2001). This relationship was also evident even when the direction was reversed (Aryee et al., 1999; Jones et al., 2008). Work-family fit positively predicted marital and family satisfaction. Conversely, conflicting demands between work and family has negative associations with marital satisfaction (Allen, Herst, Bruck, & Sutton, 2000; Carroll, Hill, Yorgason, Larson, & Sandberg, 2013). These suggest that quality in-home relationships provide cushion for the negative effects of work demands. This is particularly important in looking into women's work-family experience because they usually experience more negative family-to-work spillover (Keene & Reynolds, 2005).

Similar findings were reported for Asian populations (Fackrell et al., 2013; Galovan et al., 2010; Wu, Chang, & Zhuang, 2010). In a study of young urban Chinese professionals, Coffey and colleagues (2009) reported that participants cited mutual support and understanding between

husband and wife and encouragement and help between spouses as ideal situations that would make balancing work and family easier. In a recent study by Fackrell and colleagues (2013), they reported that marital satisfaction and family-to-work conflict are negatively related among married women in Singapore. The authors suggested that this could be because the spouse is the source of negative family-to-work spillover. This corroborates Galovan and colleagues' (2010) earlier findings from their study of work-family interface in Singapore and the United States. Similar findings were reported in other Asian countries. In Malaysia, Ahmad (1996) found that work-family conflict was negatively related to life satisfaction among employed professional women. In Taiwan, Wu and colleagues (2010) observed that work-to-family conflict predicts marital satisfaction among women who do business with their spouses.

Child relationship satisfaction. According to Byron (2005), the focus of studies on work-family balance has been the effects of marital quality and spousal support on work. While the role of children and parenting are also considered important family characteristics in an individual's work-family life (Tausig & Fenwick, 2001; Voydanoff, 2002), scholars have taken a more demographic approach (e.g., age and number of children) in examining the effects of child characteristics on work-family life (Davis, Goodman, Pirretti, & Almeida, 2008; Kiecolt, 2003; Martinengo, Jacob, & Hill, 2010; Milkie & Peltola, 1999). Moen and Roehling (2005) explained that becoming parents transforms the work and family lives of men and women. This is most evident during the early years of parenthood when parents are just starting to establish their careers and may feel pressured to invest a relatively large amount of time and energy into their work (Lundberg & Rose, 2000).

The implication of this predicament among employed parents is significant, especially among women. Higgins, Duxbury, and Lee(1994), for example, observed that young mothers

were more likely to experience heightened family-work spillover due to feelings of exhaustion from caregiving. Nomaguchi, Milkie, and Bianchi (2005) reported that mothers reported emotional distress when they felt that their work roles prevented them from being with their children. On the other hand, those who are able to spend quality interactive time (e.g., reading, playing) with their children felt more successful in balancing work and family (Milkie, Kendig, Nomaguchi, & Denny, 2010). Similarly, high parental attachment was found to influence higher sense of role balance among women (Marks et al., 2001).

Furthermore, some scholars have found that being mainly responsible for child care predicted feelings of low work-family fit for mothers (Hill, Hawkins, Martinson, & Ferris, 2003). Moreover, parents' feeling of self-efficacy influenced their sense of role balance. For example, Erdwins, Buffardi, Casper, and O'Brien (2001) observed that mothers who felt confident in their ability to nurture and support their children appeared to be less weighed down by the multiple role demands. In the same vein, Jones and colleagues (2008) found that work-family fit predicted child relationship satisfaction. On the contrary, Cinamon, Weisel, and Tzuk (2007), reported that work-to-family conflict and family-to-work conflict were associated with low levels of parental self-efficacy and poor quality of parent-child interaction.

A significant cultural consideration among professional Asian mothers is the societal definition of what a "good mother" is. In most societies, the responsibility of raising children lies on the parents. In Asia, good parenting, more specifically "good mothering," lies on the ability of the mother to raise a "quality child" who will excel academically (Hirao, 2007; Yuen & Lim, 1992). Perhaps due to the deeply entrenched high value for motherhood, Asian women still consider childrearing as a priority especially when they are young (Hirao, 2007; Matsunobu, 2002; Yuen & Lim, 1992). For instance, a report from the National Institute of Population and

Social Security Research (NIPSSR, 2003) indicated that the majority of women in Japan support the idea that mothers should stay at home while the children are still young and not be distracted by paid work. Hirao (2007) explained that according to Japanese cultural norms, the mother's childrearing role is highly valued because the child is seen as an extension of his/her mother; therefore the child's outcomes, be it positive or negative, are considered a reflection of the mother's "personality, intelligence, behaviour, and resources" (p. 64).

In context, culturally-mandated gender roles play a vital part in understanding the work-family experience of Asian women. Motherhood, particularly, is deeply rooted in tradition, and, therefore, married professional women may find the balancing act difficult. Aryee (1992) explained that despite Asian women's active participation in the workforce, they are still expected to maintain housework and childcare as their main roles; therefore, the possibility of combining career and family in Asian societies hinges upon a woman's ability to successfully prevent her career from disturbing the normative expectations of being a spouse and mother. Coffey and colleagues (2009) found that having young children to care for is one of the main reasons balancing work and family feels difficult among young urban professionals in China. A similar finding was observed in Taiwan, where Lu and colleagues (2008) found that having dependent children increased family-to-work conflict. In Singapore, however, Jones and colleagues (2008) observed that work-family fit was positively related to child relationship satisfaction.

Work-Family Harmony

The quest to achieve balance in work and family continues to be almost unrealistic in a modern industrialized society. While it is a high priority among employed individuals (Frincke, 2007; Lockwood, 2003; Milkie et al., 2010), the majority of employees find it difficult to find a

healthy level of balance between their work and family lives. Consequently, an abundance of research on work-family interface converged on the idea of work and family roles being incompatible spheres resulting in almost two decades of studying inter-role interference (Frone, 2003; Greenhaus & Beutell, 1985; Greenhaus et al., 2006; McMillan et al., 2011). The idea of inter-role interference suggests that role pressures from one domain are incompatible with another in some respect, and vice versa (Frone, 2003; Greenhaus & Beutell, 1985). In essence, inter-role interference transpires because the roles and responsibilities from work and home are competing for resources (e.g., time, physical energy, psychological resources) that are strictly limited (Greenhaus & Beutell, 1985). Examples of this situation are when a woman is overwhelmed by the demands of being a mother (e.g., attending to a sick child) and a paid employee (e.g., staying late at work for rush deliverables), or when the expectations from a spouse (e.g., emotional availability once at home) compete with pressures to perform at work (e.g., preoccupation with work demands).

Work-family conflict is essentially the negative aspect of work-family interface. However, receiving a substantial amount of attention from scholars are the more positive facets of work and family life (Carlson, Kacmar, Wayne, & Grzywacz, 2006; Frone, 2003). Constructs such as "enrichment" (Greenhaus & Powell, 2006), "integration" (Greenhaus & Parasuraman, 1999), "enhancement" (Graves, Ohlott, & Ruderman, 2007; Thoits, 1987), "facilitation" (Wayne, Grzywacz, Carlson, & Kacmar, 2007), and "balance" (Frone, 2003; Hochschild, 1997) are commonplace in the positive work-family interface literature. Taken together, these concepts feed on the idea that the individual can benefit from performing dual roles, such as experiences in one role enriches, develops, and/or enhances an individual's ability to perform in another role.

Frone (2003), nevertheless, argues that the positive aspect of work-family experience does not necessarily require giving the exact amount of time and resources in both roles. Instead of the absence of conflict, the work-family interface could be a positive experience if the individual is equally invested and satisfied with work and family roles (Greenhaus, Collins, & Shaw, 2003). Still, Voydano ff (2005) considers work-family balance as finding that work resources meet family demands and vice versa. With this plethora of definitions, it is clear that the positive aspect of work-family interface is still in the process of development (Frone, 2003; Grzywacz & Carlson, 2007).

More recent studies have suggested that there is evidence to support that work and home life in many ways complement, instead of compete with, each other, thus shifting the paradigm to harmony, instead of conflict (Hill et al., 2007). Harmony is a better metaphor because, unlike balance, it suggests that an individual exists in more than just two domains which could either be concordant or dissonant with each other (Goodsell, Barrus, Meldrum, & Vargo, 2010). Goodsell and colleagues (2010) referred to this dynamic as polyphony, suggesting that parents think and behave in "multiple, simultaneous, interacting contexts" (p. 12).

Drawing from these ideas, McMillan and colleagues (2011) propose that work-life harmony is attainable when an individual's surplus of gains from work/life enrichment is "aligned with, serve to, ameliorate, alleviate" the stressors that evolve from conflict. Consequently, they proposed a work-family interface model that integrates both conflict and enrichment and defined work-life harmony as "an individually pleasing, congruent arrangement of work and life roles that is interwoven into a single narrative of life" (p. 15). This is an important concept in understanding work-family interface in Asian societies, mainly because Asian traditions consider work and family as congruent rather than competing (Aryee et al.,

1999; Choi, 2008; Lu et al., 2006, Lu et al., 2008; Yang et al., 2000). This is also key to cross-cultural understanding of work-family interface, particularly because "what one culture or one family considers a dissonant relationships between life domains may not be dissonant in all cultures or families" (Goodsell et al., 2010; p.13). This implies that different people interpret harmonic combinations (i.e., work-family arrangements) differently, depending on their socio-cultural background.

Voydano ff (2002) explained that structural and psychological facets of work-family interface influence a wide range of work, family, and individual outcomes; however, not much is known about how work-life harmony can explain the relationship between work, family, and individual factors.

Professional Women's Mental Health

Hughes and Galinsky (1994) observed that women in dual-earner families experienced more psychological distress, and that work-family interference accounted for the association of mental health and work and family conditions. With traditionalism and modernism existing side-by-side in most Asian countries, women may experience inner tension in their attitudes toward their multiple roles as wife, mother, and employee (Aryee et al., 1999; Lu et al., 2008). Some scholars refer to this as ambivalence (Hirao, 2007), such that a woman is caught between tradition and modernity. This could be explained by the feelings of discomfort a woman may experience when they deviate far from firmly entrenched role expectations of motherhood and homemaking (Major, 1993). Indeed, work-family scholars have observed that as an individual experiences more work-family conflict, depression is more likely to occur (Beach, Katz, Kim, & Brody, 2003; Chatterji & Markowitz, 2012; Frone et al., 1996; Thomas & Ganster, 1995).

Research suggests that younger Asian cohorts have higher rates of depression, suggesting that depression rates will increase in future years (Lee et al., 2009). The consequences of depression for the economy are costly. In China alone, depression accounts for an estimated 43,280 million RMB (or US \$5,278 million) in job loss, decreased work productivity, and damaged property (Hu, He, Zhang, & Chen, 2007). One study found that adults suffering from depression were unable to perform their family and work roles for an average of 27.5 days during the past year due to depressive symptoms (Lee, et al., 2009). Work-family conflict and marital distress have been identified as antecedents to depression for Asian workers (Fu & Parahoo, 2009; Miller et al., 2013; Sandberg, Yorgason, Miller, & Hill, 2012). Employed women in China reported that their depression stems from the increased stress they experience due to lack of spousal support in domestic responsibilities (e.g., taking care of children, household chores) (Fu & Parahoo, 2009). Marital satisfaction was also observed to significantly predict depression among Chinese wives (Miller et al., 2013). Based on a national quota sample in Singapore, Sandberg and colleagues (2012) noted that couples who are in a distressed relationship are at heightened risk for experiencing depression, which consequently affects their work outcomes.

For professional women, especially in Asia, it is imperative to evaluate their mental health outcomes in the context of their roles as wife and mother. Panatik, Badri, Rajab, Rahman, and Shah (2011) found evidence that work-family conflict negatively influences mental health among Malaysians. Fackrell and colleagues (2013) similarly found that work-to-family conflict and family-to-work conflict were positively related to depression among employed mothers in Singapore. Seto, Morimoto, and Maruyama (2004) explained that for employed women with children, receiving significant support from a spouse could alleviate the burden of heavy

workload at home, thus precluding psychological distress. Conversely, depression can be a mechanism through which negative family-to-work spillover is experienced by employed individuals in distressed marital relationships (Sandberg et al., 2012). Holmes and colleagues (2012) also reported that mothers who feel like their employment is not compatible with their role to ensure their child's development had significantly high levels of depression.

In Japan, Seto and colleagues (2004) observed that the heavy workload of childcare and housework Japanese working mothers with young children have to deal with puts them at risk for psychological distress. Researchers contend that women become more prone to depression because traditional gender roles expect them to adopt a marital gatekeeper role (Beach et al., 2003), wherein mothers find it difficult to relinquish responsibilities in the home front as an effort to externally validate the maternal role through clearly establishing a clear gendered division of labor (Allen & Hawkins, 1999).

Purpose of the Study

Scholars agree that there is a need to explore work-family issues outside of Western societies, particularly because findings based on Western contexts (e.g., United States, Canada) might not necessarily apply to Eastern populations. While work-family research in Asia has grown in the recent years (Aryee, 1992; Aryee et al., 1999; Coffey et al., 2009; Devasahayam & Yeoh, 2007; Galovan et al., 2010; Hill, 2007; Lu et al., 2008; Yang et al., 2000), studies focusing on employed Asian women are still sparse (Choi, 2008; Fackrell et al., 2013; Thein et al., 2010).

Building upon Jones and colleagues' (2008) study of work-family fit among couples in Singapore and Fackrell and colleagues' (2013) study of work-family interface among married women in Singapore, this study responds to Voydanno's (2002) concern regarding the limited

knowledge about work-life harmony's role in explaining the relationship between work, family, and individual factors.

Jones and colleagues (2008) is one of the few studies that looked at how work-family fit influences marital satisfaction and child relationship satisfaction in the same model. Aside from including children characteristics in their model, they approached the mother-employee role beyond demographics (e.g., number and age of children) but considered the actual quality of parent-child relationship. The trouble was, however, family characteristics and individual characteristics (i.e., mental health) were all treated as outcomes. With Bronfenbrenner's ecological systems model as a foundation, this study takes into account that perceptions of work-family life can influence the association between work factors and individual outcomes.

In addition, Fackrell and colleagues (2013) observed in a cross-cultural study that total number of work hours indirectly predicted depression via work-family conflict in married women in the United States, but not in Singapore. The authors explained that this could be because working long hours actually reflects a commitment to bring honor to the family by way of secure employment in Singapore. If Asian societies view work and family as congruent rather than competing, it might be worthy to explore the antecedents and outcomes of work-family interface using a positive paradigm. Congruent with Hill's (1958) ABC-X model of family stress, perceived satisfactory family relationships can act as a resource employed women can tap into to cognitively achieve work-family harmony. This cognitive process, in turn, can suppress the negative impact of a demanding work environment on mental health. Taken together, the following hypotheses are offered:

While controlling for education and income,

H1: Working long hours will have a negative association with marital satisfaction, child relationship satisfaction, work-family harmony, and mental health.

H2: Marital satisfaction will mediate the negative association between long work hours and work-family harmony.

H3: Similarly, child relationship satisfaction will mediate the negative association between long work hours and work-family harmony.

H4: Fitting with the first two hypotheses, work-family harmony will mediate the negative association between long work hours and mental health.

H5: Work-family harmony will mediate the relationship between family relationships and mental health.

Method

Participants

The participants for the current study were 284 employed married Asian mothers residing in Singapore who participated in the 2012 Singapore National Study of Work-Life Harmony, conducted in partnership between the Ministry of Social Family Development (MSF) in the Republic of Singapore and the School of Family Life (SFL) at Brigham Young University (Hill et al., 2013). The 2012 survey was conducted with a national quota sample of employed Singaporean citizens and permanent residents ($N = 1,650$). They were selected to be representative of age, gender, and house type documented by the Singapore Department of Statistics. An extra 50 mothers with pre-school children were included in the interviews so that there is a statistically reliable representation of that group.

Of the 284 women in this study, 81.7% were Chinese, 11.6% were Malay, 4.6% were Indian, and the remaining 1.8% was from other ethnic groups. This reflects the national

demographics in terms of ethnic composition. On the average, these mothers were 42.48 years old ($SD = 9.90$), with 2.00 children living with them at home. Thirty percent of these mothers had college education, and 75% earned a monthly income of at least SG \$3000. Eighty-six percent worked full-time in private for-profit service sector industries (e.g., retail, hotels and restaurants, transport), mostly as clerical, service, and sales employees. Seventy-one percent worked on a regular day-time schedule, while the other 29% worked flexible or variable schedule (10.2%), rotating shift (10.6%), evening shift (1.8%), split shift schedule (.7%), or some other work schedule (6.0%). On the average, these women worked 42.04 hours per week ($SD = 14.51$).

Procedure

Data were collected during the 2012 wave of the Singapore National Study of Work-Life Harmony (Hill et al., 2013). Conducted as a follow-up to a similar 2006 study, the final instrument used in the 2012 survey consisted of 177 questions representing questions from the 2006 study, with additional questions developed by Singapore's Ministry of Social and Family Development to deal with new priorities and new questions recommended by work-life experts and collaborators. Face-to-face interviews were conducted by EA Consulting Group between March and July 2012. The interviews ran between 35 and 45 minutes and were carefully monitored by Brigham Young University's School of Family Life and Singapore's Ministry of Social and Family Development. The margin of error for the overall sample was +/-2 %, while the margin of error for women was +/- 4%.

Measures

Work hours. Participants answered the question "In total, how many hours do you work in a week?" This included the extra hours they worked, which may be paid or unpaid.

Marital satisfaction. Marital satisfaction was measured using a 5-item modified version of the Quality Marriage Index (Norton, 1983). The responses were based on a 6-point Likert scale ranging from 1 (*very strongly disagree*) to 6 (*very strongly agree*). These items were (1) "I have a good relationship with my spouse," (2) "My relationship with my spouse is very stable," (3) "Our relationship is strong," (4) "My relationship with my spouse makes me happy," and (5) "I really feel like a part of a team with my spouse." Lower values indicate low marital satisfaction, and high values indicate high marital satisfaction. For this sample, the marital satisfaction scale yielded a Cronbach's alpha of .95.

Child relationship satisfaction. For married respondents with children, child relationship satisfaction was measured by a single item 4-point Likert type scale asking respondents how satisfied they felt about their relationship(s) with their children. Low values indicated low relationship satisfaction, and high scores reflected high relationship satisfaction.

Work-family harmony. Work-family harmony was measured using the National Measure of Work-Life Harmony, created during the 2006 cycle of the Singapore National Study of Work-Life Harmony. Nine questions from the survey were selected to be included in the National Work-Life Harmony Index (Fackrell et al., 2013; Jones et al., 2008). These nine items were designed to evaluate the extent to which the participants agreed or disagreed with statements pertaining to their work and family life characteristics. These items were (1) "How easy or difficult is it for you to integrate your work and your personal/family life," (2) "All in all, I am able to effectively integrate my work responsibilities and family/personal aspirations," (3) "My job fits well with my individual personality," (4) "My job fits well with my desire to be happily married," (5) "My job fits well with my desired number of children," (6) "My job fits well with my desire to spend time with my family/ children," (7) "My job fits well with my

preferred pace (tempo) of life," (8) "My job fits well with my desire for social interaction," and (9) "My job fits well with my personal aspirations." Low values indicate low work-life harmony, and high values indicate high work-life harmony. For this sample, the work-life harmony scale yielded a Cronbach's alpha of .79.

Mental health. Mental health was measured using two items based on the Center for Epidemiologic Studies Depression Scale (CES-D Scale; Whooley, Avins, Miranda, & Browner, 1997). These items relate to the participants' mental health self-evaluations during the past month including feelings of being bothered by feeling down, depressed or hopeless, and little interest or pleasure in doing things. Lower values indicate poor mental health, and higher values indicate good mental health. For this sample, the mental health scale yielded a Cronbach's alpha = .83.

Control variables. Level of education and income were included as control variables. Past research showed that work-family interface is associated with factors such as education (Voydanoff, 2007) and income (Fackrell et al., 2013).

Analysis

Figure 3 represents the mediation model used to explore the above mentioned relationships. It illustrates the direct and indirect relationships between work hours, marital satisfaction, child relationship satisfaction, work-family harmony, and mental health, while controlling for education and income. Using the statistical program Analysis of Moments Structure (AMOS; Arbuckle, 2012) software, Structural Equation Modeling (SEM) was used to analyze the mediation model. The chi-square fit statistics, Tucker and Lewis Index (TLI), comparative fit index (CFI), and the Root Mean Square Error of Approximation (RMSEA) were considered in testing the goodness-of-fit of the model. The primary advantage of SEM is that it

controls for measurement error, which reduces the bias in the regression coefficients (Kline, 2010).

To conduct mediation analyses, the classic mediation model approach proposed by Baron and Kenny (1986) was combined with bootstrapping techniques to test the significance of indirect effects. In a mediation model, variable X is hypothesized to have a relationship with variable Y, through an intervening variable called a mediator M. Baron and Kenny's (1986) approach emphasized establishing significant associations between the mediator and the outcome, the independent variable and the outcome, and the independent variable and the mediator. The reduction of coefficients and *p* values for the association between the independent variable and the outcome after the introduction of the mediator is then examined. Bias-corrected bootstrapping was used to test the extent to which variable X is associated with variable Y, through variable M (MacKinnon, Lockwood, Hoffman, West, & Sheets, 2002). With bootstrapping, resampling with replacement done many times (i.e., 1000) creates samples from which the indirect effects are computed and a sampling distribution is empirically generated where an adjusted confidence interval, a *p* value, or a standard error can be determined (Kenny, 2014).

Results

Preliminary Analyses

The employed mothers who participated in this study reported that they experienced relatively harmonious work and family life ($M = 2.91$, $SD = .41$, $R = 2$). They also reported relatively high marital satisfaction and child relationship satisfaction scores ($M = 4.58$, $SD = .76$, $R = 5$, $M = 2.80$, $SD = .76$, $R = 3$; respectively). They also reported relatively positive mental health ($M = 3.84$, $SD = .77$, $R = 4$). However, the mothers reported they felt they were not able to

spend enough time with their spouse ($M = 1.74$, $SD = .50$, $R = 2$), with their children ($M = 1.68$, $SD = .47$, $R = 2$), or for themselves ($M = 1.57$, $SD = .53$, $R = 2$).

The results of bivariate correlations (see Table 1) indicated that having higher education was associated with more marital satisfaction ($r = .16$, $p < .01$) and having fewer children ($r = -.16$, $p < .01$). Earning more money was similarly associated with more marital satisfaction ($r = .13$, $p < .05$), as well as positive mental health ($r = .12$, $p < .05$). Better work-family harmony was positively associated with mental health ($r = .27$, $p < .01$) and marital satisfaction ($r = .14$, $p < .05$). Interestingly, more work hours was positively associated with mental health ($r = .24$, $p < .01$).

Structural Equation Model Analyses

The results of the goodness-of-fit analysis of the path model indicated that the model fit the data well. The Chi-Square was non-significant (1.11 [$df = 1$], $p = .29$). The Comparative Fit Index (CFI) was .99, and the Tucker-Lewis Index (TLI) was .98, which indicated good model fit (Fan, Thompson, & Wang, 1999). The Root Mean Square Error of Approximation (RMSEA) was .02.

Hypothesis Testing

Hypothesis 1. While working long hours did not have a significant negative association with marital satisfaction, child relationship satisfaction, and work-family harmony; it was significantly associated with mental health. However, the association between work hours and mental health was the reverse of the hypothesized relationship ($\beta = .24$, $p < .01$); suggesting that women who worked longer hours had a more positive mental health.

Hypothesis 2. Hypothesis 2 was not supported as marital satisfaction did not mediate the relationship between long work hours and work-family harmony. Bootstrapping indicated that

the indirect effect was .000. This is not surprising given that two of the three paths involved in the mediation were not significant. The results of the path model indicated that long work hours was not significantly associated with employed mothers' perceived work-family harmony ($\beta = -.07, p = .25$) (see Figure 3). Similarly, long work hours was not significantly associated with marital satisfaction ($\beta = -.03, p = .62$). However, marital satisfaction significantly predicted work-family harmony ($\beta = .13, p = .03$); suggesting that employed wives who perceived their marriages to be satisfying perceived the work and family life to be harmonious.

Hypothesis 3. Similarly, the third hypothesis, that child relationship satisfaction would mediate the relationship between long work hours and work-family harmony, was not supported. Bootstrapping indicated that the indirect effect was .000, confirming that child relationship satisfaction did mediate the relationship between long work hours and work-family harmony. Unlike marital satisfaction, the direct effect of child relationship satisfaction on work-family harmony was not significant ($\beta = .07, p = .25$).

Hypothesis 4. Hypothesis 4 was also not supported, as work-family harmony did not mediate the relationship between long work hours and mental health. Bootstrapping indicated a non-significant indirect effect ($\beta = -.03, CI = -.08, .01; p = .15$). Long work hours significantly predicted better mental health among employed women ($\beta = .25, p < .01$). However, although work-family harmony significantly predicted mental health ($\beta = .28, p < .01$), long work hours were not significantly associated with work-family harmony ($\beta = -.07, p = .25$).

Hypothesis 5. The fifth hypothesis which proposed that work-family harmony would mediate the relationship between family relationships and mental health was partially supported. Results indicated that marital satisfaction had a significant indirect effect ($\beta = .04, CI = .00, .09, p = .05$) on mental health through work-family harmony. However, work-family harmony did not

mediate the relationship between child relationship satisfaction and mental health ($\beta = .02$, CI = $-.01, .05$, $p = .24$).

Discussion

With Bronfenbrenner's ecological systems model as a foundation and using Hill's (1958) ABC-X model of family stress, this study was conducted to facilitate a better understanding of the mechanisms by which family and work characteristics influence individual outcomes, and how positive family relationships can act as a resource for employed women who might be dealing with psychological distress brought by working long hours. To achieve this, this study focused on family and individual characteristics and psychological outcomes of employed mothers residing in Singapore. By doing so, the relationships among individual, family, and work factors were explored with consideration to the macrosystemic cultural influences on gender roles, family values, and work ethics.

Mediation Analyses

The direct effect of work hours on mental health was the reverse of the hypothesized relationship. As Lu and colleagues (2006) explained, collectivists (i.e., Asians) will experience low psychological distress even when faced with high work and family demands because being able to work means they are able to provide and care for their families and doing so represents strong family values (Thein et al., 2010). This is probably the reason why work hours significantly predicted better mental health among employed women. Because work and family domains are not considered dissonant in Asian cultures; perhaps the subjective meaning of engaging in paid work, regardless of its demands, contributes to a healthy psychological disposition (i.e., sense of fulfillment) (Stum, 2001) among employed women in Singapore.

Although findings indicated that the association between work long hours and marital satisfaction, child relationship satisfaction, and work-family harmony were in the hypothesized negative direction, they were not significant. There is the possibility that these findings were real, and perhaps attributable to work and family spheres being permeable in collectivist cultures. Alternately, it is also possible that these non-significant findings were results of a small sample size.

Both hypotheses 2 and 3 were also not supported. Neither marital satisfaction nor child relationship satisfaction mediated the relationship between long work hours and work-family harmony. As Fackrell and colleagues (2013) previously explained, this could be because working long hours actually reflect commitment to family's honor by contributing to financial stability via employment security. In retrospect, Asian women are probably taking advantage of employment opportunities as an opportunity to contribute to their household economy. By doing so, these women are demonstrating that they are willing to put work demands above family interests if it means being able to help provide for their family.

The significant positive relationship between these employed women's marital satisfaction and their perception of work-family harmony supports previous findings that marital quality helps spouses balance family and work roles (Coffey et al., 2009; McAllister et al., 2012). This is most likely due to husbands' role in supporting their wives' decision to work. As Clarke and colleagues (2004) explained, having a spouse who is able to provide tangible and/or emotional support is crucial in shaping positive work-family outcomes. On the average, the women in this study reported that they were highly satisfied in their marriages, implying that their relationships with spouses were strong and stable, and they felt like they were a part of a team with their spouse.

The non-significant effect of child relationship satisfaction on work-family harmony is intriguing, especially because Asian cultures put substantial emphasis on being good mothers, which usually means being able to stay at home to rear their children themselves (Hirao, 2007). Coffey and colleagues (2009) suggested that having young children to care for is an important factor in Asian urban professionals' ability to balance work and family. Fackrell and colleagues (2013), however, reported that having young children had a weak relationship with family-to-work and work-to-family conflict and suggested that this was probably attributable to families in collectivist culture's access to help from extended family and the availability of domestic maids for childcare.

Eighty-four of the 284 (30%) mothers in this study reported having extended family living with them and/or having maids to help around the house. It is possible that mothers who are able to leave their children in the care of their extended family members perceive that their children still feel secure and not abandoned, especially since the children are around family members as opposed to being with strangers while the mother is away at work. Also, because the children are in the care of trusted family members, employed mothers might not be worried much about them, thereby not being a main concern in trying to harmonize work and family life. It would be worthwhile for future research to investigate how this feature of Asian families can influence the relationship between mothers' relationship with their children and work-family harmony, as well as their mental health.

The fourth hypothesis that work-family harmony would mediate the relationship between long work hours and mental health was not supported either. Work-family harmony was significantly associated with mental health, suggesting that a harmonious work-family life contributes to positive mental health. This corresponds to Fackrell and colleagues' (2013)

findings that wives who experience work-to-family and family-to-work conflict are more likely to be depressed. However, the relationship between long work hours and work-family harmony was not significant. This is similar to what Fackrell and colleagues (2013) found, which suggests that the total number of hours worked does not have a significant relationship with family-to-work conflict. Asians' work ethics put them in a position where devotion to work is actually expected of them even if it means less time for themselves and for their families (Yang et al., 2000). Because of this prevailing attitude, it is possible that working long hours does not have an impact on employed women's perceptions of a harmonious work and family life.

Even though work-family harmony did not mediate the relationship between long work hours and mental health, results indicated that it did mediate the relationship between marital satisfaction and mental health, which was the fifth hypothesis of the study. Marital distress and work-family conflict have been identified as major risk factors for depression (Fu & Parahoo, 2009; Miller et al., 2013). Results of this study suggest that, among employed Asian women, marital satisfaction was positively associated with mental health through the mediator work-family harmony. This suggests that employed wives' perception of their marriages influenced whether or not they perceived that their work and family lives co-existed harmoniously, and this contributed to a more positive mental health. This is congruent with recent reports indicating that employed Asian women attributed their psychological distress to lack of domestic support (Fu & Parahoo, 2009; Seto et al., 2004). These results support previous findings that positive marital relationships lead to positive work-family outcomes (Clarke et al., 2004; Coffey et al., 2009; Law, 2011), which eventually lead to positive mental health outcomes (Fackrell et al., 2013; Panatik et al., 2011).

On the other hand, work-family harmony did not mediate the relationship between child relationship satisfaction and mental health. This is because two of the three paths were not significant. As mentioned earlier, the non-significant relationship between child relationship satisfaction and work-family harmony is perhaps attributable to Asians' access to help from extended family and the availability of domestic maids for childcare. Because the children are in the care of trusted family members, employed mothers might not be worried much about them, thereby not being a main concern in trying to harmonize work and family life. Since they do not worry about arranging childcare while they are at work, it is possible that their relationship with their children does not necessarily have an impact on their mental health.

Taken together, these findings suggest that working long hours has a positive association with mental health. Previous research in Asia has suggested that it is possible for women in dual-earner families to experience distress due to inner tension brought about by deviating from their traditional roles as wives and mothers by taking paid employment (Aryee et al., 1999; Hirao, 2007; Major, 1993). Despite this possibility, scholars still found that total hours worked did not seem to be significant predictors of work-family conflict (Lu et al., 2008) and workload was positively associated with happiness among Asian employees (Lu et al., 2006). These are similar to the results of this study, implying that engaging in paid employment actually has a positive association with mental health for Asian women.

This is not surprising because Asians regard work as a means of ensuring family prosperity and financial security; therefore, they experience relatively low psychological distress even when faced with high work demands (Lu et al., 2008). Scholars suggest that while employed parents may experience inner tension when the demands of work compete with their family roles, their commitment to work (i.e., working long hours) is considered a show of

diligence which ensures their family's financial security and results in the blurring of work and family roles (Aryee et al., 1999; Lu et al., 2008). Because work and family domains are not considered dissonant in Asian cultures; the subjective meaning of engaging in paid work contributes positively to mental health through personal sense of fulfillment drawn from one's ability to provide and care for their families (Stum, 2001, Thein et al., 2010).

The results of this study also suggest that marital satisfaction is associated with mental health through work-family harmony. This supports previous findings that positive marital relationships lead to positive work-family outcomes (Clarke et al., 2004; Coffey et al., 2009; Law, 2011), which eventually lead to positive mental health outcomes (Fackrell et al., 2013; Panatik et al., 2011). The quality of their relationship with their children did not have a significant impact on their perceptions of work-family harmony, but this is perhaps attributable to their access to childcare assistance through their network of extended family and hired househelp.

In relation to Hill's (1958) model of family stress, employed women in Singapore consider their marriage as a resource that influences their perception of their work-family life. Also, their level of satisfaction with their marital relationship has an effect on their mental health through their perceptions of work-family harmony. Although working long hours seem to not have a negative effect on mental health among employed Asian women in Singapore, which is possibly attributable to Asian work ethics, there is evidence that in the event that a woman actively participates in the work force, her relationship with her spouse plays a significant role on her work-life experience which ultimately has a significant impact on their mental health.

Limitations and Directions for Future Research

This study was limited in that it was cross-sectional, which means that temporal ordering of events was not possible. Consequently, potential bidirectional effects and causal relationships cannot be inferred. The nature of longitudinal research can significantly benefit the study, particularly because family relationships and work characteristics develop over the lifespan, and critical issues related to work-family interface could be more salient at different time points. Such determinations cannot be done with cross-sectional data. This limitation points to the importance of future work and family research in Asia to use longitudinal designs.

In addition, data used were from a self-report survey. This is important because Asians tend to use mid-point scores when responding to survey questions that use Likert-type scale for responses (Chen, Lee, & Stevenson, 1995), which is likely to be attributed to Eastern principles of modesty and moderation. It may be beneficial in future research to also include other types of data less subject to cultural bias.

This study also did not include a couple of variables that could potentially improve our understanding of the relationships between work, family, and mental health among professional Asian women. First, duration of marriage was not included in the model due to unavailable data. Relationship duration can potentially influence individual and relational disposition (Gibb, Fergusson, & Horwood, 2011). Also, the presence of extended family and/or paid domestic help in the model. Access to extended family and, sometimes, hired nannies to help with household chores and childcare is unique to Asian family life, and it would be interesting to investigate how this feature can influence the relationship between parents' relationship with their children and work-family harmony, as well as their mental health.

Lastly is the question of generalizability of the results to other working groups and other parts of Asia. The participants in this study included only Singapore citizens and permanent residents; but a third of Singapore's workforce are foreign workers (Singapore Ministry of Manpower, 2014). Because of this, future research on work-family interface should include non-citizen workforce participants, as well as in other areas of Asia.

Conclusion

Women's participation in the labor force has increased in Singapore in recent years. This study investigated the relationships between work hours, marital satisfaction, child relationship satisfaction, work-family harmony, and mental health among employed mothers in Singapore. Findings indicate that recognizing the unique cultural meanings Asian societies ascribe to work and family can facilitate a better understanding of Asian women's work-family experience. Results indicating that working long hours has a significant positive relationship with mental health are congruent with Asian family values and work ethics which hinge on the idea that being devoted to work is an honorable sacrifice and necessary for the maintenance of stable and financially secure family life in a modern and urbanized Asian society. Paid work is most likely not considered as competing with one's finite resources; instead, it is probably regarded as a means by which women can contribute to the family's welfare and well-being (Lu et al., 2006; Lu et al., 2008). The lack of association between working long hours and family relationships and perceived work-family harmony hinges on the idea that being devoted to work is necessary for the maintenance of stable family life and is, therefore, tolerated in Asian societies (Lu et al., 2008).

There is also evidence that marital satisfaction, in itself, influences the level of work-family harmony employed women perceive. Work-family harmony also influences mental health

directly, suggesting that one's perception of the intersection between work and family life has a direct effect on women's emotional disposition. Consequently, marital satisfaction indirectly influences mental health through work-family harmony. This bears support to the ABC-X Model of Family Stress (Hill, 1958). There is evidence that employed women's relationship with their spouse is perceived as a resource that influences their perception of their work-family life, which consequently influences their mental health. Taken together, these suggest that for Asian women who engage in paid employment, their relationship with their spouse plays a significant role on their work-life experience, which ultimately has a significant impact on their mental health.

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Table 1. Correlations, Means, and Standard Deviations

	1	2	3	4	5	6	7	8	9	10	11	Means	SD	Range
1. Education Level	--													
2. Monthly Income	.42**	--												
3. Time with spouse	.04	.11	--									1.74	.50	2
4. Time with children	-.06	.02	.28**	--								1.68	.47	2
5. Time for self	.06	.02	.30**	.25**	--							1.68	.53	2
6. Work-family harmony	-.06	.09	.31**	.24**	.20**	--						2.91	.41	2
7. Mental health	-.06	.12*	.11	.12*	.02	.27**	--					3.84	.77	4
8. Marital satisfaction	.06**	.13*	-.00	-.01	.11	.14*	.01	--				4.58	.76	5
9. Child relationship satisfaction	.03	.06	.01	-.00	-.01	.08	.09	.07	--			2.80	.76	3
10. Children at home	-.16**	-.08	-.03	.02	.01	.09	.03	.10	.05	--		2.00	.86	5
11. Work hours	-.06	.14*	.08	.05	-.05	-.05	.24**	-.03	-.08	.06	--	42.04	14.51	80

Note: *Asterisks (*) indicate significance at $p < .05$ and (**) $p < .01$.

Table 2. Decomposition of Effects from Structural Equation Model on Work Hours and Outcome Variables

	Direct	Indirect	Total
Effects on Marital Satisfaction			
Work hours	-.03	--	-.03
<i>Education level</i>	.13	--	.13
<i>Monthly Income</i>	.08	--	.08
Effects on Child Relationship Satisfaction			
Work hours	-.09	--	-.10
<i>Education level</i>	-.01*	--	-.01
<i>Monthly Income</i>	.07	--	.07
Effects on Work-Family Harmony			
Work hours	-.07	-.01	-.08
Marital Satisfaction	.13*	.00	.13
Child Relationship Satisfaction	.07	.00	.07
<i>Education level</i>	-.15*	.02	-.13
<i>Monthly income</i>	.14*	.02	.15
Effects on Mental Health			
Work hours	.24**	-.03	.21*
Marital Satisfaction	-.03	.04*	.01
Child Relationship Satisfaction	.09	.02	.10
Work-Family Harmony	.27**	.00	.27**
<i>Education level</i>	.10	-.04	-.11**
<i>Monthly income</i>	-.07	.05*	.14**

Note: Italicized variables are control variables. Asterisks (*) indicate significance at $p < .05$ and (**) $p < .01$.

Figure 1. ABC-X Model of Family Stress for Asian Working Women

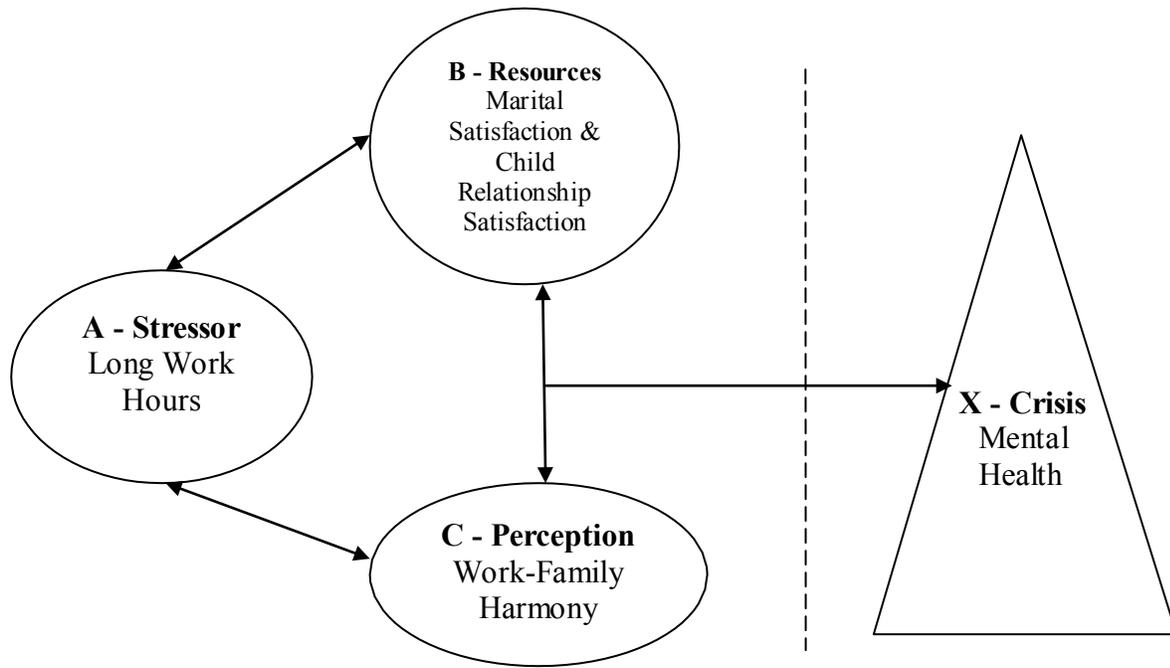
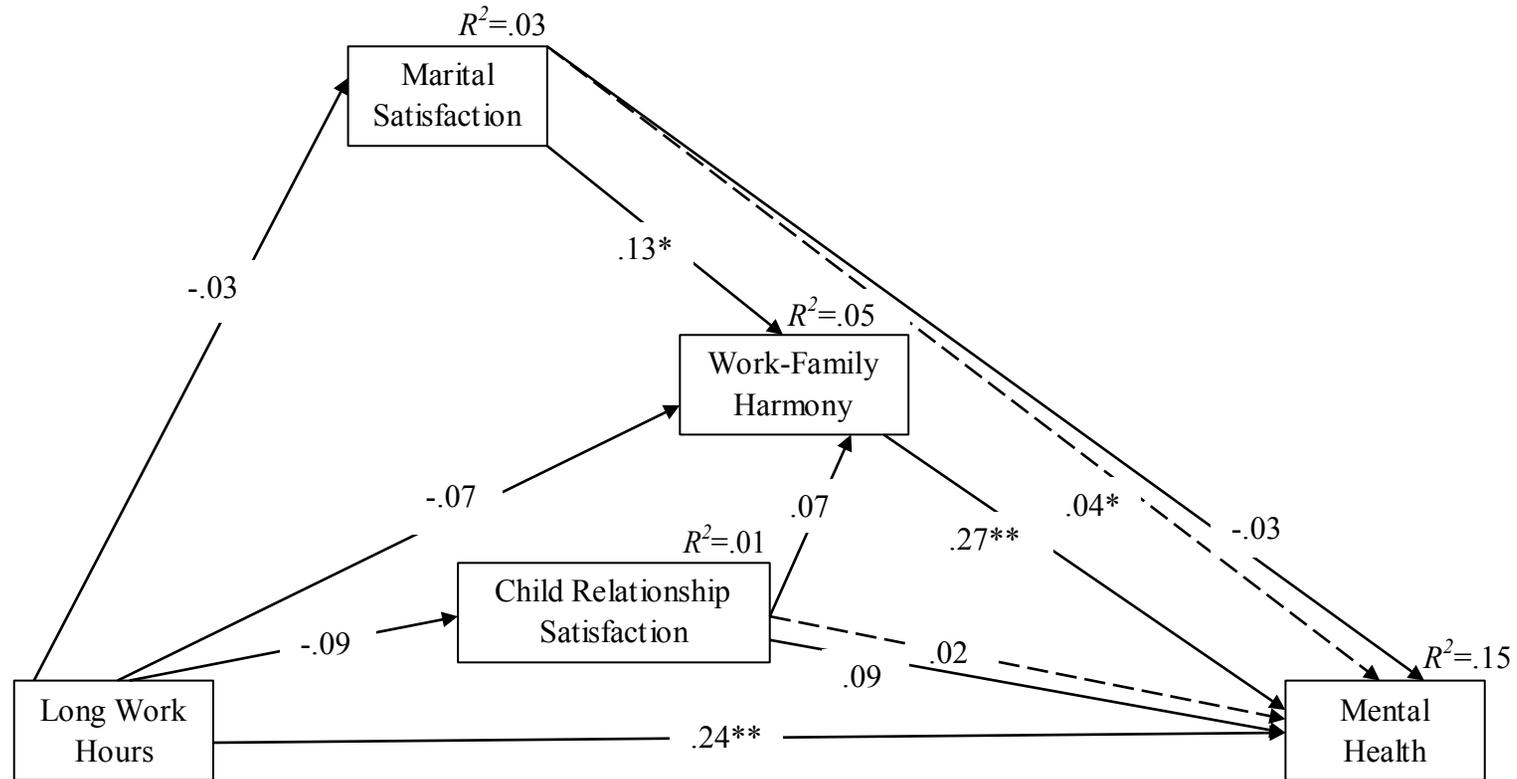


Figure 2. Salient Standardized Pathways to Outcome Variables for Employed Mothers in Singapore (N = 284)

Control Variables: Education, Income



Model Fit: $\chi^2 = 1.11$ (df = 1), $p = .29$; TLI = .98, CFI = .99, RMSEA = .02

Note: Boldface indicates significant pathways. Broken arrows indicate indirect effects. Asterisks (*) indicate significance at $p < .05$ and (**) $p < .01$.