WORK-FAMILY CONFLICT, POSITIVE SPILLOVER, AND EMOTIONS AMONG ASIAN AMERICAN WORKING MOTHERS

by

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This dissertation is dedicated to

my wonderful parents, Triumph and Sunny,

and my amazing husband, Han.

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I am today. My parents' dedication to their professional identities has been a key in my career development. My brother taught me the pleasure of always keeping a childlike curiosity. My husband, with his natural mindfulness, will keep reminding me to live every moment to its fullest.

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ABSTRACT

**WORK-FAMILY CONFLICT, POSITIVE SPILLOVER,
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Despite the robust body of literature on work-family experiences among European American families in the US and Asian families in East Asia, there is a lack of empirical research on Asian American women's experiences in managing work and family roles. Drawing from models of work-family conflict, recent trends in studying positive experiences, and the inclusion of socio-cultural factors in emerging cross-cultural studies, the present project explores the interconnection between work-family experiences, acculturation, and well-being among Asian American working mothers with young children. The study sample consisted of 157 ethnically diverse participants, who completed an online survey on work-family experience. The study was unique in its examination of both negative and positive work-family outcomes and utilization of empirical measures as well as open-ended questions.

Results supported the presence of both unique and shared antecedents for both directions of work-family conflict and positive spillover for Asian American mothers. Specifically, they emphasized the importance of role qualities in predicting negative work-family outcomes and the significant role played by acculturation and enculturation in positive work-family outcomes. Role interdependence was found to be a potential

mediator between acculturation/enculturation and positive outcomes whereas gender role

ideology and extended familial support moderated the relationship between positive

spillover and positive emotions. In addition, participants' responses to open-ended

questions provided qualitative information on the challenges and rewards of juggling

work and family roles. Taken together, these results highlighted the value of socio-

cultural variables (e.g. acculturation/enculturation, role interdependence, and gender role

ideology), especially in our understanding of *positive* work-family spillover and emotions

among Asian American working mothers. Implications for clinical, organizational, and

policy-making contexts and the limitations of these findings were discussed.

Chapter I

INTRODUCTION

The importance of research on work-family issues among employed mothers
emerged with changes in demographic patterns across the United States and societal
attitudes about work and family (Zedeck, 1992). Over the last quarter of the twentieth
century, the nation witnessed a significant rise in the percentage of dual-earner families
and the number of married women with young children entering the workforce (Frone,
Russell, & Cooper, 1992). Between 1970 and 1997, the percentage of families in the
United States with a sole male breadwinner declined from 51.4% to 25.9% (Jacobs &
Gerson, 1998). This was in part due to the erosion in earning power among men, which
led to many married women entering the paid labor force to help support their families.
From 1975 to 2000, the labor force participation rate of mothers with children under age
18 rose from 47% to 73%, and had stabilized to about 68% by 2005 (U.S. Department of
Labor, 2006).

Another major trend has been the increase in the diversity of America's
population. The percentage of people of races other than White or Black increased from
1.4% in 1970 to 12.5% by 2000 (Hobbs & Stoops, 2002). This increase mainly resulted
from international migration and subsequent births to the immigrant population by Asian
and Pacific Islander and Hispanic populations. According to the U.S. Department of

Labor (2006), approximately 63% of Asian mothers with children below 18 years of age participated in the labor force in 2005. However, despite the recent expansion of literature on Asian American families, relatively few studies have examined work-family issues among Asian American women. Most of the empirical studies on employed women have been conducted in East Asian countries, which overlooked the unique challenges of negotiating competing cultural norms among Asian American women. This left a void in the knowledge of experiences of employed Asian American mothers in the U.S. This dissertation sought to help fill a critical gap in work-family conflict research by exploring work-family experiences among Asian American working mothers with young children. The main goal was to gain a broad overview of work-family experiences among Asian American women, incorporating both the traditional framework of conflict and role quality as well as an exploration of positive outcomes, emotions, acculturation, and beliefs about the relationship between work and family.

Does combining work and family inevitably result in distress and conflict? The interface between the family and workplace is intricate and can vary from negative to positive. Traditionally, the guiding assumption has been that work and family were two incompatible domains. The term, work-family conflict[1], generally refers to the inter-role conflict in which the role demands from work are incompatible with role demands from family (Greenhaus & Beutell, 1985). More specifically, the relationship between work and family has been conceptualized as a bi-directional construct where work roles affect family roles and vice versa (e.g., Gutek, Searle, & Klepa, 1991).

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[1] It is important to note that the terms "work-family conflict" and "work-family positive spillover" merely reflect the relationship between the two constructs without implying a causal direction of impact. Instead, "work-to-family" and "family-to-work" will be used in this paper to indicate the direction of influence.

Initially, scholars focused on work-to-family conflict and family-to-work conflict. However, recent studies on multiple roles and quality-of-life outcomes suggested that there are also benefits. Work (i.e., job role quality) can potentially enhance family well-being and positive aspects of family life (i.e. family role quality) can spill over into the workplace (Barnett & Hyde, 2001). The present study explored both positive and negative relationships by measuring conflicts and positive spillover between work and family in both directions of impact. Because current literature has found job and family role qualities to be important predictors of decreased psychological distress (Barnett, Marshall, Raudenbush, & Brennan, 1993; Greenberger & O'Neil, 1993), the current study further investigated the importance of work and family role qualities on work-family outcomes.

Apart from conflict and positive spillover, physical health and emotional reactions to combining work and family roles are also crucial outcome of interest. Studies focused on White professional workers have supported that work-family experiences affect physical health. A recent review reported that there is substantial evidence indicating that work-family experiences, especially work-family conflict, contribute to poor physical health (Greenhaus, Allen, & Spector, 2006). Higher positive spillover between work and family has been associated with better self-appraised health (Grzywacz, 2000). In terms of emotions, the two most commonly measured signs of psychological distress stemming from work-family conflict are anxiety and depressed mood (Grimshaw, 1999, p. 219). While a few studies on multiple roles (mostly with a focus on elderly care-giving) used clinical measures of depression and anxiety, most of the work-family research focused on state-like manifestations of emotion as a reaction to work-family related stressors (e.g.

work-family conflict or burnout). This dissertation examined self-reported physical health and emotional reactions and their relationships to other predictor and outcome variables.

Finally, there has also been an effort to encourage examination of how individuals construct and give meaning to their roles. Given today's increasing diversity, studies of socio-cultural factors such as acculturation and cultural beliefs would increase our understanding of work-family issues among ethnic minority members. As presented in the literature review following this introduction, current studies on Asian American women have been limited by the qualitative research methods and the lack of utilization of measures on cultural processes such as acculturation and personal beliefs. This study attempted to address these limitations by examining acculturation, gender role ideology, familial support, and beliefs in the interdependence of family and work roles in relation to various work-family outcomes

In summary, the present study sought to shed light on work-family experiences among Asian American working mothers with young children. Although there is a robust body of literature on work-family experiences among European American families in the US and Asian families in East Asia, there is a lack of research that directly examines the experiences of Asian American women in the United States. Chapter 2 will review in detail theoretical constructs and key work-family studies from various disciplines of research, first in general terms, and then as they relate to the experience of Asian Americans. It will also provide conceptual framework for the present study, with explanation of specific hypotheses.

Chapter II

LITERATURE REVIEW

Work-Family Conflict Perspectives

Initially, work-family literature focused on the negative psychological effects of juggling work and family roles. The phrase "work-family conflict" (WFC) emerged in the 1980s, with the sharp increase in women's participation in the workforce. The change in employee demographics challenged the gendered ideology of men as the primary breadwinner and women as the stay-at-home mother. The traditional gendered sex-role connotes the conflict that arises when women attempt to fulfill the responsibilities of both roles. According to role theory, work-family conflict occurs because of an inter-role conflict in which the role demands of one sphere (work or family) are incompatible with the role demands of another sphere (work or family).

The assumption that work and family are separate spheres and in competition for resources such as time and attention continues to be dominant in our society (Barnett, 1998). Related to inter-role conflict is the "scarcity hypothesis," which states that human energy and resources are fixed and limited. Thus, individuals partake in a zero-sum game in which resources expended in one sphere deplete those available for the other, leading to diminished role quality in the sphere that received less resource (Gutek, Searle, &

Klepa, 1991). The more roles a person occupies the more role-strain or "overloads" a person experiences.

Currently, the most widely used theory for explaining work-family conflict is the conservation of resources theory (Grandey & Cropanzano, 1999; Hobfoll, 1988, 1989). Unlike traditional theories that define strain in terms of either an outcome or a perception of environmental challenges (e.g., Lazarus & Folkman's [1984] "stress-appraisal-strain-coping" theory), the conservation of resources theory also takes into account worries about the possible loss of resources in the future, such as the depletion of energy required to complete future tasks. This theory proposes that people strive to protect and build resources, such as objects (e.g. money, house), conditions (e.g. quality of one's roles, external support), energies (e.g. time and level of energy), and personal characteristics (e.g., beliefs such as a positive outlook). Psychological stress occurs when these resources are lost or threatened. Work-family conflict is conceptualized as the consequence of "resources being lost in the process of juggling both work and family roles" (Grandey & Cropanzano, 1999, p. 352). For example, job demands can threaten one's resources and over time, prolonged exposure to demands such as long work hours leads to emotional exhaustion and burnout (Hobfoll & Freedy, 1993). Furthermore, because resources are not limited to concrete reserves, the inclusion of personal characteristics and conditions allows for exploration of how cultural contexts influence work-family conflict. It also provides a framework in understanding how coping methods (i.e., problem-focused coping) and support (i.e., support at work and domestic help from family members at home) ameliorate work-family conflict (Jansen, Kant, Kristensen, & Nijhuis, 2003; Lapierre & Allen, 2006).

The construct of work-family conflict (WFC) is multi-dimensional and refers to conflict that may be time-based, strain-based or behavior based (Greenhaus & Beutell, 1985). Time-based conflict occurs when job and family responsibilities compete for the individual's time (e.g., working overtime forces employees to miss a school performance.) Time-related conditions such as long work hours, schedule inflexibility, shift work requirements, and overtime/evening duties are consistently related to WFC (Byron, 2005, Judge, Boudreau, & Bretz, 1994; Parasuraman, Purohit, Godshalk, & Beutell, 1996). Strain-based conflict suggests that strain experienced in one role crosses-over and interferes with participation in another role (e.g. the stress of tending to a sick child affects one's ability to concentrate at work). Work stress is caused by conflict within one's occupational role, work role ambiguity, and work role overload (Kahn & Byosiere, 1992) and leads to role pressure and incompatibility (Greenhaus & Beutell, 1985). Conversely, family-related stress such as marital and parental conflict can lead to interference with work roles (Byron, 2005). Behavior-based conflict occurs when specific behaviors required in one role are incompatible with behavioral expectations in another role (e.g. aggression and emotional restriction required for managerial positions are incompatible with the need for harmony and emotional openness by family members). For example, studies on correctional officers have found that behavior-based conflict was related to work stress and job satisfaction (Lambert, Hogan, Camp, & Ventura, 2006, Triplett, Mullings, & Scarborough, 1999).

Gutek, Searle, and Klepa (1991) also identified the bi-directionality of WFC, such that conflict can take the form of work interfering with family (work-to-family conflict) or the form of family interfering with work (family-to-work conflict). Current measures

of WFC assess the two distinct reciprocal constructs and have shown consistent support

for distinguishing between the two directions (e.g., Byron, 2005; Kossek and Ozeki, 1998;

Netemeyer, Boles, & McMurrian, 1996). Frone et al. (1992) constructed one of the first

widely used models of the work-family interface. As shown in figure 2.1 and 2.2, the

model focused on the relationship between work-related factors when exploring work-to-

family conflict and family-related factors when exploring family-to-work conflict.

Furthermore, it depicted a cross-domain effect in which a considerable amount of family

satisfaction is explained by job specific variables whereas a considerable amount of job

satisfaction is explained by family specific variables. The cross-domain effects have been

confirmed in recent meta-analytical studies (Byron, 2005; Ford, Heinen, & Langkamer,

2007).
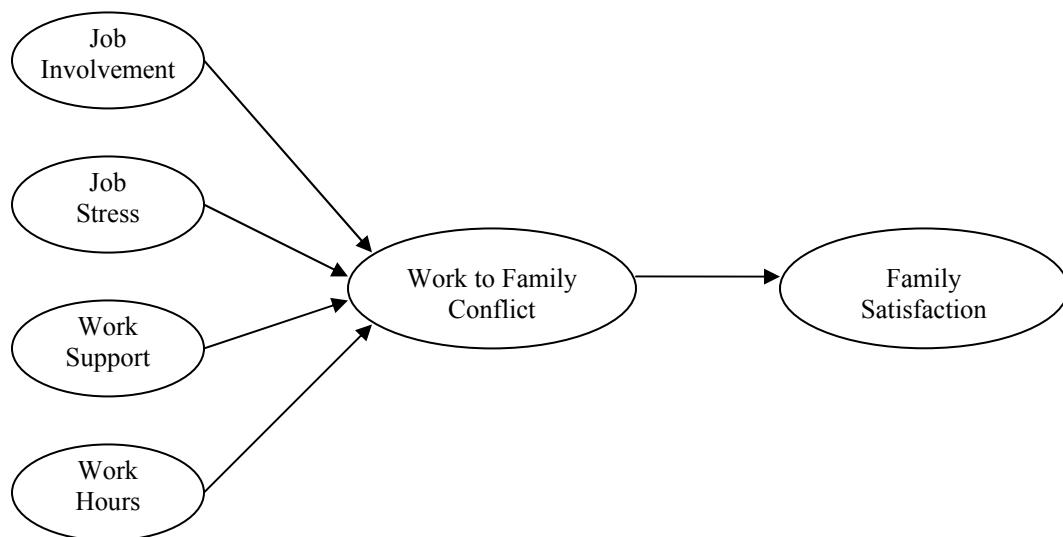
Figure 2.1 Work-to-family conflict model based on Frone et al. (1992) and adapted from
Ford, Heiner, & Langkamer, (2007).
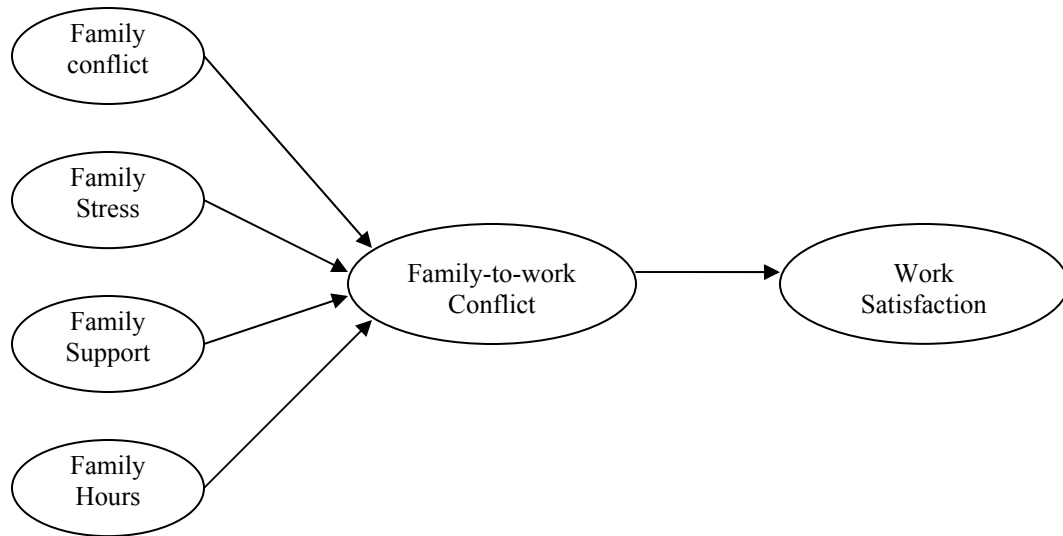
Figure 2.2 Family-to-work conflict model based on Frone et al. (1992) and adapted from
Ford, Heiner, & Langkamer, (2007).

The models above show that WFC is used interchangeably as an outcome and as a

predictor. In a recent meta-analytical review of WFC as an outcome, Byron (2005) found

that work variables had a greater impact on work-to-family conflict than on family-to-

work conflict. On the other hand, nonwork related antecedents[2] related to more family-

to-work conflict, although the results were not always statistically significant. Of all the

antecedents, job stress, family stress, and family conflict had the strongest associations

with both work-to-family conflict and family-to-work conflict. Byron suggested that

some work and family factors have simultaneously disruptive effects on work and family

life. One of the goals of this study is to explore the relationship between work and family

factors on WFC.

As a predictor of work-related consequence, WFC has been associated with

negative workplace outcomes such as absenteeism and turnover (Barling, MacEwen,

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[2] In work family literature, "non-work antecedents" usually consist of family-related variables (e.g. spouse
support, family stress, and family conflict). However, a couple of the variables, such as time spent outside
of work and involvement in non-work activities, do not make the distinction between family and self and
may include non-family activities such as time spent on hobbies or other forms of self-developments.

Kelloway, & Higginbottom, 1994; Fernandez, 1986; Goff, Mount, & Jamison, 1990; Hepburn & Barling, 1996; Kossek, 1990; Kossek & Nichol, 1992; MacEwen & Barling, 1994; Thomas & Ganster, 1995), intentions to leave work (Aryee, 1992; Burke, 1988) and low job satisfaction (see meta-analytic review by Kossek & Ozeki, 1998). Furthermore, individuals who experienced work-family conflict have been found to incur increased health risks, inadequate performance in family roles (e.g., marital partner and parent), reduced family and life satisfaction, and poor marital adjustment (e.g., Bedian, Burke, & Moffett, 1988; Boles, Johnston, & Hair, 1997; Burke, 1988; Higgins, Duxbury, & Irving, 1992; Hughes & Galinsky, 1994; Suchet & Barling, 1986).

Expansionist Theory

The "multiple roles" literature focused on studying roles that are not conventional to one's gender, such as the worker role among women with children and the roles of partner and parent among employed women. Recent research studies emphasized on the "expansionist hypothesis/theory" (Baruch & Barnett, 1986; Barnett& Hyde, 2001), which stated that multiple role occupancy has beneficial effects such that "adding" the worker role is beneficial to women, and "adding" family roles is beneficial for men. Various terms have been used to refer to the process by which one role strengthens or enriches the quality of the other role, such as work-family enrichment, work-family enhancement, work-family facilitation, and positive spillover. This expansionist perspective contrasted with the work-family conflict approach which predicted a negative correlation between work and family roles. Instead, researchers have found a modest positive correlation between work commitment and family commitment (Marks & MacDermid, 1996).

The expansionist approach does not make the assumption that energy and resources are limited and fixed but rather that they are expandable. Through the occupation of various roles, a person may expand his/her energy supply. The theory consists of four empirically testable principles: a) multiple roles are beneficial for one's mental, physical, and relationship health; b) the benefits are derived from processes such as "buffering, added income, social support, opportunities to experience success, expanded frame of reference, increased self-complexity, similarity of experiences, and gender-role ideology" (Barnett & Hyde, 2001, p. 784); c) there are upper limits to the benefits, limited by role conditions such as the number of roles, the quality of roles, and the time demands of each; d) psychological gender differences are generally small. The following sections summarize research findings that indicate the role-enhancement perspectives for employed women.

In general, researchers have found that women who worked full-time reported better psychological outcomes than stay-at-home mothers. In a study of middle-class women who varied in employment, marital, and parental status, Barnett & Baruch (1985) found that employment status accounted for most of the variance in psychological well-being and that married women with children who held high-prestige jobs reported the greatest level of well-being. Additional evidence for this association came from Wethington and Kessler (1989) who conducted a longitudinal study over a 3 year period and found that women who entered the workforce from being a home-maker experienced less depression whereas employed women who decreased their hours of paid employment to either low part-time or homemaker status reported increased symptoms of depression. While a few studies uncovered no effect (positive or negative) of employment status (e.g.,

Baruch & Barnett, 1986; Repetti & Crosby, 1984), and some studies found positive

effects for some groups of women (Waldron & Jacobs, 1989), none of the studies found

that employed women had worse mental or physical health when compared to

unemployed women.

In terms of relationship health, research indicated a positive correlation between

work commitment and spouse commitment (Hyde, DeLamater, & Durik, 2001).

Specifically, women's employment decreased the poverty rate of married couples (Blank,

1988) and wives' earnings were associated with positive gains such as marital stability

(Oppenheimer, 1997) and lowered levels of depression (Ross & Huber, 1985). On the

contrary, marital dissolution was found to be highest in couples in which the wife had no

earnings (Ono, 1998).

Another relevant research topic is the importance of role quality on psychological

well-being. People benefit from a role when they find the role satisfying and when the

satisfaction outweighs the problems/concerns they have for that particular role. Thus, one

way to measure role quality is to ask for subjective levels of satisfaction in one's roles.

Alternatively, in the care-giving roles literature, role integration theory provides another

measure of role quality whereby researchers calculate the difference between "the

rewarding or satisfactory aspects" and "the stressful or 'of concern' aspects" (Barnett &

Gareis, 2006)[3]. Studies have found that high levels of role satisfaction were associated

with low levels of psychological distress (depression and anxiety). Job-role quality has

been found to be a strong predictor of psychological distress for both wives and husbands

(Barnett, Marshall, Raudenbush, & Brennan, 1993) and changes in job role quality over

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[3] In order to avoid the confusion of interchanging between "role quality" (work-family literature) and "role interdependence (care-giving literature), role quality will be consistently used in this dissertation to describe the quality of one's roles.

time was negatively related to change over time in distress for men and women among

dual-earner couples (Barnett, Raudenbush, Brenna, Pleck, & Marshall, 1995). On the

other hand, satisfactory experiences in parental and marital roles were strong predictors

of decreased psychological distress, especially for women (Greenberger & O'Neil, 1993).

Even though there has been more evidence showing the association between

work-to-family and family-to-work conflict and poor physical health (e.g., Frone, 2003;

Greenhaus, Allen, & Spector, 2006), Grzywacs (2000) found that higher positive

spillover between work and family were associated with better self-appraised health. In

relation to the conservation of resources theory explained in earlier sections, positive

experiences may be construed as a reservoir of resources that minimize potential health

threat of negative work-family experiences (Grzywacz & Bass, 2003). Attitudes may

moderate the effects between work status and health. For example, Repetti, Matthews,

and Waldron (1989) reviewed research on the effects of employment and concluded that

employment was associated with improved health for women who held a positive attitude

toward employment regardless of their marital status. Given the general absence of

research on positive work-family experiences in relation to physical health, the present

study included a physical health variable to explore its relationship to both conflict and

positive perspectives.

Work-Family Issues among Asian Women – International Studies

The majority of work-family studies on Asian women have been conducted in

East Asian countries such as China, Japan, Hong Kong, and Singapore. This is in contrast

to the lack of work-family research on Asian American families in the United States. The

following paragraphs present international and cross-cultural studies on Asian women and work-family issues.

The need to balance work and family is a universal phenomenon across the globe. International studies from Asia provided support for the work-family conflict perspective and outlined negative outcomes of WFC on Asian women. In Hong Kong, married female professionals reported "intense" or "extremely intense" levels of WFC and cited insufficient time, multiple roles, and lack of support from husbands as sources of their stress (Lo, 2003; Lo, Stone, & Ng, 2003). Positive influence of employment upon life satisfaction was substantially reduced because of insufficient time to fulfill their child-care responsibilities (Lee, Law, & Tam, 1999). Combined exposure to work and family-related stress was associated with an increase in systolic blood pressure and recurrent sleeping problems in a sample of working women in Beijing, China (Xu, Siegrist, Cao, Li, Tomlinson, & Chan, 2004). Additionally, married Korean women indicated stress and depression as outcomes of work-family conflict (Lee, Um, & Kim, 2004). Studies on Malaysian dual-career couples found that women reported significantly higher stress and a pressure to choose between family and career responsibilities more than men and that WFC explained a significant amount of variance in work and life satisfaction (Ahmad, 1996; Komarraju, 2002). In Singapore, researchers also observed greater WFC among women and an associated decrease in life-satisfaction (Aryee, 1992), whereas Japanese working mothers indicated that parental demands led to WFC which led to life strain (Matsui, Ohsawa, & Onglatco, 1995). Interestingly, studies in India did not uncover much WFC, but instead observed a fairly compartmentalized and widely accepted

gendered role structure in which women stayed inside the kitchen and out of banking and shopping (Komarraju, 1987; Larson, Verma, & Dworkin, 2001).

International researchers have offered various cultural explanations for the associations among gender, WFC, and psychological well-being in these single-nation studies. First, Asian cultures prescribed stronger expectations for women to adhere to family roles, as reflected in statistics showing that 62.4% of women in Korea stopped working around the time of marriage and half quit their jobs after delivering their first child (Jin, 2006). Second, some researchers speculated that the authoritarian and hierarchical work culture and lack of labor legislation in Asian countries could potentially increase job stress which could then interfere with their family life (i.e., Lo, 2003). Third, it has also been hypothesized that religious influences play a role. For example, the lack of WFC in Asian Indian families has been attributed to the Hindu belief that it is the 'dharma' or duty of fathers to protect their families from negative experiences and thus Indian fathers engaged in more compartmentalization between work and family. On a national economic level, researchers hypothesized that the decreasing trends of fertility rates might signal an underlying assumption of a fundamental incompatibility between working and raising children (Brewster & Rindfuss, 2000).

Unlike single nation studies, cross-cultural studies have examined differences and similarities between two or more cultural and ethnic groups (Aycan & Kanungo, 2001) and uncovered subtle group differences in WFC between Asian and western societies. For example, Aryee, Fields, and Luk (1999) were the first researchers to explore the adaptability of a western work-family conflict model to a Chinese population. They found that consistent with Frone et al.'s (1992) model of work-family conflict, both job

distress/satisfaction and family distress/satisfaction had significant influences on overall employee well-being. However, life satisfaction of Hong Kong employees was primarily influenced by work-to-family conflict whereas life satisfaction of the U.S. employees was primarily affected by family-to-work conflict. Aryee et al. speculated that the importance of family in Confucian societies may be the reason why employees in Hong Kong were more affected by conflict spilling from work to family.

It was through the cross-cultural perspective that researchers began to form more nuanced understanding of cultural contexts underlying group differences. Based on the cultural-level factor analyses of IBM employees across 60 countries, Hofstede (1980) derived four factors: masculinity-femininity, power distance, uncertainty-avoidance, individualism-collectivism. The most relevant factor in understanding Asian society's conceptualization of work-family issues has been individualism-collectivism. One line of research proposed that collectivism foster work centrality. Support for this view was partially provided by research studies emphasizing the value of work in Asian societies. For example, England and Misumi (1986) found that work was more important for every occupational group in the Japanese sample when compared with the U.S. counterparts. Recently, Bu and McKeen (2000) compared work-family expectations of Canadian and Chinese business students and found that Chinese of both sexes attached greater value to their occupational role and expect to commit more time to it than Canadians. Interestingly, they also found that Chinese participants anticipated less difficulty balancing work and family.

One way of conceptualizing the dichotomy between work centrality and the importance of family in Asian culture is explained by the blurred line between work and

family. People in individualistic societies tend to focus more on personal goals and view work and family as distinct and competing spheres. Work is perceived as a path to personal self-fulfillment, as evidenced by the emphasis in achieving educational and vocational skills based on one's intrinsic interest. However, in collectivist Asian societies, people define themselves according to their group membership (e.g. family, company, country), and emphasize group goals above personal ones (Triandis, 1995). As a result, they tend to identify work as a natural extension of familial expectations rather than for the purpose of individual self-actualization (Espiritu, 1999; Park & Liao, 2000; Grahame, 2003).

The idea that individuals work in order to fulfill their family obligation was first suggested by Yang, Chen, Choi, and Zou (2000). In a cross-cultural study comparing American and Chinese employees, they found that U.S. employees reported more family demands, which created more conflict than work demands, whereas Chinese employees experienced greater work demands, which led to more conflict than did family demands. They speculated that the Chinese viewed work as one's contribution to the family's well-being rather than for self-development. In Chinese culture, "sacrificing family time for work is viewed as self-sacrifice for the benefit of the family" whereas it is perceived as "a failure to care for significant others in Western culture" (p.120).

Although many studies raised the importance of exploring socio-cultural contexts (e.g., collectivism and gender norms), these cultural contexts were often not measured. Usually, studies inferred these concepts by selecting samples from countries that were previously found to be more individualistic or collectivist. For example, Spector et al. (2004) recruited 2,487 managers across 15 samples from both collectivist as well as

individualist nations and found that the individualistic English-speaking countries (Australia, Canada, England, New Zealand, and U.S.) observed a stronger association between work hours and work-family stressors than Chinese and Latin cultural groups. The similarity between Chinese and Latin cultural groups (both identified as collectivist in previous studies) was used to infer the relevance of the Individualism-Collectivism values in WFC. However, such inference was confounded by other cross-nation similarities between the Chinese and Latin cultural groups, such as the endorsement of traditional gender role ideology. In order to better understand causality, the present study assessed acculturation as well as specific values and beliefs related to work and family constructs.

Work-Family Issues among Asian American Women

While it is possible to extrapolate the experiences of Asian American women from reviewing international and cross-cultural samples, it is important to acknowledge that Asian American women also face unique challenges in negotiating competing cultural norms and values. Prior to reviewing work-family issues among Asian American women, this section will begin with the complex demographic factors related to studying Asian American families. The Asian American and Pacific Islanders group (AA/PI) is an inherently heterogeneous group, composed of 28 different Asian and 19 Pacific Islander subgroups with a range of cultural values, religions, and languages. The general category can be broken down into East Asian (e.g., Chinese, Japanese, and Korean), South East Asian (e.g., Filipino, Hmong, Laotian, Malaysian, Thai, and Vietnamese), South Asian (e.g., Bangladeshi, Asian Indian, Pakistani, and Sri Lankan) and Pacific Islander groups (e.g. Hawaiians, Samoans). According to the U.S. Census Bureau (2005), Asian

Americans numbered 14.4 million or about 5% of the U.S. population. The largest U. S.-Asian groups are Chinese, Filipino, Asian Indian, Vietnamese, and Korean (Sue, 2005). Asian American demographics become more complex when considering factors such as level of acculturation, immigration status, and generational status.

According to the U.S. Equal Employment Commission (2003), there has been a steady increase of participation of Asian women in the workforce. The rate of increase in employment among Asian American women went from 1.3 percent in 1990 to 2.1 percent in 2001, with a projected labor participation rate in the United States of 61.3% by the year 2012. Compared to other women of color, Asian women have been more successful in attaining higher-level positions in the workforce, with a 135% increase in the number of female officers and managers from 1990 to 2001. Despite their increased labor participation, Asian Americans were often recruited as part of a larger sample in work-family studies, and rarely alone as a culturally-specific population. This is a major drawback as work and family issues are intricately related to the larger social, cultural, and political contexts (Lewis & Zedeck, 1992; Lobel, 1991; Schein, 1984). In other disciplines, however, research in the fields of gender roles and multiple roles literature provide some insight into how Asian American women experience their work and family roles.

Conceptual frameworks of Asian American research have relied on an understanding of traditional family structures in Asian societies. Influenced by Confucianism, traditional Asian-American families emphasized a vertical family structure of patriarchal lineage and hierarchal relationships (Kibria 1993; Min 1998). The husband was the breadwinner and head of the family, whereas the wife's role was to

provide emotional nurturance to her husband and children and to assume full

responsibility for child-care and household tasks. Violation of one's role would bring

shame to the whole family (Ho, 1987). Very commonly, a mother formed a close bond

with her children, even to the extent of favoring her eldest son over her husband

(Hilderbrand, Phenice, Gray, & Hines, 2000). This traditional view is still prevalent in

Asian countries today as reflected by a recent poll in South Korea where 82% of Korean

women agreed that "women should have only a family-oriented life, devoted to bringing

up the children and looking after the husband." (Kim 1994; cited in Pyke & Johnson,

2003).

In contemporary Asian American families, women still performed most of the

household labor although there has been a recent trend toward greater male involvement.

Case studies on Taiwanese and Korean immigrant families in New York City found that

young professional husbands participated in household labor (Chen, 1992; Min 1998).

Furthermore, studies have found that Asian American women expressed dissatisfaction in

unequal division of labor with their spouses. Stohs (2000) examined 419 multicultural

women (136 Asian Americans) and found that Asian American women performed 12.9

hours more household labor than their spouse per week and 71% of them reported some

conflicts with their spouse over household division of labor (Stohs, 2000). Interviews

with immigrant women also showed that women today challenged the patriarchal

authority of their husbands by demanding or appealing for more help with family work.

While outright demands remained relatively rare, Korean women have been reported to

use the politics of appeal, whereby they use stereotypical feminine traits, such as

weakness, to request for extra help in family work (Lim, 1997). One explanation for this

shifting trend is the change has been gender role ideology as influenced by exposure to Western culture. Park & Liao (2000) found that South Korean women who had extensive exposure to Western culture (e.g., studying in the US for college) adopted less traditional gender role expectations.

Stohs (2000) also found that regardless of ethnicity, SES, or work-related strains, multicultural women engaged in conflicts with their spouses over division of labor when they felt that they were doing more household tasks relative to other women. This finding contradicted traditional resource theories (e.g., Chafetz, 1990) which predicted that married women attain the ability to challenge gender inequality only when they gain power relative to their husbands by achieving high job status or economic independence. Qualitative studies on Korean immigrant couples also emphasized the importance of psychological gains rather than economic gains. Lim (1997) indicated that when working for family survival is prioritized, wives gained psychological resources such as confidence, competence, and honor through their work roles, which helped them legitimize their right to demand more help from their husbands. Because many Asian American immigrant women work in small family businesses in which they do not accrue economic independence from their husbands, it is not the amount of economic contribution that leads to changes in gender roles, but the "psychological pride" a woman feels about contributing to her family. These studies indicated the potential benefit to combining multiple roles with decreasing levels of traditional gender role ideology.

Like cross-cultural psychologists, gender role researchers in the US were also interested in exploring the psychological boundary between work and family among Asian American women. Grahame (2003) challenged the dual spheres approach in which

responsibilities to one's family is separated from responsibilities to one's work in a zero-sum fashion. She argued that this formulation was built on the assumption of a standard middle-class (historically white) family and did not apply to minority families from different cultures and different SES (Smith, 1993). She interviewed low-income Asian immigrant women who juggled domestic responsibilities, a full time job training program, and part-time paid labor and reported that Asian immigrant women perceived their job training and their part-time job as contributions to their family's wellbeing. Specifically, respondents cited their potential contribution in money and/or provision of health insurance through their jobs as motivators for engaging in multiple roles.

Consistent with the expansionist perspective, researchers on multiple roles focused on role experiences, such as level of satisfaction and stress, and their effects on psychological well-being. Their studies defined overall role quality as the difference between total satisfaction and stress (e.g., Meleis, Norbeck, & Laffrey, 1989). Overall role quality measured in this fashion was found to associate with quality of life among Korean American women (Kim & Rew, 1994) and perceived health in Filipino American women (Jones, Jaceldo, Lee, Zhang, & Meleis, 2001). Jones et al. (2001) also explored levels of satisfaction and stress separately in her study comparing Chinese American and Filipino American caregivers. She found that role stress in the roles of wife and mother had the greatest influence on perceived physical health outcomes, whereas stress associated with the caregiver role influenced only psychological outcomes. Even though employee role experiences were not associated with any health outcomes, total role satisfaction across all roles was significantly and positively associated with psychological well-being. Jones did not uncover any significant associations between acculturation and

health outcomes, although she speculated that higher level of current physical health reported by Filipino Americans may be associated with their higher levels of education and acculturation status.

A major shortcoming of work-family research among Asian American participants is the lack of attention to acculturation. Acculturation refers to the "process of adapting to the norms of the U.S. culture" whereas enculturation refers to the "process of becoming socialized into and maintaining the norms of the Asian culture." (Kim, 2007, pp. 143). Currently, acculturation in work-family conflict has received more attention in studying Latina women. For example, Segura (1994) found that acculturated women experience more role conflicts and were more likely to see work as personal development rather than for the sake of their family. Recently, Grzywacz et al. (2007) interviewed immigrant Latinos employed in the poultry processing industry and found that they reported infrequent work-to-family conflict, with physical demands (i.e. physical strain from assembly line work) being a particular strong antecedent for conflict among women. Their finding of infrequent WFC supported the view that individuals from more collectivistic cultures may experience fewer conflicts because the two domains were perceived as more integrated. Unlike the sample of Filipina women presented previously, Grzywacz et al. did not find evidence that work-family conflict was associated with physical health in this population.

When taken together, previously mentioned studies on Asian American gender roles and work-family issues provided some insights into how acculturation might be associated with personal beliefs of gender roles and work-family boundaries. First, Grahame's study found that recent immigrants tend to focus on ways their job training

was a mean to make more contribution to their family and fulfilling their family roles. On the other hand, Lim's Korean couples (1997) seemed to represent a wider range of acculturation (22% of all participants were professional couples), and even though the majority of the wives (30 out of 36) still believed that wives were responsible for family work, many perceived a right to demand their husband's participation in some family work. These wives, however, also expressed resignation about gender inequality at home and cited patriarchal gender ideas and immigrant family circumstances as a hindrance to their attempt to challenge their husbands. Finally, Stohs (2000) recruited women who were capable of reading and writing in English, which implied a higher level of acculturation. In her study, seventy-one percent of her Asian American sample reported having some form of overt marital conflicts surrounding division of labor. In summary, these studies suggested that recent immigrants were more likely to report a blurred line between work and family in which work was construed as part of their family obligation, whereas more acculturated women were more likely to challenge traditional gender roles.

Altogether, researchers of Asian American families need to consider role meanings, such as level of role quality, interdependence between work and familial roles, and gender norms. In a recent review by Perry-Jenkins, Repetti, and Crouter (2000), the authors indicated that a serious limitation in the literature on multiples roles and work-family conflict is the lack of research on the ways individuals construct and give meaning to their roles. Specifically, they suggested that there is a connection between "role enactment" (behaviors of a given role) and "role responsibility" (e.g. the psychological responsibility for a role). An individual's experience of a role is dependent on the meaning he or she attaches to this role. Simon (1995) found that women reported more

work-to-family conflict than men and attributed them to marital problems, feelings of

guilt, and negative self-evaluations as parents and spouses. By examining specific beliefs

related to work and family roles, the present study hopes to explore ways role meanings

influence work family experiences.

Conceptual Framework and Goals

As stated previously, there is a substantial gap in the work-family literature on the

experience of Asian American women. Recent cross-cultural models (Joplin, Shaffer,

Francesco, & Law, 2003; Korari, Lero, & Ayman, 2003) in work-family literature

highlighted the influence of cultural characteristics on individuals' experiences of work-

family conflict and its consequences. Korabik et al.'s model included socio-cultural

variables such as gender-role ideology and vertical and horizontal individualism/

collectivism, in addition to policy variables such as social policy initiatives and

contextual variables such as strategies for coping. On the other hand, Joplin et al.'s model

proposed that work-family conflict and stress are related to "clashes between

environmental changes and societal culture." She encouraged researchers to focus on the

discrepancy between two macro influences, those of environment (e.g. economic trends)

and those coming from social domains, such as the cultural values emphasized in one's

social environment. Both models emphasized shared beliefs about work and family in

relation to one's environment. Because interpretations of work-family experiences could

be impacted by one's values, these models suggested that socio-cultural factors moderate

the potential for work-family experiences to produce mental and physical outcomes.

Based on these cross-cultural models, this study focused on specific socio-cultural

variables, including acculturation, enculturation, and cultural beliefs about gender roles and work-family relations.

Prior to exploring specific socio-cultural variables, the study first examined the general experiences of Asian American women in combining work and family roles. Given the evidence provided by expansionist theories, Asian American women were expected to experience positive spillover and positive emotions in addition to conflict and negative emotions. In addition to the inclusion of demographic variables such as education and ethnicity in the analyses, this study also explored the importance of family specific and work specific variables, such as role quality, work hours, and number of children. Despite the lack of ethnic minority studies in previous meta-analytic reviews, it remained plausible that cross-domain models found in studies published across the world would replicate in this sample. Because the present study surveyed participants on specific sources of familial support, such as husband, other family members, and hired help as well as types of support (chores versus childcare), it allowed for comparison of various instrumental supports at home.

Next, the present study focused on the ways acculturation and culturally-related beliefs influence various work-family conflict. First, self-reported measures of acculturation and enculturation were explored to understand their broad relationship with work-family outcomes. More specifically, the study examined two culturally related role values, gender roles and family-work role interdependence. In many Asian countries, the traditional gender ideology stated that women are primarily responsible for child rearing and household maintenance whereas men should be the breadwinners. Thus, a woman who maintained traditional gender role expectations and was compelled to enter the labor

market because of economic pressure might experience more negative emotions and poorer health from work-family conflict. On the other hand, qualitative studies also supported the view that many Asian American women perceive their work roles as part of their overall familial obligations, such that there is a blurring of meaning they attach to their work roles and their family roles. In this context, work is considered to be a form of self-sacrifice an individual commits to in order to fulfill his/her family obligation. A woman high on the interdependence belief was thus predicted to experience more positive emotions and better physical health in the face of high work-family conflict.

According to social identity theory (Burke, 1996; Thoits, 1991), disruptions within and between identity-roles (e.g. parent, employee, or spouse) results in distress if there were not corresponding shifts in cultural values. A woman who was initially pushed to enter the work force despite having traditional gender role beliefs might experience distress. However, if she learned to justify her work as interdependent with her role as a mother, she might experience a decrease in distress. Because Asian American women face the unique challenge of being exposed to both ethnic immigrant cultural norms as well as those of the Euro-centric mainstream, this study explored these contradictory values in relation to individual experiences of combining work and family roles.

To summarize, given the absence of research among ethnic minority populations, specifically in Asian American communities, it is important to determine whether theoretical predictors and consequences of work-family conflict hold in diverse ethnic groups. The present study sought to investigate the experiences of Asian American working mothers and expand the understanding of how cultural-specific variables

contribute to the occurrence and consequences of work-family conflict and positive spillover by accomplishing the following three goals:

1. Previous studies have suggested the notion that work-to-family conflict and family-to-work conflict have unique antecedents, and therefore, may require different interventions to prevent their occurrences. In addition, it has shown that certain factors (role stress and family conflict) affect conflict in both directions. This study aims to study the extent to which these findings translate in a sample of Asian American working mothers, and whether they apply to our understanding of positive spillover.

2. Research has shown that work-family conflict and positive spillover impact an individual's physical and emotional wellbeing. A main goal of the present study was to investigate key variables that are speculated to affect emotions and physical health of Asian American women, specifically work role quality, family role quality, work-family conflict, work-family positive spillover, acculturation, and cultural beliefs about work and family.

3. Based on cross cultural models that emphasize the importance of social-cultural variables, the present study examined how work-family outcomes (conflict and positive spillover) among Asian American women were affected by socio-cultural variables, including acculturation, enculturation, traditional gender role ideology, and beliefs about work-family interdependence. Specifically, it was predicted that cultural beliefs may serve as coping strategies to mediate the relationship between acculturation and work-family outcomes and moderate the relationship between work-family outcomes and emotions.

Altogether, the results of the present study would help inform work-family policy makers, management personnel, as well as mental health professionals working with patients dealing with work-family based conflict and adjustment problems among Asian American communities. The study results would help various professionals in identifying antecedents and planning interventions with Asian American workers/patients.

Study Hypotheses

Drawing from cross-domain models of work-family conflict, recent trends in studying positive work-family experiences, and the importance of cultural characteristics in emerging models, the following hypotheses were tested.

Research Q1: What are the variables that contribute to work-family conflict?

Preliminary analyses will explore the level of work-family conflict. Given the low level of conflict reported by immigrant women in previous studies, it is expected that Asian American women would report a low or medium level of conflict. In addition, the analyses will explore whether acculturation has an impact on work-family conflict. Given the lack of theoretical and empirical evidence, no hypothesis regarding acculturation will be made. The primary hypothesis will attempt to replicate findings from Byron's meta-analytic review by exploring the effects of work-related variables and family-related variables on two directions of WFC while controlling for demographic variables and acculturation and enculturation.

- Hypothesis 1: Work-related variables will be associated with greater work-to-family conflict than with family-to-work conflict whereas family-related variables will be associated with greater family-to-work conflict.

- Hypothesis 1a: Positive work role quality and support from workplace on family obligations will decrease work-to-family conflict whereas number of hours worked will be associated with increased work-to-family conflict.

- Hypothesis 1b: Number of children is expected to be associated with increased family-to-work conflict, whereas family role quality, support from husband, support from extended family members, and hired help are predicted to decrease family-to-work conflict.

- Hypothesis 1c: Of all of the antecedents tested, it is expected that job role quality and family role quality (both an extension of stress as measured in Byron's meta-analyses) will have the strongest associations with both directions of work family conflict.

Research Q2: What are the variables that contribute to family-work positive spillover?

Given the lack of existing model of positive spillover, the present study will explore whether the notion that work-to-family conflict and family-to-work conflict have unique antecedents is also applicable to positive spillover. The study will also explore effects of acculturation and enculturation on positive spillover, although no specific hypothesis will be made. The following hypotheses thus follow those posed in answering the previous Research Question. Demographic variables and acculturation/enculturation will again be control variables.

- Hypothesis 2: Work related variables will be associated with greater work-to-family positive spillover than family-to-work positive spillover whereas family related variables will be associated with greater family-to-work positive spillover than work-to-family positive spillover.

o Hypothesis 2a: Positive work role quality, low work hours, and support from workplace on family obligations will be associated with higher work-to-family positive spillover.

o Hypothesis 2b: Family role quality, support from husband, support from extended family members, and hired help are predicted to increase family-to-work positive spillover.

o Hypothesis 2c: Of all of the antecedents tested, it is expected that job role quality and family role quality (which take into account of both stress *and* satisfaction) will have the strongest associations with both directions of work family conflict.

Research Q3: What are the variables that contribute to positive and negative family-work emotions?

As presented in the literature review, work-family conflicts are invariably associated with psychological wellbeing. The present study will explore the effects of work-family conflict and domain-specific variables on emotions associated with combining work and family roles among Asian American mothers. Furthermore, acculturation will be included in the analyses as a possible predictor. Demographic variables will be controlled in these analyses.

- Hypothesis 3: Emotions associated with work-family experiences are impacted by conflict, positive spillover, and domain-specific factors.

o Hypothesis 3a: High work-family conflict will be associated with greater negative emotions and lower positive emotions.

- Hypothesis 3b: High work-family positive spillover will be associated with greater positive emotions and lower negative emotions.

- Hypothesis 3c: Positive work and family role qualities will be associated with higher positive emotions and lower negative emotions.

Research Q4: What are the variables that contribute to physical health?

While there has been evidence connecting WFC and physical health in mainstream literature focusing on White populations, this association has only been found in a sample of Filipina women and was not found in another sample of Latino immigrants. This study attempted to explore the relationship between physical health, work-family outcomes, domain-specific variables, and acculturation among a diverse group of Asian American working mothers. Given that this aspect of the study was exploratory, no specific hypothesis was made with regard to acculturation.

- Hypothesis 4: Physical health is impacted by level of conflict, positive spillover, and work-domain or family-domain specific factors.

  - Hypothesis 4a: Physical health is positively associated with work-family positive spillover and negatively associated with work-family conflict.

  - Hypothesis 4b: Physical health is positively associated with work and family role qualities.

Research Q5: What roles do gender role ideology, work-family interdependence, and extended familial support play on work-family outcomes?

Preliminary hypotheses were made based on qualitative studies showing the ameliorating effects of work-family interdependence and non-traditional gender role ideology on reducing multiple role stress as well as Asian literature on the prevalence of

extended familial support in Asian American families. It is expected that these variables impact the relationship between acculturation/enculturation, work-family conflict, work-family positive spillover, and emotions.

- Hypothesis 5: Extended familial support, gender ideology, and role interdependence mediate the relationship between acculturative variables and work-family outcomes and between work-family outcomes and emotions.

    o Hypothesis 5a: Specifically, it is predicted that enculturation will have a positive impact on role interdependence, gender role ideology, and extended familial support, which then determine the level of work-family conflict and positive spillover. The mediation relationship is shown below.

```
                    → WF Role Interdependence ⟍
                   ↗                            ⟶  WF
AAMASC ──────→ Gender Role Ideology  ────────→    Conflict
         ↘                                   ↗    Pos. spillover
          ↘ Extended Family support ────────
                                        │  │
                                        │  │
                                  Controlling for:
                                        Age
                                     Education
```
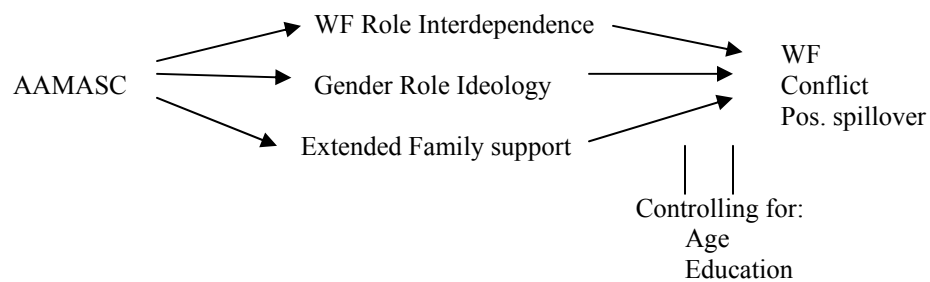
    o Hypothesis 5b: It is also predicted that gender ideation, extended familial support, and work-family interdependence moderate the relationship between work-family outcomes (conflict or positive spillover) to impact level of emotions.

```
                              Extended familial support

          Role interdependence          │          Gender role ideology
                   │                     │                   │
                   ↓                     ↓                   ↓
WF conflict/ ─────────────────────────────────────────→  Emotions
pos spillover                                             (positive or negative)
```
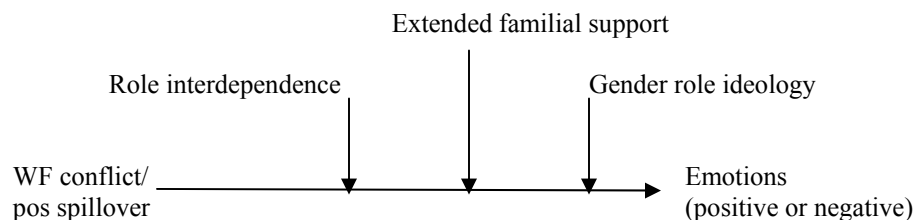
Chapter III

METHODS

Recruitment and Procedures

Participants for this online study were recruited through samples of convenience, announcements posted on public Asian American related websites, and emails sent to organizations that target Asian American parents or Asian American professional women. Eligibility for filling out the survey as stated on the information form included being a married Asian American mother who lived with their spouse and children, had at least one child under the age of 12, and worked at least 20 hours a week. Both native born Asian American mothers and Asian immigrant mothers were eligible for this study. Proficiency in reading English was assumed based on an individual's ability to respond to the recruitment email and complete the survey. Interested participants were invited to visit the project home page, which outlined general information on the study (e.g. purpose, procedures, risks and benefits, invasion of privacy, and confidentiality). As an incentive, a raffle of two $100 amazon.com coupons was offered to participants who agreed to leave their contact information. A lottery took place in May where two participants were each awarded a $100 amazon.com coupon.

An Internet survey was used to reach Asian American working mothers residing all over the nation. The survey was reviewed by the Institutional Review Board and

considered to be exempt from ongoing review. An Internet survey was used because previous studies using electronic data collection methods supported the feasibility and benefits of electronic data collection. Electronic data collection was found to generate comparable response quality from participants to written surveys (Comley, 1996; Curl & Robinson, 1997; Lakeman, 1997; Stanton, 1998). Furthermore, Asian-Americans are among the nation's heaviest users of the Internet on a day-to-day basis, fully 70% of them are online on a typical day, which is significantly higher than any other groups (Spooner, 2001). This study found that approximately 35% of Asian Americans online are between the ages of 25 to 34 and 22% are between the ages of 35-44, both are categories of prime child-bearing age.

Measures

Survey measures included both existing validated measures as well as those that were developed for the purpose of this study (see Appendices).

Participant Characteristics

Demographic variables. Demographic questions were selected and designed based on their relevance to family-work and Asian American research. Participants were asked to report demographic information including age, state of residence, education, birthplace, ethnicity, years lived in US, and years lived in Asia. In addition, family information was gathered on the participants' number of children, age of the youngest child, the race of their husband, and whether they live with extended family members. Work related demographics included occupation, number of hours worked per week, and whether participants worked in a family business or worked with family members.

Acculturation. The Asian American Multidimensional Acculturation Scale

(AAMAS) (Chung, Kim, & Abreu, 2004) is an orthogonal 15-item measure that assesses

acculturation to three different cultural dimensions: Cultural of Origin (AAMAS-CO),

Asian American culture (AAMAS-AA), and European American culture (AAMAS-EA).

Due to time constraint, the pan-ethnic Asian American (AAMAS-AA) acculturation scale

was eliminated in this study (see Appendix A). AAMAS-CO represents enculturation

whereas AAMAS-EA represents acculturation. For each item, participants were asked to

indicate on a 6-point scale (1 = not very well; 6 = very well) the extent to which they

engage in a particular cultural norm with respect to each of cultural groups. Many of the

items are behavioral in nature, and within each scale are 4 domain subscales that can be

examined separately. The domain subscales measure language, food consumption,

cultural knowledge, and cultural identity. In terms of reliability, Chung et al. reported

coefficient alphas ranging from .87 to .91 for country of origin subscale and .76 to .81 for

European American subscale. Test-retest reliability for the two subscales were reported to

be .89 and .78 respectively. Reliability data for the domain subscales ranged from .76

to .87 for language, .65 to .71 for food consumption, .67 to .89 for cultural knowledge,

and .74 to .79 for cultural identity for the acculturation and enculturation measures.

<u>Work-Family Roles</u>

Role Involvement. The measure of role involvement was modified from a

structured interview (Meleis et al., 1989) and provided a descriptive picture of

involvement in one's work role and various family roles. The original interview consisted

of twelve possible roles (e.g. daughter, wife, mother, caregiver, housekeeper, religious,

social etc.) Due to the focus on family and work roles, this study only included 5 roles,

four of which were considered "family" roles: wife, caregiver of parents/in-law, mother, employee, and housekeeper. For each role, participants were asked to rate their degree of involvement on a scale of 1 (no involvement) to 5 (very involved). Family role involvement was calculated by averaging the ratings of involvement for the four family roles. Employee role involvement was calculated by the degree of involvement in the single-item job role.

Role Quality. In accordance with research on care-giving roles and the expansionist view of multiple roles, role qualities were measured by the difference in satisfaction and stress (Appendix B). For each of the primary roles (wife, caregiver of parents/in-law, mother, employee, and housekeeper), participants were asked to rate their role satisfaction using a 10-point scale ranging from 1 (*not satisfying at all*) to 10 (*very satisfying*) and role stress from 1 (*not stressful at all*) to 10 (*very stressful*). Work role quality was calculated by subtracting the stress rating from the satisfaction rating. Overall family role quality was calculated by subtracting the stress rating from the satisfaction rating for each of the family roles and then summing the difference.

Work Family Conflict. Work-to-family conflict and family-to-work conflict were measured using a validated, existing instrument that includes time and strain based components of conflict (Netemeyer, Boles, & McMurrian, 1996). The 10-item scale contained five items measuring family-to-work conflict and five items measuring work-to-family conflict (Appendix C). Using a 7-point Likert scale, participants were asked to indicate to what extent they agree with each item. Responses ranged from 1 (strongly disagree) to 7 (strongly agree). A sample item from the work-to-family conflict scale was, "The demands of my work interfere with my home and family life." A sample item from

the family-to-work conflict scale was: "The demands of my family interfere with work-related activities." Higher scores indicate higher conflict. According to Netemeyer et al. (1996), the internal consistencies of both scales are adequate, with alpha estimates ranging from .83 to .89, and an average alpha of .88 for WFC, and of .86 for FWC across three samples).

In addition, participants were asked to provide some qualitative descriptions regarding the effects of their job on their family roles at the end of the study. Specifically, they were asked the following two open-ended questions. In what way(s) does your work negatively affect you? In what way(s) does your work negatively affect your family? (see Appendix I for all open-ended questions)

Work Family Positive Spillover. In order to account for the expansionist view of work-family roles, this study adapted an existing measure of Work-Family positive spillover. Based on theoretical constructs, Hanson, Hammer, & Colton (2006) developed a multidimensional scale measuring the transfer of positive affect, behaviors, and values from one role to another role. The scale assessed level of positive spillover from work to family and from family to work in three separate domains: behavior-based instrumental positive spillover (i.e., skills learned at work helps one in one's family life), affective positive spillover (i.e., being in a positive mood at one role helps one to be in a positive mood at the other role), and value-based instrumental spillover (i.e., values developed at work assists in fulfillment of familial responsibilities). Using a 5-point Likert scale, participants were asked to rate their level of agreement or disagreement with each statement. Hanson et al. reported alpha coefficients over .90 for all sub-dimensions of positive spillover, indicating adequate reliability. Due to time constraint, this study

utilized the behavior-based instrumental and the value-based instrumental positive

spillover because of their better construct validity based on correlation with outcome

measures (Appendix D). Specifically, behavior-based spillover were associated positively

with mental health (work-to-family: $r = .35$, $p < .01$; family-to-work: $r = .20$, $p < .05$), job

satisfaction (work-to-family: $r = .31$, $p < .01$; family-to-work: $r = .23$, $p < .01$), and

family satisfaction (only from work-to-family: $r = .20$, $p < .01$). Value-based positive

spillover were associated with job satisfaction (work-to-family: $r = .26$, $p < .01$; family-

to-work: $r = .28$, $p < .01$), family satisfaction (only from family-to-work: $r = .20$, $p < .05$),

and mental health (only from work-to-family: $r = .32$, $p < .01$)

Participants were also asked to provide some qualitative descriptions regarding

the effects of their job on their family roles at the end of the study. Specifically, they

were asked the following two open-ended questions. In what way(s) does your work

contribute positively to you? In what way(s) does your work contribute positively to your

family?

Work-Family Support

Support. Seven questions were designed to assess the level of support participants

received from workplace and their family in their multiple roles (Appendix E). One

question asked about the degree to which participants believed that her workplace is

supportive of family responsibilities. Other questions focused on support from family

members and through hired help and were adapted from the King, Mattimore, King, and

Adams (1995) 44-item Family Support Inventory for Workers (FSIW). Due to the value

placed on extended family among Asian American families, it is possible that

instrumental support may be provided by relatives who are not co-residing with the

family. Thus, questions distinguished between support from husband in housework and childcare from support from other family members. A sample item of support from husband was, "*my husband helps me out by taking care of my child.*" Given the prevalence of hired help in today's family, two questions focused on whether hired help was utilized for housework or childcare. For the purpose of analyses, both family support and hired help would fall under the category of family-related variables whereas work support was considered to be a work-related variable.

<u>Work-Family Beliefs</u>

Gender Role Ideology. As shown in Appendix F, a six-item measure of gender role ideology as it applies to the division of labor was adapted from a scale that was originally developed as part of a larger index by Spence and Helmreich (1978) and was recently used as a single measure by Stevens, Minnotte, Mannon, & Kiger (2007). Stevens et al. (2006) reported Alpha reliability coefficients of .71 for their sample of primarily Caucasian women. Instead of the six-point scale used in their study, respondents in this study were asked to indicate their level of agreement using a five-point scale. The change from an even six point scale to an odd five point scale in the proposed study was to allow for a neutral response set (3= neither agree nor disagree). A sample item is "A woman's most important task in life should be taking care of her children." The appropriate items were reverse coded so that the higher the scale score, the more traditional the respondent's gender ideology.

Role Interdependence. Given the absence of any existing scales that measure the psychological interdependence of family and work roles, questions were designed to assess role interdependence for this study (Appendix G). Participants were asked to rate

the following statements on a 5-point Likert scale from 1 (*strongly disagree*) to 5 (*strongly agree*): (1) In my opinion, working is part of being a good mother; (2) In my opinion, working is part of being a good wife; (3) My work contributes to my family's well-being; (4) My work is not related to my obligations toward my family. (5) Giving up family time for work is one form of self-sacrifice a mother makes for the well-being of her family. The fourth statement was reverse coded in analyses.

In addition, participants were asked an open ended question on reasons that contribute to their decision to work. Their answers might provide another proxy for whether work is construed as a duty to the family (hence higher work-family interdependence) or for the purpose of self-development (lower work-family interdependence)

Well-Being

Work-Family Emotions. The present study focused on state emotions that resulted from combining multiple roles rather than chronic psychological distress such as depression and anxiety disorders. Emotions fall into groups based on their valence (positive or negative) and intensity (low, high). This study assessed both the valence and the intensity of common emotional responses to combining work and family roles (Appendix H). Specifically, participants were given a sentence stem, "When I think about having both family and work roles and obligations, I feel…" and were asked to rate the extent to which they experienced six emotions on a scale of 1 (*not at all*) to 5 (*very much*). The emotions were selected based on their conceptual relevance to multiple roles in past literature. Negative emotion labels included in this study were sad, stressed, and guilty. Positive emotions included happy, proud, and energized.

Physical Health. Physical health was assessed with a single item question that asked participants to rate their overall health on a 5-point scale ranging from 5 (poor) to 1 (excellent). This single-item measure of health had been commonly used in public health research and work-family literature.

Data Analyses Strategy

Incomplete surveys were excluded from analyses. Management of missing data was handled via listwise deletion based on analysis. As a result, sample sizes differed slightly from one analysis to the next. Bivariate correlation analyses were first conducted to determine the preliminary relationships. Using SPSS, hierarchical regression analyses were then conducted to determine the relationship between independent and dependent variables while controlling for demographic variables (entered as the first step) and levels of acculturation and enculturation (entered as the second step). Comparison of standard beta coefficients allowed for an exploration on whether a set of independent variables explained the variance in a particular direction of work-family conflict over the other direction of work-family conflict.

In order to test mediation effects (Hypothesis 5), path analyses using AMOS (SPSS software) were conducted due to its efficiency over conducting multiple sequential regression analyses. Path analysis is an extension of multiple regression and it provides estimates of the magnitude and significance of hypothesized causal connections between sets of variables. The sample size of 157 participants was considered adequate to run a path analyses with 10 possible paths. Finally, moderating effects were examined using interaction terms in hierarchical regressions.

Chapter IV

RESULTS: DESCRIPTIVE ANALYSES

This chapter presents preliminary descriptive results on factors that contribute to work-family conflict, positive spillover, emotions, and physical health among Asian American working mothers. Participant characteristics are presented first, followed by descriptive analyses and scale analyses.

Participants

A total of 157 participants completed their survey (see Table 4.1 for study sample characteristics). Study participant ages ranged from 20 to 52 ($M = 36.09$, $SD = 5.64$). Over 10 ethnic groups were represented in this sample. The majority of participants identified themselves as Chinese American (54.8%), followed by Filipino Americans (14.6%). Most of the participants reside on the West coast (65.0%). More participants were born in the US (56.1%) than in Asian countries (43.6%). Education levels among participants were skewed toward higher education, with most participants holding a Master's level degree (36.3%) or a Bachelor's degree (32.5%).

In terms of work demographics, more participants worked full time (62.4%) and only rarely with family members (5.7%) or in family owned businesses (3.8%). With respect to family demographics, most participants had one (43.9%) or two children (45.9%) and only a few of them resided with family members not in their immediate

nuclear family (9.6%). More participants were married to an Asian spouse (47.8%) than a

Caucasian spouse (40.1%).

Table 4.1 Demographic variables

Variable	N (Mean)	% (SD)
Age (mean; SD, in years)	156 (36.09)	(5.64)
20-29	16	10.3%
30-39	98	62.8%
40-49	41	26.3%
50-59	1	0.6%
Ethnicity		
Asian Indian	10	6.4%
Chinese	86	54.8%
Filipino	23	14.6%
Japanese	9	5.7%
Korean	15	9.6%
Southeast Asian	13	8.2%
Vietnamese	4	2.5%
Laotian	2	1.3%
Hmong	4	2.5%
Cambodian	2	1.3%
Thai	1	.6%
Other (Chamorro)	1	.6%
Place of Birth		
USA	88	56.1%
Foreign	68	43.6%
Years in the U.S. (mean, SD)	(29.97)	(9.46)
Years in Asia (mean, SD)	(6.04)	(8.71)
Education		
High school or equivalent	1	.6%
Some college/vocational school	12	7.6%
Bachelor's degree	51	32.5%
Master's degree	57	36.3%
Doctoral/Professional degree	36	22.9%

Table 4.1 Demographic Variables (continued)

Variable	N (Mean)	% (SD)
Residence by census regions		
Midwest	20	12.7%
Northeast	19	12%
South	10	6.4%
West	102	65.0%
Unidentified	6	3.8%
Weekly work hours	(37.4)	(9.0)
Part-time (< 40 hours)	59	37.6
40 hours a week	60	38.2
Over 40 hours a week	38	24.2
Family owned business	6	3.8%
Work with family member(s)	9	5.7%
Number of children	(1.7)	(.8)
One	69	43.9%
Two	72	45.9%
Three	9	5.7%
Four	4	2.5%
Five	1	.6%
Live with other family members	15	9.6%
Ethnicity of spouse		
Asian	75	47.8%
Caucasian	63	40.1%
Latino	4	2.5%
Black	4	2.5%
Other(multiracial)	11	7.0%

Descriptive Analyses

Initial analyses were conducted to provide an overview of work-family experiences among this sample of Asian American working mothers. As shown in Table 1.2, participants reported their level of involvement in their work role and various family roles. A number of participants reported having some involvement in elderly caretaking roles (28.7%). Surprisingly, a few participants indicated that they have no involvement in being a mother ($N = 6$) or being an employee ($N = 5$) even though most of them subsequently rated their levels of satisfaction and stress for each role and did not endorse the "not applicable" option. Given that all participants had children and worked at least 20 hours a week, it did not seem possible that they had no involvement in these roles. One plausible explanation is that some participants interpreted the measure as their psychological investment in a role rather than the level of physical obligations that was intended by the original scale. Another explanation for the work-role is that some participants who were entrepreneurs or business owners did not identify with having a role as an "employee". Given that this variable was only included for descriptive purposes, it was not included in later analyses.

Participants were also asked to rate their level of satisfaction and stress from each of the roles (see Table 4.2). In general, participants reported the highest level of satisfaction in their roles as a mother ($M = 5.2$, $SD = .97$) and as a wife ($M = 4.79$, $SD = 1.17$). They reported the highest level of stress in their role as a mother ($M = 4.05$, $SD = 1.44$) and in their job ($M = 4.01$, $SD = 1.42$).

Table 4.2 Means and standard deviation of role experiences

Measure	Range	Mean*	SD
Involvement in			
Wife role	0-4	2.52	.78
Caretaking role	0-3	.49	.89
Mother role	0-4	2.71	.75
Work role	0-3	2.57	.75
Housework role	0-4	2.23	.92
Level of Satisfaction experienced in			
Wife role	1-6	4.79	1.17
Caretaking role	1-6	3.99	1.28
Mother role	2-6	5.20	.97
Work role	1-6	4.57	1.19
Housework role	1-6	3.59	1.24
Level of Stress experienced in			
Wife role	1-6	3.28	1.60
Caretaking role	1-6	3.16	1.57
Mother role	1-6	4.05	1.44
Work role	1-6	4.01	1.42
Housework role	1-6	3.82	1.51

* Higher scores indicate higher involvement/satisfaction/stress.

Scale Analyses

Analyses were first conducted to investigate mean scores assessing the various work-family predictor variables. The means and standard deviations of these variables appear in Table 4.3. Work-related variables consisted of work role quality, support from the workplace of family obligations, and average number of hours worked per week. Work role quality was calculated by subtracting job role stress from job role satisfaction. In general, participants reported minimally positive work role quality ($M = .55$, $SD = 2.05$) and some support from their workplace in managing their family duties ($M = 3.8$, $SD = 1.2$, scale ranges from 1 to 5 whereby 5 is feeling supported a lot of the time).

Family-related variables consisted of number of children, support from husband, extended familial support, support through hired help, and family role quality. In general, participants reported higher level of support from their husbands ($M = 4.01$, $SD = .88$) than from extended family members ($M = 2.63$, $SD = 1.25$). Approximately equal percentages of participants indicated that they received support "a lot of the time" from their husbands in housework (38%) and childcare (41%), respectively. While participants reported lower support in housework from extended family members, 28% of participants indicated receiving support in childcare from extended family members "a lot of the time." This was expected given the high level of grandparent involvement in childcare typically cited in Asian American literature. In terms of hired help, 68% of participants utilized some sort of hired childcare (e.g., nannies and daycare) and 29% of participants used hired cleaners regularly.

Table 4.3 Mean and standard deviation of non-demographic predictor variables

Measure	Mean*	SD
Work-related variables		
Work role quality [a]	.55	2.05
Support from work of family duties [b]	3.79	1.22
Number of hours worked	37.37	9.03
Family-related variables		
Number of children	1.68	.75
Support from husband [b]	4.01	.88
In housework and errands	3.94	1.04
In childcare	4.09	.93
Support from other family members [b]	2.63	1.25
In housework and errands	2.19	1.36
In childcare	3.08	1.57
Support through hired help [b]	1.08	.89
In housework and errands	.31	.49
In childcare	.77	.61
Family role quality [c]	.85	1.55
Wife role quality	1.50	2.36
Caretaker role quality	.84	2.06
Mother role quality	1.14	1.89
Housework role quality	-.27	2.08
AAMAS-Country of Origin [d]	4.31	.83
AAMAS-European American [e]	4.88	.63
Traditional Gender Role Ideation [f]	2.21	.67
Work-Family Interdependence [g]	3.55	.65

a) The higher the number, the higher the quality of a given role.
b) All support variables (work, spouse, family members, and hired help) are rated on a scale of 1-5 where higher scores indicate more support.
c) The higher the number, the higher the quality of family roles (consisting of wife, mother, caretaker, and housework roles).
d) This is a 6-point scale. Alpha for AAMAS-Country of Origin is .88.
e) This is a 6-point scale. Alpha for AAMAS-European American is .87.
f) Scale ranged from 1 to 5 where higher scores indicate more traditional gender role ideology. Alpha for the gender role ideology scale is .60.
g) Scale ranged from 1 to 5 where higher scores indicate stronger perception of interdependence between work and family roles. Alpha for this scale is .43.

Given that there were four possible family roles, a family role quality score was calculated by averaging the difference between family role satisfaction and role stress for each of the family role. While not everyone engaged in elderly caretaking roles, this variable was included to calculate collective family role quality to provide a more realistic picture of general role quality at home. Respondents reported a minimally positive role quality ($M = .85$, $SD = 1.55$). It is important to note, however, that the low overall score was contributed by the negative rating of role quality in housework/chores. If one considered relational roles (wife, caretaker, and mother) alone, the role quality score would be substantially higher.

Respondents also reported on various cultural variables. On the 6-point AAMAS, participants reported relatively high level of enculturation (country of origin scale score: $M = 4.31$, $SD = .83$) and even higher level of acculturation (European American scale score: $M = 4.88$, $SD = .63$). While the level of enculturation was more evenly distributed across the population (figure 4.1), this sample of participants represented a group of acculturated women (figure 4.2).

Mean =4.306
Std. Dev. =0.83028
N =157
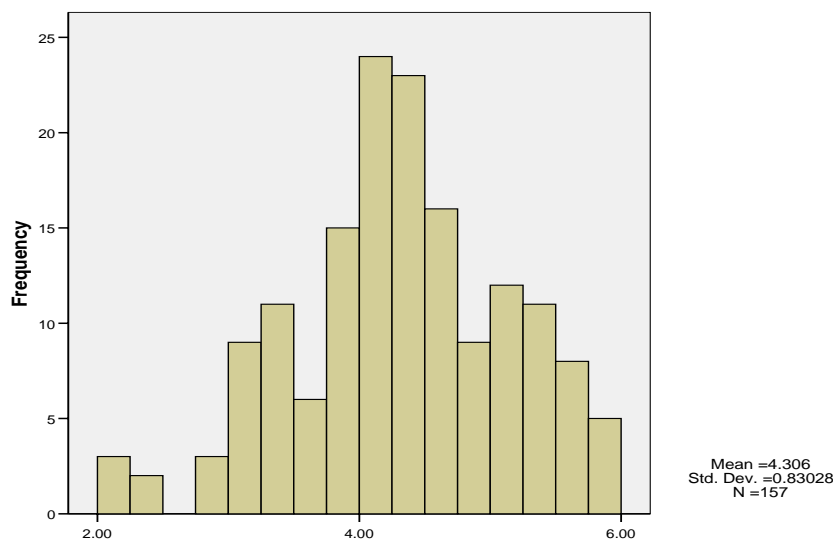
Figure 4.1 AAMAS-country of origin (enculturation)
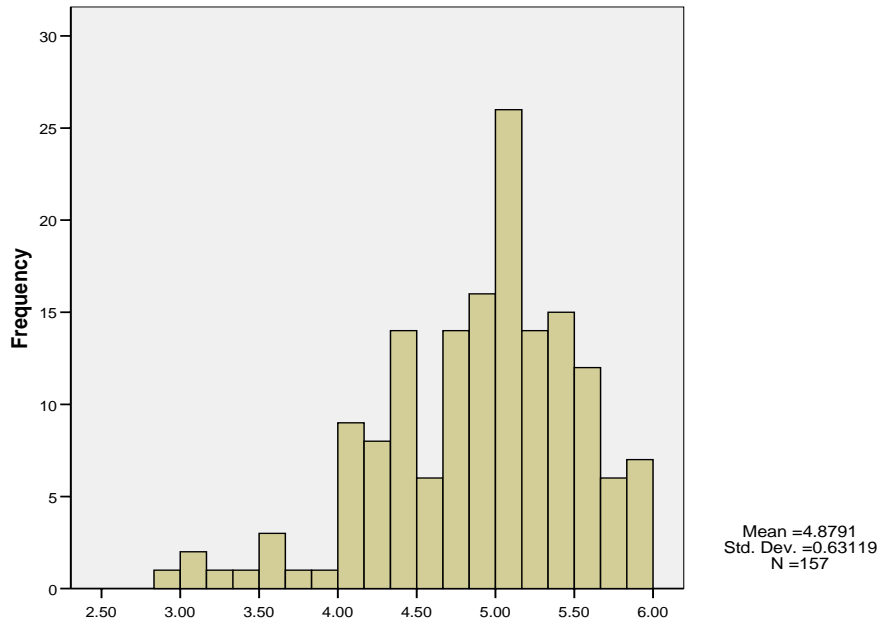
Figure 4.2 AAMAS- European American (acculturation)

Two culturally related beliefs were also assessed in the survey. Participants in general endorsed non-traditional gender role ideation (Figure 4.3. $M = 2.21$, $SD = .67$) and relatively higher levels of work-family interdependence (Figure 4.4. $M = 3.55$, $SD = .65$). The latter result was unexpected given the high level of acculturation in this group.
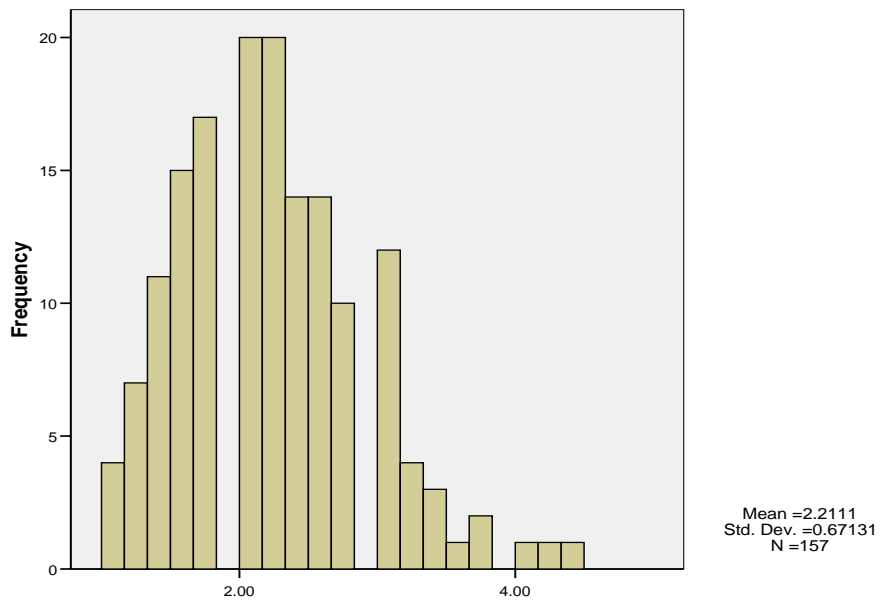
Figure 4.3 Gender role ideology. Higher number denotes more traditional gender role ideology.

51
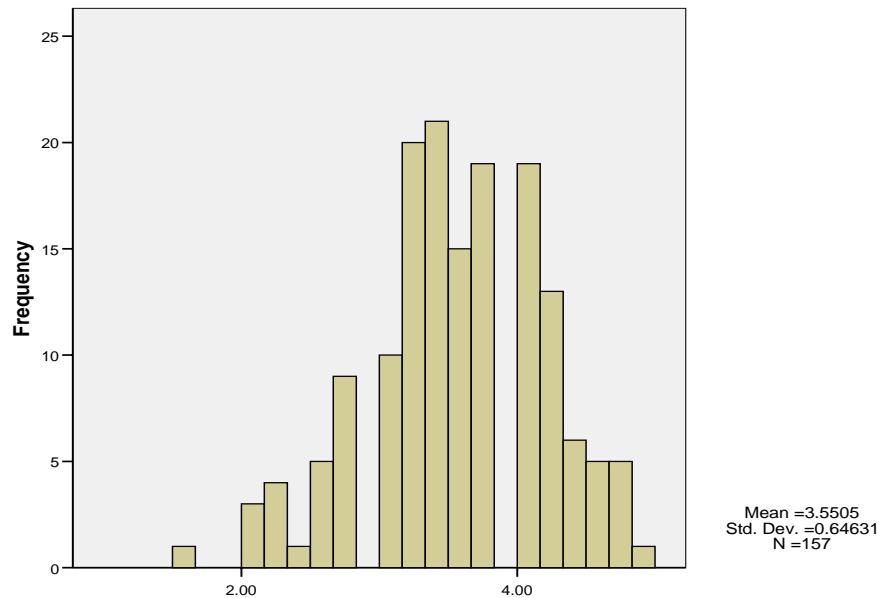
Figure 4.4 Work-family interdependence. Higher number denotes higher interdependence between work and family roles.

Table 4.4 presents the means, standard deviations, and reliability alphas from outcome measures. Reliability of existing outcome measures (conflict and spillover) ranged between .90 and .94. Alphas for work-family emotions were .76 for positive emotions and .66 for negative emotions. These reliability alphas are considered adequate. As predicted, participants did not report a high level of WFC. On a 7-point scale where 7 indicated high level of conflict, respondents on average reported medium level of work-to-family conflict ($M = 3.83$, $SD = 1.65$) and family-to-work conflict ($M = 3.12$, $SD = 1.66$). In terms of positive spillover, participants also responded a moderate level of positive spillover (work-to-family: $M = 3.35$, $SD = 0.99$; family-to-work: $M = 3.78$, $SD = 0.89$). Finally, respondents reported high level of positive emotions ($M = 3.57$ on a 5 point scale) and relatively lower negative work-family emotions ($M = 2.91$). In general, participants reported good health status ($M = 2.15$, $SD = .92$).

Table 4.4 Mean and standard deviation of non-demographic outcome variables

Measure	Mean	SD	Alpha
Work-Family conflict			
Work-to-family conflict	3.83	1.65	.92
Family-to-work conflict	3.12	1.66	.90
Work-Family Positive spillover			
Work-to-family positive spillover	3.35	0.99	.93
Family-to-work positive spillover	3.78	0.89	.94
Work-Family related emotion			
Positive emotion	3.57	0.73	.76
Negative emotion	2.91	0.79	.66
Health (one-item measure)	2.15	0.92	

Chapter V

RESULTS: CONFLICT AND POSITIVE SPILLOVER

This chapter presents correlation and regression results in testing Hypothesis 1 (work-family conflict) and Hypothesis 2 (positive spillover). Hypotheses testing involved first conducting bivariate correlation analyses to test preliminary relationships. Then, hierarchical regression analyses were conducted to predict conflict or positive spillover while controlling for demographic variables and levels of acculturation and enculturation. All continuous study variables were centered to minimize round off errors (Neter, Kunter, Nachtsheim, & Wasserman, 1996).

Research Q1: What are the variables that contribute to work-family conflict?

Correlation analyses

Bivariate correlation analyses were conducted to determine the preliminary relationships between work-family conflict and other variables. The first set of bivariate analyses assessed the relationship between work-family conflict and various demographic factors, including age, education, acculturation, and enculturation. As shown in Table 5.1, participants with higher level of education reported more work-to-family conflict ($r = .16$, $p < .05$) and more family-to-work conflict ($r = .34$, $p < .001$). Family-to-work conflict was also highly correlated with work-to-family conflict ($r = .509$, $p < .001$). Conflict outcomes were not associated with any other demographic variables.

Table 5.1 Correlation for work-family conflict and demographic variables

Variable	1	2	3	4	5	6
1. Age						
2. Education	.34**					
3. AAMASC (enculturation)	-.08	-.02	-.20*			
4. AAMASE (acculturation)	-.22**	-.05	.15	-.18*		
5. W-F Conflict	.08	.16*	-.08	-.07	.03	
6. F-W Conflict	.03	.34**	-.12	-.11	-.05	.51***

Note. $* p < .05.$ $** p < .01.$ $*** p < .001.$ (2-tailed).

In the next set of correlations (Table 5.2), the relationships between work-family conflicts, work related variables, and family-related variables were explored. As expected, work-to-family conflict was associated with all work-related variables: number of hours worked ($r = .26$, $p < .01$), job role quality ($r = -.46$, $p < .001$), and support from work ($r = -.24$, $p < .01$). It was also associated with three of the family related variables: family role quality ($r = -.40$, $p < .01$), support from husband ($r = .18$, $p < .05$), and hired help ($r = .16$, $p < .05$). On the other hand, family-to-work conflict was only associated with two family related variables: family role quality ($r = -40$, $p < .01$) and hired help ($r = .30$, $p < .001$). The positive correlations between work-to-family conflict and the two familial support variables (support from husband and hired help) and between family-to-work conflict and hired help were unexpected.

Table 5.2 Correlation for all work, family, and conflict variables

Variable	1	2	3	4	5	6	7	8	9
Work related variables									
1. Avg weekly work hours									
2. Work role quality	-.08								
3. Support from work	-.11	.18*							
Family-related variables									
4. Number of children	-.01	.09	.16						
5. Family role quality	-.07	.48**	.08	-.09					
6. Extended familial support	.04	-.07	.04	-.04	.08				
7. Support from husband	.21**	-.15	.13	.06	.04	.03			
8. Hired help	.05	-.07	.00	-.13	-.05	.23**	-.10		
Work-Family Conflict (both directions)									
9. W-F conflict	.26**	-.46**	-.24**	.04	-.40**	.05	.18*	.16*	
10. F-W conflict	-.00	-.33**	-.02	.01	-.39**	.11	-.03	.30**	.51**

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. (2-tailed).

Hierarchical regression analyses

Two three-step hierarchical regression analyses were conducted to determine the relationships between work-family conflict, work-related variables, and family-related variables. One regression predicted work-to-family conflict whereas the other regression predicted family-to-work conflict. In these analyses, age and education were entered in step 1 as control variables. Then, AAMASC (enculturation) and AAMASE (acculturation) were entered in step 2 separately from demographic variables in order to explore amount of variance explained solely by these factors. In step 3, both work-related variables and family-related variables were entered simultaneously. This allowed for comparison of the unique contributions across domain-specific variables. Table 5.3 displayed the regression coefficients and R square statistics for the models.

In the first 2 steps, none of the demographic (gender and age) and acculturative variables was significant in predicting work-to-family conflict. However, the addition of work and family variables significantly increased the prediction ($\Delta R^2 = .37$) and the new model explained 39% of the variance in work-to-family conflict, $F(12, 138) = 7.45$, $p < .001$. As predicted, post hoc examination of the coefficients showed that all three work-related variables made significant contribution to work-to-family conflict. Women who worked more hours ($\beta = .18$, $p < .05$), had lower work role quality ($\beta = -.26$, $p < .01$), and received less support from their workplace in their family roles ($\beta = -.23$, $p < .01$) experience higher work-to-family conflict. In addition, respondents with lower family role quality ($\beta = -.23$, $p < .01$) and more childcare/ housework support from their husband ($\beta = .16$, $p < .05$) also experienced more conflict.

In terms of family-to-work conflict, demographic variables were significant when entered as the first step of the regression analysis, $F(2, 148) = 110.04, p < .001$) and accounted for 14% of the total variance. Post hoc examination of the coefficients showed that only the unique contribution of education was statistically significant ($\beta = .37, p < .001$). Higher level of education predicted increased family-to-work conflict. The inclusion of acculturative variables in step 2 did not significantly increase its prediction. However, when work and family variables were added in step 3, they explained an additional 20% of the variance in conflict ($\Delta R^2 = .20$). The model that included demographic, acculturative, and family/work variables accounted for 34% of the total variance, $F(12, 138) = 5.98, p < .001$). Post hoc examination of the coefficients showed that family role quality alone made the only significant contribution to family-to-work conflict ($\beta = -.34, p < .001$).

Table 5.3 Hierarchical regression analyses predicting work-family conflict

	Work-to-Family Conflict			Family-to-Work Conflict		
	B	*SE B*	*β*	*B*	*SE B*	*β*
Step 1:	$R^2 = .02$			$R^2 = .11$***		
Demographic Variables:						
Age	.01	.03	.02	-.03	.02	-.11
Education	.25	.15	.14	.65	.15	.37***
Step 2:	$R^2 = .03$; $\Delta R^2 = .00$			$R^2 = .14$**; $\Delta R^2 = .02$		
Acculturation/Enculturation:						
AAMASE (acculturation)	.05	.22	.02	-.21	.21	-.08
AAMASC (enculturation)	-.07	.17	-.04	-.26	.16	-.13
Step 3:	$R^2 = .39$***; $\Delta R^2 = .37$***			$R^2 = .34$***; $\Delta R^2 = .20$***		
Work Variables:						
Average weekly work hours	.03	.01	.18*	-.01	.01	-.06
Work role quality	-.21	.07	-.26**	-.09	.07	-.12
Support from workplace	-.31	.10	-.23**	-.04	.10	-.03
Family Variables:						
Number of children	.18	.16	.08	.12	.16	.06
Family role quality	-.25	.09	-.23**	-.36	.09	-.34***
Extended familial support	.06	.09	.04	.16	.10	.12
Support from husband	.32	.14	.16*	-.00	.14	-.00
Hired help	.14	.14	.07	.25	.14	.14

Note. * $p < .05$. ** $p < .01$. *** $p < .001$

Hypothesis 1

Hypothesis 1 stated that work-related variables would be associated with greater work-to-family conflict whereas family-related variables would be associated with greater family-to-work conflict. This hypothesis was partially supported because after controlling for demographic and acculturative variables, all the work variables included were predictive of work-to-family conflict but not predictive of family-to-work conflict. On the other hand, family role quality was the only family factor predictive of family-to-work conflict when controlling for demographic and acculturative variables. As predicted, its effect (beta) on family-to-work conflict was greater than its effect (beta) on work-to-family conflict.

Specific directions of impact were also hypothesized for variables in relation to both directions of conflict. Hypothesis 1a stated that positive work role quality and support from the workplace would decrease work-to-family conflict (negatively associated) whereas number of hours worked would be positively associated with increased work-to-family conflict. All three predictions in hypothesis 1a were supported in correlation and hierarchical regression analyses. The regression analysis also suggested that family role quality was negatively associated with conflict whereas support from husband was positively associated with conflict. The latter finding was especially unexpected.

Hypothesis 1b focused on family-to-work conflict and stated that number of children would be associated with increased conflict whereas family role quality, familial support (from husband and extended family members), and hired help would be associated with decreased conflict. Bivariate correlation analyses found that family role

quality was associated with decreased conflict whereas hired help was associated with increased conflict. In the hierarchical regression, only family role quality had a significant contribution to conflict. When comparing the coefficients, it appeared that the beta for family role quality was higher for family-to-work conflict than work-to-family conflict. This difference in predictive power corresponded with our predictions.

Altogether, the significant contribution of family role quality on both directions of conflict and the significant contribution of job role quality on work-to-family conflict supported Hypothesis 1c. Specifically, the high impact of family role quality on both directions of conflict suggested its relative importance in WFC beyond other domain specific variables. Other key variables included average work hours, support from the workplace, support from husband, and hired help. The unusual finding of husband support positively associating with conflict will be addressed in the Discussion section.

Research Q2: What are the variables that contribute to positive spillover?

Correlation analyses

Bivariate correlation analyses were conducted to determine the preliminary relationships between work-family positive spillover and demographic or domain specific variables. As shown in Table 5.4, work-to-family positive spillover was positively correlated with AAMAS-Country of Origin (enculturation) ($r = .17$, $p < .05$) whereas family-to-work positive spillover was positively correlated with AAMAS-European American (acculturation) ($r = .17$, $p < .05$) and negatively correlated with age ($r = -.18$, $p < .05$). Not surprisingly, the two spillover scores were also correlated with each other ($r = .51$, $p < .001$).

Table 5.4 Correlation for work-family positive spillover and demographic variables

Variable	W-F Pos. Spillover	F-W Pos. Spillover
1. Age	.00	-.18*
2. Education	.08	-.11
3. AAMASC (enculturation)	.17*	.06
4. AAMASE (acculturation)	.14	.17*
5. W-F Positive Spillover	—	.51***

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. (2-tailed).

The next set of analyses (Table 5.5) examined the relationships between positive spillover, work related variables, and family-related variables. Work-to-family positive spillover was correlated with work role quality ($r = .24$, $p < .01$), number of children ($r = .17$, $p < .05$), and family role quality ($r = .18$, $p < .05$). Family-to-work positive spillover was correlated with support from husband ($r = .17$, $p < .05$).

Table 5.5 Correlation for work-family positive spillover and work/family variables

Variable	W-F Pos. Spillover	F-W Pos. Spillover
Work related variables:		
1. Avg weekly work hour	.01	-.03
2. Work role quality	.24**	.07
3. Support from workplace	.12	.14
Family related variables:		
4. Number of children	.17*	.13
5. Family role quality	.18*	.15
6. Extended familial support	-.00	.05
7. Support from husband	.03	.17*
8. Hired help	-.03	-.10

Note. * p <.05. ** p < .01. (2-tailed).

Hierarchical regression analyses

  Two three-step hierarchical regression analyses were conducted to determine the relationships between positive spillover, acculturation, work variables, and family variables. One regression predicted work-to-family positive spillover whereas the other regression predicted family-to-work positive spillover. In these analyses, age and education were entered in step 1 as control variables. In step 2, acculturative variables (acculturation and enculturation) were then entered to indicate their chronological precedence before domain specific variables. In step 3, work and family variables were entered together. Table 5.6 displayed the regression coefficients and R square statistics for the models.

  In the model of work-to-family positive spillover, none of the demographic variables was significant. When acculturative variables were entered, it significantly

increased the prediction by 5%, $\mathit{\Delta F}(2, 146) = 3.91$, $p < .05$. Acculturation ($\beta = .19$, p

$< .05$) was significant whereas enculturation ($\beta = .16$, $p = .05$) was near significant in

predicting work-to-family positive spillover. On the other hand, the addition of work and

family variables did not significantly increase the prediction. Exploration of beta

coefficients suggested that job role quality was the only variable that significantly

contributed to work-to-family positive spillover ($\beta = .20$, $p < .05$).

     In the family-to-work positive spillover model, demographic variables did not

make a significant contribution when entered in the first step. In step 2, the addition of

acculturative variables did not make a significant change in the prediction. However,

exploration of beta coefficients suggested that acculturation made a near significant

contribution ($\beta = .17$, $p = .05$). Finally, when work and family variables were entered in

step 3, they did not significantly increase the amount of variance explained. However, the

model with all the variables from step 1 to 3 was significant, $F(12, 138) = 1.9$, $p < .05$.

Post-hoc examination suggested that only one variable, number of children, made a near

significant contribution ($\beta = .17$, $p = .05$) so that an increased number of children is

associated with an increase in positive family-to-work spillover.

Table 5.6 Hierarchical regression analyses predicting work-family positive spillover

	Work-to-Family			Family-to-Work		
	B	$SE\ B$	β	B	$SE\ B$	β
Step 1:	$R^2 = .01$			$R^2 = .03$		
Demographic Variables:						
Age	.00	.02	.00	-.02	.01	-.14
Education	.08	.09	.08	-.07	.08	-.08
Step 2:	$R^2 = .06; \Delta R^2 = .05*$			$R^2 = .06; \Delta R^2 = .03$		
Acculturation/Enculturation:						
AAMASE (acculturation)	.30	.13	.19*	.23	.11	.17†
AAMASC (enculturation)	.19	.10	.16†	.00	.09	.00
Step 3:	$R^2 = .13; \Delta R^2 = .08$			$R^2 = .14*; \Delta R^2 = .08$		
Work Variables:						
Average weekly work hours	.00	.01	.04	-.00	.01	.00
Work role quality	.10	.05	.20*	-.01	.04	-.02
Support from workplace	.05	.07	.06	.07	.06	.09
Family Variables:						
Number of children	.17	.11	.14	.19	.10	.17†
Family role quality	.01	.06	.01	.06	.05	.10
Extended familial support	.04	.07	.06	.05	.06	.07
Support from husband	-.02	.10	-.02	.10	.09	.10
Hired help	-.03	.10	-.02	-.12	.09	-.12

Note. * $p < .05$. ** $p < .01$. † $p < .06$

Hypothesis 2

The present chapter examined whether positive spillover also has unique work and family antecedents like work-family conflicts. In general, Hypotheses 2 and its corresponding sub-hypotheses were not supported due to the lack of strong association between positive spillover and domain specific variables. The only exception is the significant contribution of job role quality on work-to-family positive spillover. The main finding of analyses on positive spillover appeared to be the impact of acculturative variables. People with higher level of acculturation reported high levels of both work-to-family and family-to-work positive spillover (although near significant for the latter). There also appeared to be a near significant association between enculturation and increase in work-to-family positive spillover. In addition, correlation analyses suggested the potential for younger age to contribute to more family-to-work positive spillover.

Chapter VI

RESULTS: WORK-FAMILY EXPERIENCES AND WELL-BEING

This chapter presents correlation and regression results exploring which variables contributed to work-family emotions (Hypothesis 3) and physical health (hypothesis 4). Hypotheses testing involved conducting bivariate correlation analyses to test preliminary relationships. Next, hierarchical regression analyses were conducted to predict emotions and physical health while controlling for demographic variables in Step 1. Acculturative variables were entered simultaneously in Step 2. As in previous analyses, all continuous study variables were centered to minimize round off errors (Neter et al., 1996).

Research Q3: What are the variables that contribute to work-family emotions?

Correlation Analyses

In order to explore the relationships between work-family conflict, work-family positive spillover, and emotions in both positive and negative valences, bivariate correlations were conducted. Table 6.1 presents correlations between emotions, demographics, and outcome variables. Among background variables, enculturation (AAMASC) was correlated with positive emotions ($r = .25, p < .01$). As hypothesized, conflict was negatively associated with positive emotions (work-to-family conflict: $r = -.36, p < .01$; family-to-work conflict: $r = -.20, p < .01$) and positively associated with negative emotions (work-to-family: $r = .56, p < .01$; family-to-work: $r = .38, p < .01$).

Work-to-family positive spillover was correlated with positive emotions ($r = .43, p < .01$)

and negatively correlated with negative emotions ($r = -.20, p < .05$). Contrary to

expectation, family-to-work positive spillover was not associated with either valence of

emotions.

Table 6.1 Correlation for emotions and demographic variables

Variable	Positive Emotions	Negative Emotions
1. Age	.04	-.08
2. Education	-.01	-.01
3. AAMASC	.25**	-.15
4. AAMASE	.12	.01
5. W-F Conflict	-.36**	.56**
6. F-W Conflict	-.20*	.38**
7. W-F Positive Spillover	.43**	-.20*
8. F-W Positive Spillover	.13	-.02

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. (2-tailed).

The next set of bivariate analyses (Table 5.5) examined the relationships between

emotions, work related variables, and family-related variables. As expected, both work

and family role qualities were positively associated with positive emotions (work role

quality: $r = .42, p < .01$; family role quality: $r = .28, p < .01$) and negatively associated

with negative emotions (work role quality: $r = -.52, p < .01$; family role quality: $r = -.49$,

$p < .01$). In addition, higher number of work hours was associated with negative emotions

($r = .20, p < .05$). Surprisingly, support from husband was negatively associated with

positive emotions ($r = -.18, p < .05$) yet positively associated with negative emotions ($r

= .16, p < .05$).

Table 6.2 Correlation for emotions and work/family related variables

Variable	Positive Emotions	Negative Emotions
Work related variables:		
1. Avg weekly work hour	.00	.20*
2. Work role quality	.42**	-.52**
3. Support from workplace	.14	-.15
Family related variables:		
4. Number of children	.06	.03
5. Family role quality	.28**	-.49**
6. Extended familial support	.03	.10
7. Support from husband	-.18*	.16*
8. Hired help	.02	.09

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. (2-tailed).

Hierarchical regression analyses

A total of four, three-step hierarchical regression analyses were conducted to determine the relationships between emotions (positive and negative) and work-family outcomes. Given the high correlation between the two conflict measures and the two positive spillover measures, separate multiple regressions were run for work-to-family and family-to-work outcomes. Another set of hierarchical regression analyses were then conducted to determine the relationship between emotions and domain-specific variables. All domain-specific variables were entered for exploratory reasons even though our key variables of interest were the two role qualities. For all regressions, demographic variables were entered in step 1 and acculturative variables were entered in step 2.

Table 6.3 displays the regression coefficients and R square statistics for regression models exploring emotions and outcome measures. In the model of work-to-family

outcomes and positive emotions, demographic variables were not predictive of the criterion variable. However, when acculturative variables were entered, the new model accounted for 10% of the total variance, $F(4, 151) = 4.18$, $p < .01$. Positive emotions increased with the rise of acculturation levels ($\beta = .19$, $p < .05$) and enculturation levels ($\beta = .29$, $p < .01$). When work-to-family conflict and positive spillover were added in Step 3, they increased prediction over and beyond that of demographics and acculturation by 22% ($\Delta F(2, 149) = 24.05$, $p < .01$). The full model now accounted for 32% of the total variance, $F(6, 149) = 11.65$, $p < .01$. Post hoc analyses suggested that both decreased conflict and increased positive spillover were associated with increase in positive emotions (work-to-family conflict: $\beta = -.31$, $p < .001$; work-to-family positive spillover: $\beta = .32$, $p < .001$). On the other hand, when work-to-family outcomes were replaced by family-to-work outcomes in step 3, the model only accounted for 14% of the total variance, $F(6, 149) = 3.95$, $p < .01$. Post hoc analyses suggested that family-to-work conflict had a significant contribution to positive emotions ($\beta = -.19$, $p < .05$) whereas family-to-work positive spillover did not have an effect on conflict.

In terms of negative emotions, none of the demographic or acculturative variables made significant contributions to predicting the criterion variable. When work-to-family outcomes were added in Step 3, however, the model as a whole explained 36% of the total variance, $F(6, 149) = 13.76$, $p < .01$. Specifically, it appeared that work-to-family conflict explained most of the variance in negative emotion ($\beta = .56$, $p < .01$) whereas work-to-family positive spillover did not make a significant impact. When work-to-family outcomes were replaced with family-to-work outcomes, the model was once again significant and explained 18% of the total variance, $F(6, 149) = 5.53$, $p < .01$. Similar to

the finding in work-to-family outcomes, only family-to-work conflict had a significant

contribution to predicting negative emotions ($\beta = .42$, $p < .01$).

Table 6.3 Hierarchical regression analyses predicting emotions with work-to-family outcomes and family-to-work outcomes

	Positive Emotions			Negative Emotions		
	B	SE B	β	B	SE B	β
Step 1:	$R^2 = .00$			$R^2 = 01$		
Demographic Variables						
Age	.00	.01	.02	-.01	.01	-.08
Education	-.03	.07	-.04	.04	.08	.05
Ethnicity	-.06	.05	-.10	.04	.05	.07
Step 2:	$R^2 = .10**$; $\Delta R^2 = .10**$			$R^2 = .03$; $\Delta R^2 = .03$		
Acculturation/Enculturation:						
AAMASE (accult.)	.23	.10	.19*	-.03	.11	-.03
AAMASC (encult.)	.24	.07	.28**	-.15	.08	-.16
Step 3:	$R^2 = .32***$; $\Delta R^2 = .22***$			$R^2 = .36***$; $\Delta R^2 = .32***$		
Work-to-Family Outcomes:						
W-F conflict	-.14	.03	-.32***	.27	.03	.56***
W-F positive spillover	.25	.05	.33***	-.07	.06	-.09
Step 3:	$R^2 = .14**$; $\Delta R^2 = .04*$			$R^2 = .19***$; $\Delta R^2 = .15***$		
Family-to-Work Outcomes:						
F-W conflict	-.08	.04	-.19*	.20	.04	.42***
F-W positive spillover	.07	.07	.09	.01	.07	.01

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. Work-to-family and family-to-work domains are entered in step 3 in two separate regressions.

Table 6.4 displays the regression results exploring the predictive power of domain

specific variables. As shown, work role quality was positively associated with positive

emotions ($\beta = .32$, $p < .001$) and inversely associated with negative emotions ($\beta = -.31$, p

$< .001$). On the other hand, family role quality was associated with negative emotions

only ($\beta = -.33$, $p < .001$), but not with positive emotions. In addition, support from

husband was inversely related to positive emotions ($\beta = -.19$, $p < .05$).

Table 6.4 Hierarchical regression analyses predicting emotions with domain-specific variables

	Positive Emotions			Negative Emotions		
	B	*SE B*	*β*	*B*	*SE B*	*β*
Step 1:	$R^2 = .00$			$R^2 = .01$		
Demographic Variables						
Age	.01	.01	.04	-.01	.01	-.07
Education	-.02	.07	-.02	.01	.07	.01
Step 2:	$R^2 = .10**; \Delta R^2 = .10***$			$R^2 = .03; \Delta R^2 = .03$		
Acculturation/Enculturation:						
AAMASE (accult.)	.23	.10	.20*	-.08	.11	-.07
AAMASC (encult.)	.26	.07	.29***	-.15	.08	-.16
Step 3:	$R^2 = .32***; \Delta R^2 = .22***$			$R^2 = .44***; \Delta R^2 = .41***$		
Work Variables						
Average weekly work hours	.01	.01	.09	.01	.01	.14
Work role quality	.12	.03	.32***	-.12	.03	-.31***
Support from workplace	.08	.05	.12	-.08	.04	-.13
Family Variables:						
Number of children	-.00	.07	-.01	.10	.07	.09
Family role quality	.04	.04	.08	-.17	.04	-.34***
Support from extended family	.02	.04	.03	.08	.04	.12
Support from husband	-.17	.07	-.19*	.07	.06	.08
Hired help	.04	.07	.04	-.01	.06	-.02

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. Slight changes in beta coefficients in step 1 and 2 from Table 6.3 are due to missing data analyses.

Hypothesis 3

Hypothesis 3 stated that emotions would be impacted by conflict, positive spillover, as well as domain specific factors. Our analyses confirmed hypothesis 3a in finding that both directions of conflict were negatively associated with positive emotions and positively associated with negative emotions. On the other hand, hypothesis 3b is only partially supported. Positive spillover appeared to be associated with positive emotion only when the spillover is in the direction of work-to-family but not in the other direction. Furthermore, positive spillover was not associated with negative emotions. Hypothesis 3c stated that role qualities would be important variables in contributing to work-family emotions. The present study found that work role quality was indeed important in emotional reactions to multiple roles for both positive and negative emotions. However, family role quality was only important in predicting negative emotions.

The regression analyses also explored the effects of demographic, acculturative, and other domain-specific variables. Positive emotion was predicted by increase in levels of both acculturation and enculturation. In addition, support from husband is negatively associated with positive emotions.

Research Q4: What variables contribute to physical health?

Correlation Analyses

Table 6.5 displays correlations between physical health and demographic, work-family outcome, and domain specific variables. As shown, physical health was correlated with acculturation ($r = -.17$, $p < .05$), work role quality ($r = -.18$, $p < .05$), and family role quality ($r = -.20$, $p < .05$). Given that a smaller number denoted better health in the coding scheme, the results suggested that high levels of enculturation, high work role quality, and high family role quality contributed to better physical health. Contrary to prediction, physical health was not correlated with any conflict or positive spillover measures.

Table 6.5 Correlation for physical health and other study variables

Variable	Health
Demographic Variables	
1. Age	-.06
2. Education	.10
3. AAMASC	.09
4. AAMASE	-.17*
Work-Family Outcomes	
5. W-F Conflict	.08
6. F-W Conflict	.07
7. W-F Positive Spillover	-.13
8. F-W Positive Spillover	-.01
Work Variables:	
9. Avg weekly work hour	.09
10. Work role quality	-.18*
11. Support from workplace	-.08
Family Variables:	
12. Number of children	.03 .
13. Family role quality	-.20*
14. extended familial support	-.02
15. Support from husband	.03
16. Hired help	-.06

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. (2-tailed).

Hierarchical Regressions

Two three-step hierarchical regression analyses were conducted to determine the relationships between health and work-family outcomes while controlling for demographic (step 1) and acculturative (step 2) variables. Similar to regression analyses of emotions, work-to-family outcomes were run in a separate regression model than family-to-work outcomes. Another hierarchical regression analysis was then conducted to determine the relationship between health and domain-specific variables. All domain-specific variables were entered for exploratory reasons even though our key variables of interest were the two role qualities.

Table 6.6 displays the R square statistics and beta coefficients of the first two regressions. None of the models were found to explain a significant portion of the variance in physical health. However, post hoc analyses detected a significant contribution of acculturation on predicting changes in physical health ($\beta = -.19$, $p < .05$). Table 6.7 displays the regression results for domain-specific variables and physical health. Given that the same demographic and acculturative variables were entered in this regression, this analysis only provides additional information in its exploration of domain specific variables. None of the domain-specific variables was significant in predicting physical health.

Table 6.6 Hierarchical regression analyses predicting physical health with work-to-family outcomes and family-to-work outcomes

	Health		
	B	*SE B*	*β*
Step 1: R^2 =.01			
Demographic Variables			
Age	-.01	.01	-.03
Education	-.09	.09	-.09
Step 2: R^2 = .05; ΔR^2 = .05*			
Acculturation/Enculturation:			
AAMASE (accult.)	-.27	.12	-.19*
AAMASC (encult.)	.05	.09	.05
Step 3: R^2 = .07; ΔR^2 = .02			
Work-to-Family Outcomes:			
W-F conflict	.06	.05	.10
W-F positive spillover	-.09	.08	-.10
Step 3: R^2 = .06; ΔR^2 = .04			
Family-to-Work Outcomes:			
F-W conflict	.06	.05	.11
F-W positive spillover	.01	.09	.01

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. Due to high correlation between the two conflict scales and between the two positive spillover skills, work-to-family and family-to-work domains are entered in step 3 in two separate regressions. Health is coded so that lower number represents better health.

Table 6.7 Hierarchical regression analyses predicting physical health with domain-specific variables

	Health		
	B	*SE B*	*β*
Step 1: R^2 = .01			
Demographic Variables			
Age	-.00	.01	-.01
Education	-.14	.09	-.12
Step 2: R^2 = .05; ΔR^2 = .04			
Acculturation/Enculturation:			
AAMASE (accult.)	-.27	.12	-.19*
AAMASC (encult.)	.06	.09	.05
Step 3: R^2 = .11; ΔR^2 = .06			
Work Variables			
Average weekly work hours	.01	.01	.05
Work role quality	-.04	.04	-.09
Support from workplace	-.02	.07	-.03
Family Variables:			
Number of children	.03	.11	.02
Family role quality	-.11	.06	-.18
Support from extended family	.02	.06	.02
Support from husband	.01	.09	.01
Hired help	-.00	.10	-.00

Note. * $p < .05$. ** $p < .01$. *** $p < .001$. Slight changes in beta coefficients in step 1 and 2 from Table 6.3 are due to missing data analyses through case-wise deletion.

Hypothesis 4

Hypothesis 4 made predictions regarding the relationship between physical health, work-family outcomes, and domain-specific variables. These predictions were not supported by the data analyses. Physical health was not associated with conflict or positive spillover. Even though correlations found significant associations between physical health and the two role qualities, these associations did not remain significant after controlling for demographic and acculturative variables. Surprisingly, regression analyses found a significant association between acculturation and physical health so that increase in acculturation was associated with better health.

Chapter VII

RESULTS: BELIEFS, SUPPORT, AND WORK-FAMILY EXPERIENCES

This chapter presents results exploring the roles played by beliefs (gender role ideology and views on family-work interdependence) and extended familial support in Asian American mothers' work-family experiences. Two types of analyses were performed. For exploration of mediation effects of beliefs and extended familial support, path analyses using SEM were conducted on the pathways between acculturative variables and work-family outcomes and emotions. For exploration of moderating effects of beliefs and extended familial support, regression analyses with interaction terms were conducted. SEM was chosen for mediation analyses for its advantage in controlling for measurement errors and efficiency. Furthermore, Sobel tests were conducted when appropriated to test whether the indirect effects were significant.

Research Q5: What roles do gender role ideology, work-family interdependence, and extended familial support play on work-family outcomes?

Mediation Analyses

Earlier regression analyses found that acculturative variables were associated with positive spillover and positive emotion. Mediation analyses were conducted on those pathways to test whether acculturative variables were mediated by work-family interdependence, gender role ideology, and familial support to affect positive spillover

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and positive emotion. Instead of using demographic variables as default controls, control variables were selected based on significant association with the outcome variable in earlier hierarchical regression analyses. Additional path analyses conducted for other outcome variables (e.g. conflict) were not significant.

Figure 7.1 displays the path diagram and standard coefficients examining the relationship between enculturation and work-to-family positive spillover. As in all the other path diagrams, work-family interdependence, gender ideation, and extended familial support were included as possible mediating factors. Job quality was included as a control variable based on its significant contribution to work-to-family positive spillover in earlier findings. The direct effect of enculturation (AAMASC) and work-to-family positive spillover was not significant. As predicted, the direct effect of enculturation (AAMASC) and interdependence was positive and significant ($\beta = .21$, $p < .05$), as was the direct effect of interdependence on work-to-family positive spillover ($\beta = .15$, $p < .05$). While the two significant paths suggested evidence of a mediation effect, the indirect effect between enculturation and spillover was not significant by the Sobel test of mediation ($z = 1.60$, $p < .11$). Extended family support and gender ideation were not associated with enculturation or work-to-family positive spillover.

Figure 7.2 displays the relationship between acculturation (AAMASE) and work-to-family positive spillover. Again, job role quality was entered as the control variable. The direct effect between acculturation and work-to-family positive spillover was not significant between acculturation and spillover. Furthermore, the direct effect between acculturation and interdependence was positive and significant ($\beta = .16$, $p < .05$), as was the direct effect of interdependence and work-to-family positive spillover ($\beta = .16$, p

< .05). However, the indirect (mediation) effect between acculturation and spillover through interdependence was not significant by the Sobel test ($z = 1.49$, $p = .14$). The finding of a positive relationship between acculturation and interdependence was contrary to our prediction. Extended family support and gender ideation were not associated with acculturation or work-to-family positive spillover.

Figure 7.3 displays the relationship between enculturation (AAMASC) and positive work-family emotion. Work-to-family conflict, work-to-family positive spillover, and family-to-work conflict were entered as covariant (control) variables. Work-family interdependence had a significant and positive direct effect with enculturation ($\beta = .21$, $p < .01$) and with positive emotion ($\beta = .17$, $p < .05$). However, there was a positive and significant relationship between enculturation and positive emotion ($\beta = .14$, $p < .05$). The indirect effect was not significant by the Sobel test ($z = 1.83$, $p = .07$). There was also a direct negative effect between gender ideation and positive emotion ($\beta = -.13$, $p < .05$). Given the significance of .07 in the Sobel test, an additional mediation analysis using bootstrapping was conducted. The result, however, remained insignificant.

Figure 7.4 displays the relationship between acculturation (AAMASE) and positive work-family emotion using the same covariant as entered in previous analysis. Work-family interdependence had a significant and positive direct effect with acculturation ($\beta = .16$, $p < .01$) and with positive emotion ($\beta = .19$, $p < .05$). The indirect effect, however, was not significant by the Sobel test ($z = 1.76$, $p = .09$). As before, there was a direct negative effect between gender ideation and positive emotion ($\beta = -.12$, p < .05$).
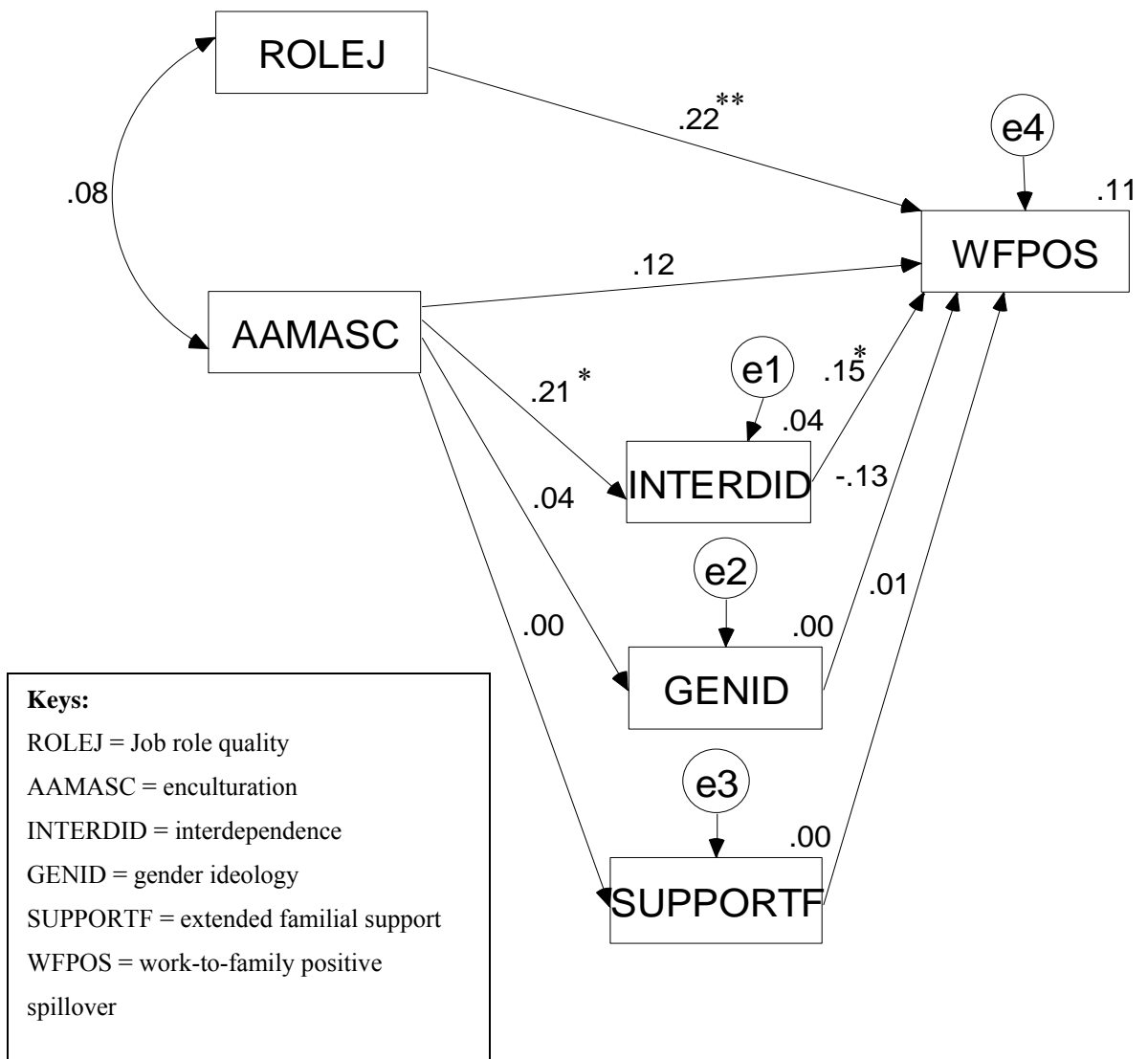
Figure 7.1 Path diagram and standardized coefficients depicting mediation between enculturation and work-to-family positive spillover

ROLEJ

.22**

e4

.11

.05

WFPOS

.10

AAMASE

.16*

e1

.16*

.03

-.05

INTERDID

-.12

e2

.01

.02

.00

GENID

e3

.00

SUPPORTF

Keys:

ROLEJ = Job role quality

AAMASE = acculturation

INTERDID = interdependence

GENID = gender ideology

SUPPORTF = extended familial support

WFPOS = work-to-family positive
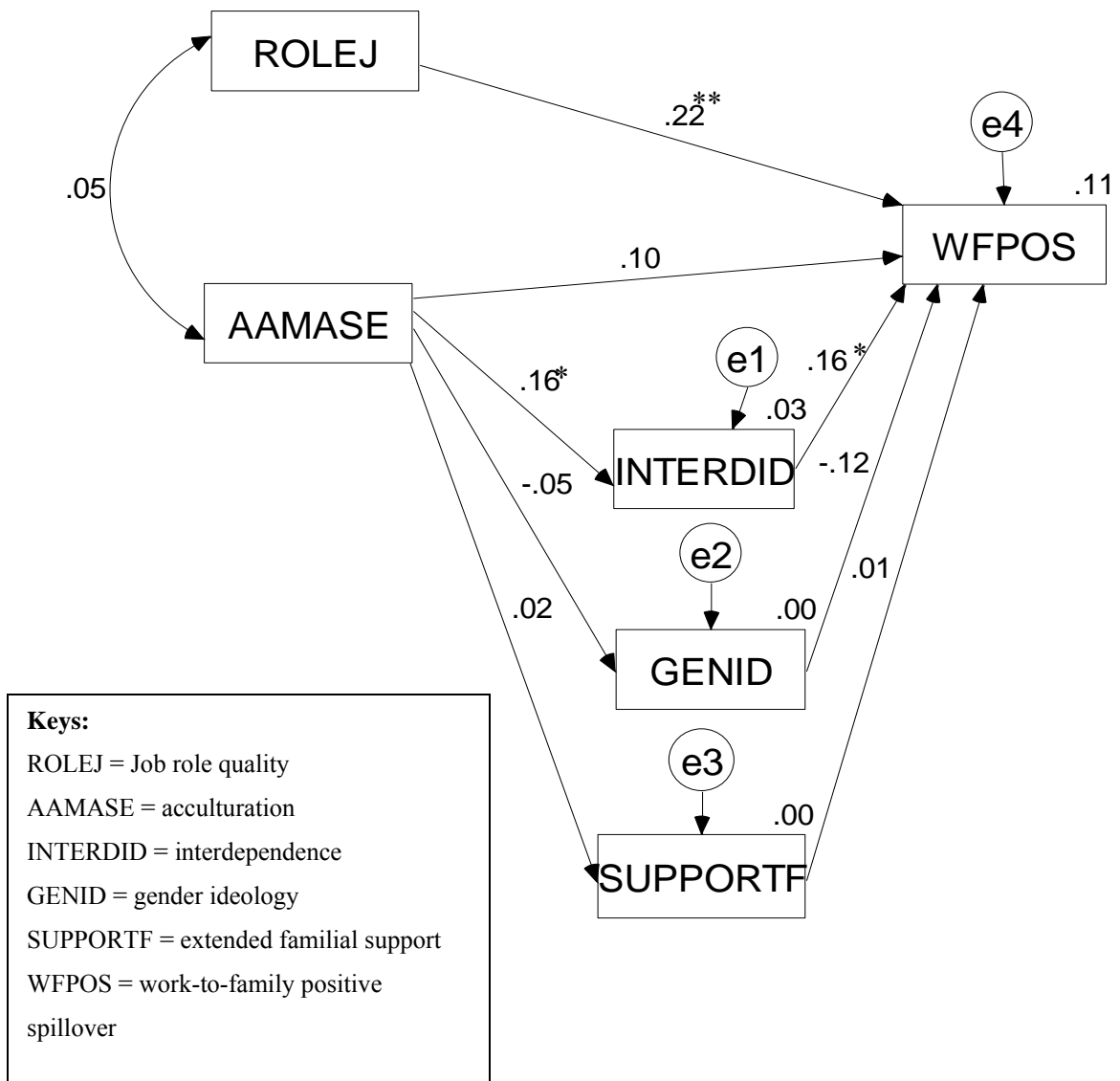
spillover

Figure 7.2 Path diagram and standardized coefficients depicting mediation between acculturation and work-to-family positive spillover.

WFCONF

WFPOS

FWCONF

AAMASC

-.15

***
.51

-.02

-.07

.17

-.11

-.29 ***

.32***

-.04

.14*

.21**

.04

.00

e1

.04

INTERDID

e2

GENID

e3

.00

SUPPORTF

.17 *

-.13

.00

.05

.00

e4

.33

POSEMO

Keys:

WFCONF = work-to-family conflicts

WFPOS = work-to-family positive

spillover

FWCONF = family-to-work conflict

AAMASC = enculturation

INTERDID = interdependence

GENID = gender ideology

SUPPORTF = extended familial support

POSEMO = Positive emotions
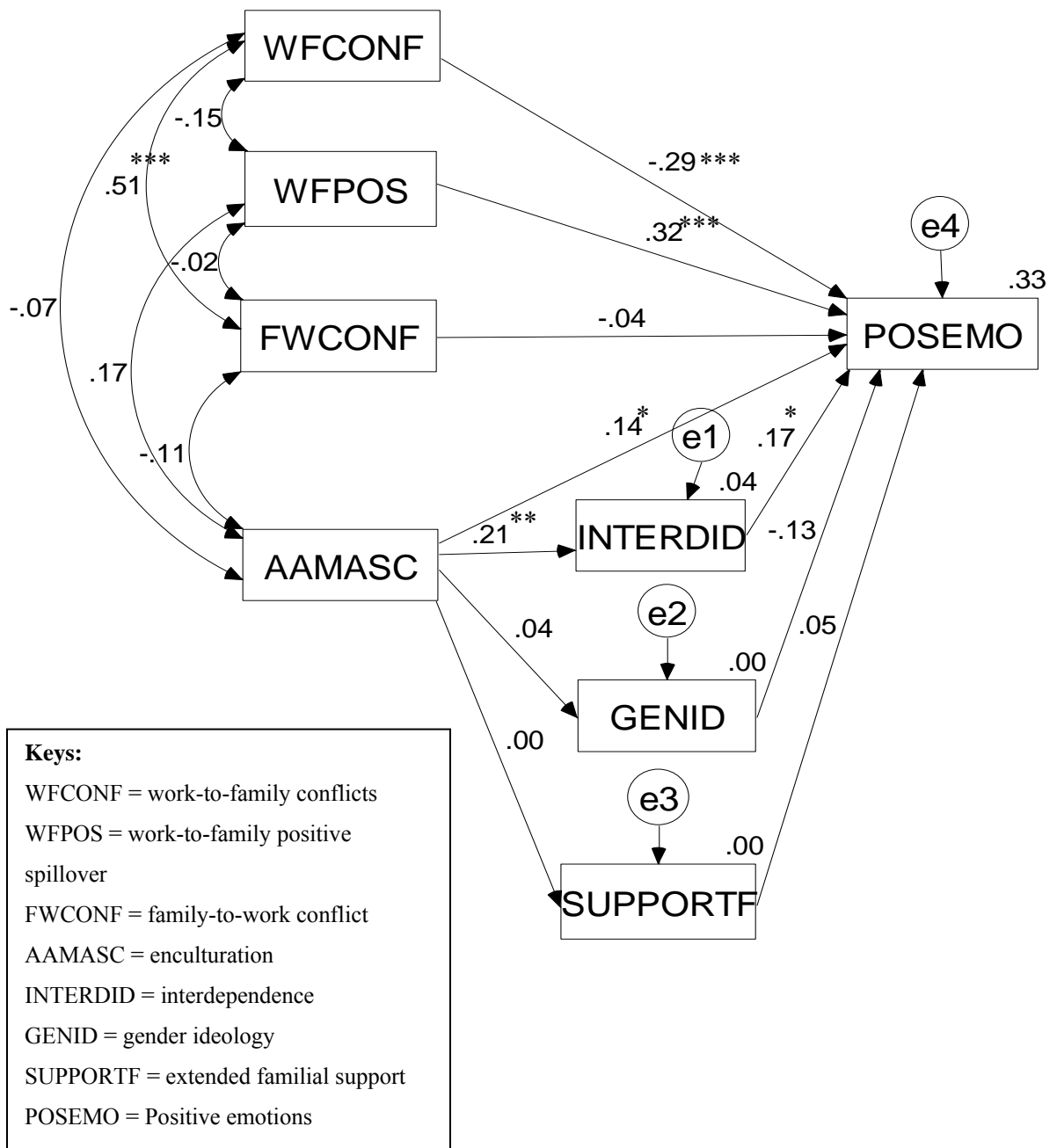
Figure 7.3 Path diagram and standardized coefficients depicting mediation between
enculturation and positive work-family emotion.
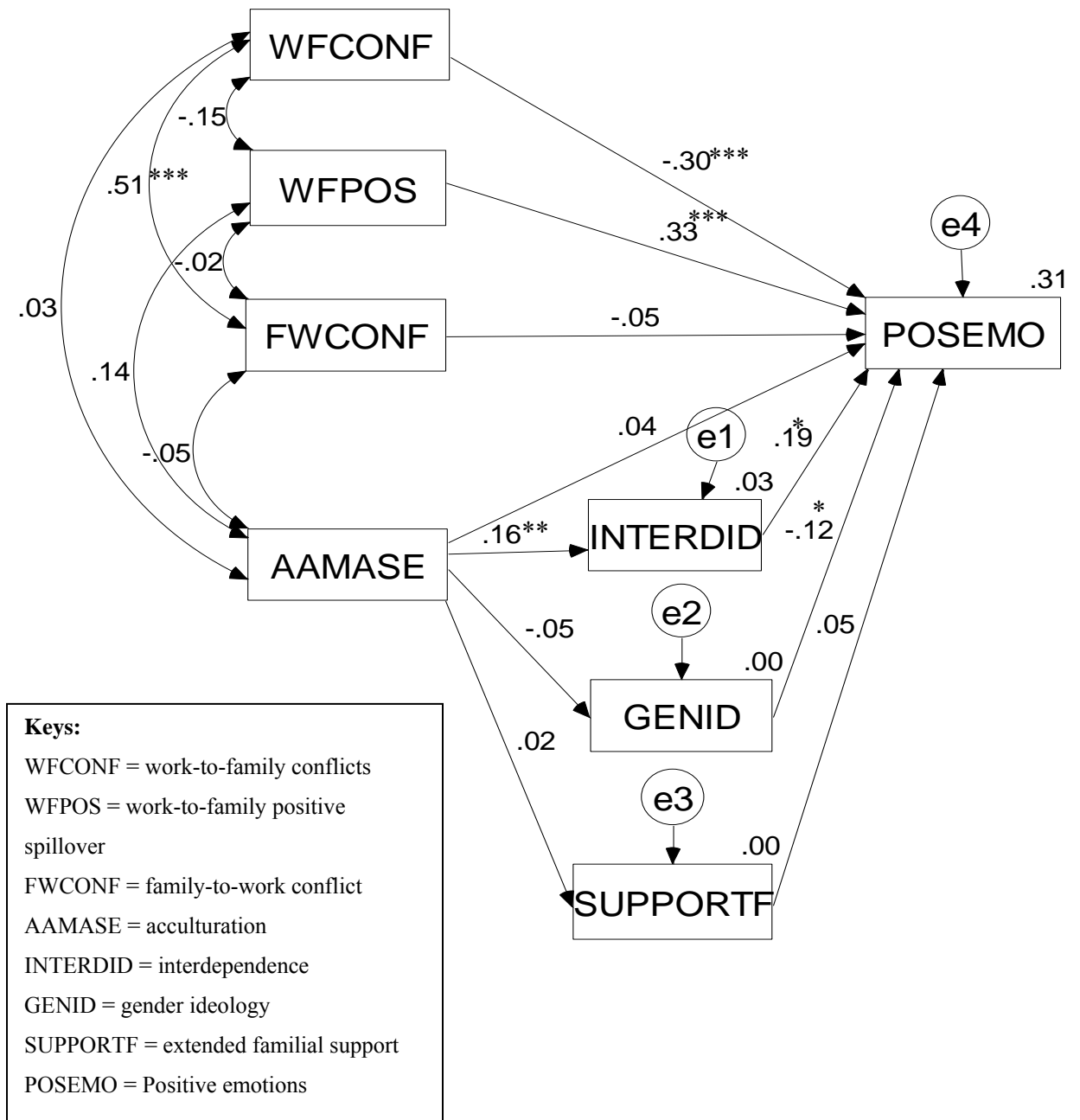
Figure 7.4 Path diagram and standardized coefficients depicting mediation between acculturation and positive work-family emotion.

Moderation Analyses

Following mediation analyses, the moderating role of beliefs, acculturation and familial support (from extended family members) were examined through hierarchical regression with interaction terms. In terms of predicting positive emotion, the interaction term between work-to-family positive spillover and gender ideation ($\beta = .19$, $p < .01$) and between work-to-family positive spillover and extended familial support ($\beta = -.15$, $p < .05$) were significant in predicting positive emotions. None of the interaction terms was significant for negative emotion.

In order to interpret the interaction results, plots were made to show the relationship between work family positive spillover (X) and mean positive emotion (Y) when there is high level and low level of gender role ideation and extended familial support. As shown (Figure 7.5), at a moderate level of work-to-family positive spillover, the effect of positive spillover on producing positive emotion increased when there was a higher endorsement of equal gender role ideology. Figure 7.6 shows that for participants with lower level of work-to-family positive spillover, the effect of positive spillover on generating positive emotions increased when there was more support from extended family members.
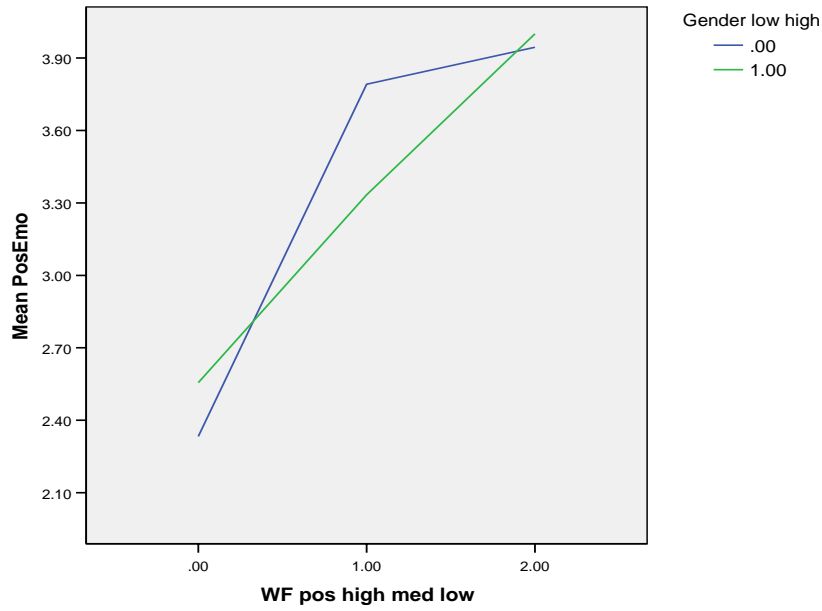
Figure 7.5 Effect of work-to-family positive spillover on mean level of positive emotion for low versus high level of traditional gender role.
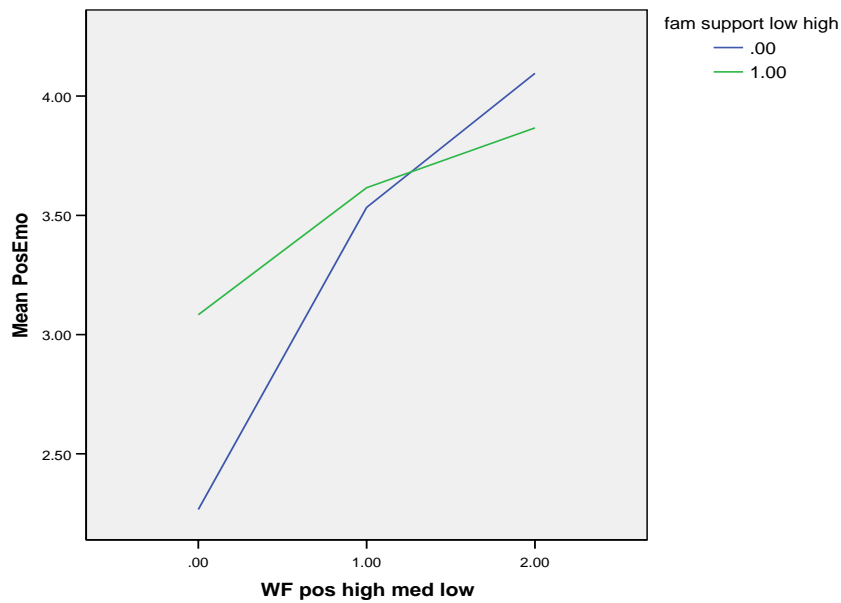
Figure 7.6 Effect of work-to-family positive spillover on mean level of positive emotion for low versus high level of extended family support.

Hypothesis 5

Hypothesis 5 made predictions regarding the mediating and moderating roles of extended familial support, gender ideology, and role interdependence. Overall, the results predicting positive emotions provided partial support for the potential mediating effect of work-family interdependence and for the mediating effect of gender role ideology and extended familial support.

In terms of mediation effects, path analyses found that both enculturation and acculturation were positively associated with interdependence, which was positively associated with work-to-family positive spillover and positive emotions. The finding of significant paths with acculturation was unexpected given interdependence's association with more traditional Asian values. Despite these significant pathways, the indirect effects were not significant by Sobel tests. In addition, gender ideation was negatively associated with positive emotion, but it was not related to acculturative variables as had been predicted. Extended familial support was not associated with acculturation or any work-family outcome variables. Overall, hypothesis 5a was not supported because there was no significant mediation effect. However, the significant standardized coefficients suggest that mediating effect of perception in work-family interdependence may become significant with a larger sample size.

Hypothesis 5b stated that gender role ideology, work-family interdependence, and extended familial support moderate the effects between work-family outcome and emotions. This hypothesis was partially supported by the finding that gender role ideology and extended familial support moderate the relationship between positive work-to-family spillover and positive emotion. Specifically, endorsement of more equal gender

role ideology increased the effects of work-to-family positive spillover on positive

emotion when there was a moderate level of positive spillover. On the other hand, as

extended familial support increase, work-to-family positive spillover has more effects on

generating positive emotion when the level of positive spillover is low.

Chapter VIII

DISCUSSION

Work-Family Conflict and Positive Spillover

The current study attempted to provide an exploratory analysis of work-family experiences among Asian American working mothers, beginning with an examination of work-family conflict. Previous meta-analytic review of studies from Asian and western cultures has found that work-to-family conflict and family-to-work conflict have shared antecedents (e.g. job stress and family stress) as well as unique antecedents (e.g. work variables on work-to-family conflict and family variables on family-to-work conflict) (Byron, 2005). The present findings suggest that Asian American women share similar antecedents in their work-to-family conflict as theorized in Frone et al.'s (1992) model, whereas his model of family-to-work conflict is not as applicable.

First, results indicated that work-to-family conflict was associated with work variables, including number of work hours, work role quality, and workplace support of familial obligations. Participants' open-ended answers pointed to work hours as a major antecedent. For example, one mother wrote, "(My work) requires long hours, which I often put in after my child goes to bed. This affects how engaged I am with my child when I get home. Even though I may physically be interacting with my son, mentally my mind is still on the work I have to finish once he goes to sleep, and I'm less cheerful and

happy as a result." Acculturation and enculturation were not found to have an effect on level of work-to-family conflict. Thus, it appears that antecedents to work-to-family conflict among Asian American women are similar to those found in other cultures. This suggests that the effect of work environment on family may be quite universal in different cultures.

On the other hand, family-to-work conflict was associated with family role quality, but not with familial support and hired help variables as hypothesized from Frone's model. One potential explanation for the lack of association with the support variables is that this study defined familial support as instrumental support on domestic role. However, instrumental support may be provided with either a collaborative or a resentful attitude. Thus, level of instrumental support may not reflect the level of emotional support. It is possible that emotional support from family members on the mother's work role is more directly associated with family-to-work conflict than instrumental support. Recently, a study reported that emotional spousal support predicted better marital satisfaction and less marital conflict for women with traditional gender roles whereas both forms of support predicted marital satisfaction for women with egalitarian gender role beliefs (Mickelson, Claffey, & Williams, 2006). Given that immigrant Asian American women tend to stay committed to traditional patriarchal structure as a way of maintaining their cultural identity and parental authority (Kibria 1993; Lim, 1997), they are more likely to endorse traditional gender roles and thus may be more affected by emotional support than instrumental support.

One of the control variables, education, was significantly associated with family-to-work conflict, but not with work-to-family conflict. Prior research findings on

education have been mixed. Frone, Russell, and Cooper (1997) reported in their longitudinal study non-significant relationships between education with work-to-family conflict and family-to-work conflict. Other studies, however, have documented a positive association between education and work-to-family conflicts (e.g. Thompson & Prottas, 2004). Because education influences the type of jobs attained, one expects to see a stronger association with work-to-family rather than family-to-work conflict. A potential explanation is that Asian American women tend to internalize the need to prioritize familial obligations before their work responsibilities due to the cultural expectation for women to be responsible for domestic activities. Higher education may increase their workload and complexity of their daily tasks but it does not necessarily exempt them from their familial responsibilities, thus increasing their family-to-work conflict. The centrality of family is reflected in this participant's open-ended response, "I rush through work and do only what is necessary so I can spend more time with my family."

Another unusual finding in the analyses of conflict is the positive association between instrumental support from husband and work-to-family conflict. While unexpected, this finding is possibly related to the cyclic relationship between work-family conflict and support, such that women who experience more work-to-family conflict in turn receive more instrumental help from their husbands. This can occur as the result of wives being more demanding of help due to their increased stress or husbands being more willing to volunteer their help to support their spouses. Another interpretation is that conflict is associated not with the quantity of instrumental support, but with the quality of instrumental support. Frequency of help from husband may not reflect the level of satisfaction wives experience, especially if the support was perceived as of poor

quality or given unwillingly. Finally, asking for help may be inherently stressful for women if they interpret their help-seeking as a sign of failure. Such stress can influence their ability to cope with work-family conflict.

In general, the results indicate that work and family role qualities are important factors when exploring both directions of conflict. While their roles as shared antecedents may be similar across families of different cultures, researchers should be mindful that there may be more variability between family experiences than work experiences. Thus, future studies on Asian American mothers should explore Asian American specific family variables, such as co-residence with parents/in-laws, utilization of support from ethnic organizations, intergenerational acculturative conflicts, and delegation of household work to older children.

In addition to examining conflict, the present study was the first attempt to explore behavioral and values based work-family positive spillover among Asian American working mothers with young children. In general, participants reported moderately high levels of family-to-work positive spillover ($M = 3.78$) and work-to-family positive spillover ($M = 3.35$). In their open-ended responses, participants not only recognized concrete resources such as added income and health insurance benefits from their jobs, but they also emphasized positive transfer of skills and values from their work to their family. For example, one mother stated, "My work requires that I critically think, evaluate, and reflect upon what I do. This is important in my family as well when I am able to reflect on different issues at home and how to work through those issues in a positive way." Other cited transferable skills included "leadership," "communication," and the expansion of "different perspectives."

Currently only one empirical study has explored specific antecedents of work-family positive spillover. Grzywacz and Marks (2000) found that affective (emotional) support from one's spouse and from family members were related to family-to-work direction of positive spillover whereas increased decision latitude and decreased pressure at work were related to both directions of positive spillover. In this study of Asian American working mothers, work role quality is the only domain-specific variable that was predictive of work-to-family conflict whereas number of children was associated with family-to-work conflict, but the association was not significant ($p = .05$). These findings suggest that positive spillover and work-family conflict are orthogonal, each with unique antecedents. Contrary to Grzywacz & Marks' finding on emotional support, there was no association between familial instrumental support variables and positive spillover in this sample. This again indicated the importance of distinguishing between emotional and instrumental support when studying work-family experiences.

The results suggested that acculturative variables were influential on both directions of positive spillover among Asian American mothers. Acculturation was associated with both work-to-family positive spillover and family-to-work positive spillover, although the latter was only near-significant ($p < .06$). On the other hand, enculturation was associated with work-to-family positive spillover ($p = .05$). Prior research on Asian Americans has reported a positive association between acculturation and work experience. For example, compared with less acculturated counterparts, higher acculturated Asian American exhibited more independent and mature attitudes in career choices (Hardin, Leong, & Osipow, 2002), reported more satisfaction and less stress with their jobs, and received better evaluations from their supervisors (Leong, 2001). Despite

the seemingly positive effect of acculturation, Leong interpreted the associations to be a manifestation of the in-group bias in which managers and supervisors evaluated acculturated workers more positively because of their perceived similarity to the majority group. Leong alleged that there should be "no reason to support the notion that more Westernized (high acculturation) workers are better workers" (Leong, p. 269). However, the findings of this study offer an alternative explanation. Compared to less acculturated Asian Americans, acculturated workers may experience more similarities in the values, behaviors, and skills between their work and family roles. This facilitates cross-domain positive spillover, which in turn enhances their job satisfaction and work performance. In that sense, acculturation may be beneficial to Asian American women working in a predominantly white culture.

Influence on Emotional and Physical Well-Being

Chapter VI examined emotions and physical health as potential outcomes of having both work and family roles. As reviewed in Chapter II, work-family conflict has been shown to be related to negative emotional well-being, such as depression (Lee, Um, & Kim, 2004), life-strain (e.g. Matsui, Ohsawa, & Onglatco, 1995), stress (Komarraju, 2002), and decreased life satisfaction (Aryee, 1992) in Asian and Asian American women. Because emotions were defined in this study as reactions to "having both family and work roles and obligations," it is possible to infer the causation from multiple roles to experiencing these emotions. As hypothesized, the findings show that work-family conflicts increase the likelihood of experiencing negative emotions and decrease the likelihood of experiencing positive emotions. Furthermore, the results suggest that both work and family role qualities are associated with negative emotions, and replicate

previous studies documenting the relationship between role satisfaction/quality and psychological distress (e.g. Barnett et al., 1993, Barnett et al., 1995).

Not surprisingly, the most commonly endorsed negative emotion is that of feeling "stressed." In their open-ended answers, participants referred to two forms of stress. First, there is stress inherent in juggling multiple roles with feelings of not performing well in either, "I always feel pulled in many directions, and sometimes like I'm not doing the best I could in either role (work/family) while juggling both." More commonly, stress is reported in terms of negative spill-over from work into family, "When (I am) stressed at work, sometimes it impacts my interactions with my children. I will be more short-tempered and impatient." Negative spillover from work into family appears to be especially stressful when it impacted their parenting abilities. This may be related to Asian cultural expectation for the mother to assume primary responsibility of providing childcare and emotional nurturance to her children (Ho, 1987).

One negative emotion of particular interest when studying Asian American women is *guilt*. When Asians fail to meet familial roles or violate internalized familial rules of conduct, they often feel guilty and ashamed (Sue & Morishima, 1982, as cited by Uba, 1994). Mention of guilt is prevalent in open-ended answers. Many participants experienced it in the family domain, "with young children, there are times when I feel guilty about not spending enough time with my children or missing out on their milestones," whereas a few also referred to guilt in their work performance, "When I have to be away from work due to family issues (e.g. my child is ill), I can't help but feel guilty… even though I know that I shouldn't and have the support of my supervisor." Furthermore, it appears that when faced with guilt, many participants compromised by

neglecting self-care. Participants mentioned sacrificing sleep, hobbies, exercise, and socialization in order to attend to their multiple roles. Because the tendency to self-sacrifice is considered as a highly desirable trait in Asian cultures (Kagitcibasi, 1997; Triandis, McCusker, & Hui, 1990), it may be perceived by Asian American mothers as a natural coping strategy. However, over time it may lead to resentment, fatigue, and decreased satisfaction in both roles. Thus, future researchers should explore self-sacrifice attitude when investigating negative emotions such as guilt in Asian American working mothers.

For a long time, researchers have documented the positive effects employment status has on psychological well-being, from life satisfaction (Barnett & Baruch, 1985) to decreased incidence of depression (Wethington & Kessler, 1989). Despite reports of stress and guilt, respondents in this study endorsed more positive work-family emotions ($M = 3.57$) than negative work-family emotions ($M = 2.91$), showing support for the expansionist theory. The study also explored whether employment positively influences emotional well-being through positive spillover between work and family domains. Among this sample of Asian American working mothers, work-to-family positive spillover was associated with positive emotions of feeling happy, proud, and energized. This lent support to the view that one emotional benefit of having a job is the transference of skills and values from their job role into their family role. Furthermore, positive spillover was not found to be associated with negative emotions, which indicates that positive experiences (spillover and positive emotions) do not necessarily reduce negative emotions. Just because a woman reports positive spillover from her workplace, it does not mean that she's not also struggling with negative feelings from her roles. Thus, it is

important for researchers to assess negative emotions and positive emotions separately, rather than assuming that they are linearly oriented.

Interestingly, positive emotions were found to be associated moderately with acculturation and strongly with enculturation. Together with earlier findings in positive spillover, it appears that acculturative factors play an important role in the development of positive work-family experiences among Asian American working mothers. Given that this particular sample is quite acculturated, the strong association of positive emotions with enculturation may not be a reflection of the beneficial impact of enculturation but that of biculturalism. It has been theorized that individual adaptation to two cultures can be categorized into four acculturative attitudes: *integration*, *assimilation*, *separation*, and *marginalization* (Berry, Kim, Power, Young, & Bajaki, 1989). Integration occurs when an individual becomes proficient in the dominant culture while retaining proficiency in the indigenous culture, also known as *biculturalism*. Unfortunately, this study sample does not have enough participants with low levels of acculturation to categorize the sample into the four acculturative attitudes. However, past research has suggested that biculturalism provides positive benefits (LaFromboise, Coleman, & Gerton, 1993) and contributes to positive psychological outcomes (e.g., Segall, Dasen, Berry, & Poortinga, 1999). Studies of Asian American college students have found that biculturalism is associated with *collective self-esteem*, the degree to which individuals evaluate their cultural groups positively (Kim & Omizo, 2005, 2006). With today's increasing diversity at the workplace, researchers should continue to investigate the role of biculturalism on positive work-family experiences among ethnic minority individuals.

One positive emotion of particular interest when studying Asian American women is pride. Previous research has cited pride as an important psychological gain stemming from employment status for immigrant Asian American women, and a potential pathway through which women learn to endorse more egalitarian gender role ideology (Lim, 1997). In this study, feeling "proud" received higher rating (in terms of intensity of emotions) than all the other emotions. In the qualitative responses, mothers in this study mentioned pride often. For example, one participant wrote, "I'm proud to contribute to our household finances. I feel proud of my work accomplishments and feel like work allows me to continually learn and improve my work related skills/talents." Post hoc analysis also showed that sense of pride was negatively correlated with gender role ideology ($r = -.17, p < .05$), which corresponded to Lim's hypothesis that sense of pride is associated with changes in gender role ideology.

Interestingly, pride was also strongly associated with role interdependence ($r = .26, p < .01$), such that women who were more likely to see work and family roles as being interdependent reported a higher sense of pride. Given the emphasis for women to focus on their familial roles in Asian culture, role interdependence allows women to feel pride from their work by construing it as an extension of their familial responsibilities. Qualitative data sheds light on a specific pathway through which pride and work-family role interdependence are related: self-perception as a role model for one's children. Respondents frequently wrote about ways their work provided an opportunity to model work ethics for their children. For example, one mother said "(Because of work), I am more grounded, responsible, and contribute financially and intellectually to my family. I believe that I am a good role model for my kids because I work hard and love my job."

Apart from positive and negative emotions, it is also important to explore physical well-being as another potential outcome of having multiple roles. Prior research has shown some initial support for the association between work-family experiences and physical health. Among Asian samples, combined work and family stress has been associated with an increase in systolic blood pressure and sleeping problems in a sample of working women in Beijing (Xu et al., 2004), and role quality in the wife and mother roles have been associated with perceived health outcomes in a group of Chinese American and Filipino female caregivers of elderly relatives (Jones et al., 2001). However, this study did not find any association between perceived physical health and work-family outcomes (conflict and positive spillover) and between perceived physical health and domain-specific variables (e.g. role qualities) when controlling for demographic and acculturative variables. The null relationship is similar to those found in a recent study of Latino immigrant workers (Grzywacz et al., 2007)

One interpretation of the null result is that the single-item physical health question is not sensitive enough to pick up health-related problems. When reviewing qualitative data, a total of 23 participants mentioned at least one negative health impact of work-family experience. The most commonly cited ones were "sleep problems," "not enough time to exercise," and feeling "tired/fatigued." Thus, a symptom check list might be better able to identify health issues among Asian American women. It also provides the added advantage of distinguishing between symptoms that are shared between mental and physical health (e.g. sleep) and symptoms that are more physically oriented (e.g. pain).

Surprisingly, there was a significant association between acculturation and physical health. The health consequences of acculturation have been variable in studies of

Asian American immigrants. For example, Frisbie, Cho, and Hummer (2001) found that foreign-born Asian American and Pacific Islander immigrants reported better health than their U.S. –born ethnic counterparts. In contrast, Lee, Sobal, and Frongillo (2000) and Yang (2007) found that among Korean Americans, lower levels of acculturation related to lower health ratings and longer residency in the US is related to better health. This study seemed to support the latter studies in finding a positive correlation between acculturation and health status. Given that the relationship between work-family conflict and physical health has been guided by stress models, it is possible that acculturation to the mainstream culture reduces daily stress, which acts as a buffer to health problems. Alternatively, acculturation may also be related to better health behaviors such as exercise and regular health check-ups.

Gender role ideology, role interdependence, and extended familial support

Qualitative literature has long referred to socio-cultural variables such as beliefs and familial support when attempting to understand the experiences of ethnic minority families. Using acculturation and enculturation as predictors, the present study was the first empirical attempt in assessing the mediating and moderating effects of gender role ideology, role interdependence, and extended familial support on work-family outcomes. The findings show that these variables play an important role in the assessment of *positive* work-family outcome such as work-to-family positive spillover and positive work-family emotions.

Even though the Sobel tests were not significant, the positive associations in the path analyses suggest that role interdependence may still be a potential mediator between acculturative factors (enculturation and acculturation) and positive work-family outcomes

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(work-to-family positive spillover and positive emotions). Specifically, the belief that work and family roles are interdependent may shed light on the expansionist theory. In their description of the processes through which multiple roles benefit one's well-being, Barnett and Hyde (2001) focused only on ways multiple roles add concrete (e.g. added income) and abstract (e.g. increased frame of reference) resources, but not on the cognitive conceptualization of roles. The potential mediating function of role interdependence suggests that cognitive appraisal of roles may also be a pathway through which Asian American mothers benefit from their employment.

Prior qualitative research on Asian American women has suggested that recent immigrants were more likely to report a blurred line between work and family (high role interdependence), which were speculated to reduce inter-role conflict. Contrary to this hypothesis, the path analyses showed that both acculturation and enculturation were positively associated with work-family role interdependence. Two interpretation of this finding will be offered. First, as a cultural *value*, work-family role interdependence may not change as rapidly through acculturation as other behavioral domains such as language and food preferences. For example, Kim, Atkinson, and Yang (1999) found that immigrant and U.S. born Asian Americans were likely to acculturate at a faster rate in terms of behaviors than adopting the values of the host culture. This interpretation is also partially supported by the stronger correlation between role interdependence and enculturation than role interdependence and acculturation.

Alternatively, given the high levels of acculturation and enculturation of the study sample, it is possible that work-family role interdependence may actually be related to biculturalism. A person who has succeeded in integrating two different cultures may be

more interested and exercise more flexibility and integration when faced with multiple

roles. In other word, the experience of integrating two cultures may potentially help a

person integrate work and family domains through work-family role interdependence.

LaFromboise et al. (1993) coined the term *bicultural competence* to describe the process

in which individuals are able to successfully meet the demands of two distinct cultures.

They explained bicultural competence as an incorporation of knowledge, positive

attitudes, efficacy (belief that one can live within both cultures without sacrificing one's

cultural identity), communication skills, role repertoire, and a sense of being grounded, in

both cultures. Many of these processes can be readily applied to the successful integration

of work and family roles. The competence in *efficacy*, especially, is closely related to

work-family role interdependence. Perhaps the framework and current understanding of

bicultural competence can be applied to future development of work-family role

competence to maximize the benefits of having multiple roles.

In terms of gender role ideology and extended familial support, the results did not

uncover any mediation effects. They were not associated with acculturation, enculturation,

or work-to-family positive spillover. The lack of association with acculturative variables

was surprising as both traditional gender role ideology and instrumental support from

extended family members have been related to Asian culture and traditions. One

interpretation is that they are less applicable to highly educated professional women who

have more resources to hire external help and whose identity as a professional woman is

already in conflict with traditional gender roles. Familial support is also less likely for

immigrant participants if most of their relatives are still living in Asia. There was,

however, a negative association between traditional gender role ideation and positive

emotion, such that Asian American mothers with more egalitarian gender role ideology reported more positive work-family emotions. Having egalitarian gender roles may reduce cognitive dissonance of being a working mother, and hence increase experience of positive emotions.

In addition, the present study indicates that gender role ideology and extended familial support are potential moderators when examining positive emotions of Asian American working mothers, but that their moderating effects are dependent upon level of positive spillover from work to family. Specifically, when the level of work-to-family positive spillover is moderate, endorsement of egalitarian gender role ideology increases the amount of positive emotions related to positive spillover. Thus, having egalitarian gender roles may be beneficial for Asian American women who experience a moderate level of work-to-family positive spillover. On the other hand, the moderating effects of extended familial support on work-to-family positive spillover and positive emotion is stronger when there is a lower level of work-to-family positive spillover. Extended familial support is especially beneficial to Asian American mothers' emotional well-being when they are not experiencing a lot of positive spillover from their work into their family.

The nonlinear moderating effect is noteworthy because it shows that even within a group of Asian American women whose gender role ideology and extended familial support were presumed to be important, the moderation effects may not consistent across different work-family experiences. This highlights the importance of contexts and individual difference when applying psychological findings in practical contexts.

Researchers need to be specific about the circumstances of their findings, and be wary of over-generalization.

In summary, the present study contributes to our knowledge of the interconnection between work-family experiences, acculturation, and emotional well-being. First, the results support the presence of unique and shared antecedents for both directions of work-family conflict and positive spillover. Specifically, they emphasize the importance of role qualities in predicting work-family conflict and negative emotions and the significant role played by acculturation and enculturation in positive spillover and the development of positive emotions. Next, review of qualitative data suggests that feelings of pride and guilt are important emotions to consider when studying Asian American mothers. Pride appears to be related to role modeling for one's children and a way to establish further role interdependence between work and family domain. On the other hand, guilt appears to be related to a tendency to self-sacrifice, which illustrates a maladaptive coping strategy endorsed by Asian American mothers. Finally, role interdependence is a potential mediator between acculturation/enculturation and positive outcomes whereas gender role ideology and extended familial support moderate the relationship between positive spillover and positive emotions. Taken together, these results highlight the value of socio-cultural variables (e.g. acculturation/enculturation, role interdependence, and gender role ideology), especially in our understanding of *positive* work-family spillover and emotions among Asian American working mothers.

Study Limitations

Many of the limitations in this study are associated with the use of the Internet as a data collection strategy. First, it may result in a potential selection bias as access to the

Internet tends to be associated with higher levels of education and income (Spooner, 2001). There is also a possibility for multiple submissions of the completed electronic survey by the same individual. Although the study requested contact information (name and a phone number) and recorded IP addresses for participants interested in being included in the raffle, this strategy cannot fully avoid the possibility of multiple submissions using fake identifying information. The study also relied on convenience sample of Internet users through advertisements that target Asian American women, Asian American parents, and Asian American professional groups. It is possible that women in organized groups may not represent those who do not have organized group memberships.

Other limitations are associated with the sample itself. The recruitment strategy in contacting Asian American professional groups also contributed to the high proportion of professional working mothers in this sample. In addition, the sample has a high percentage of Chinese Americans (55%), West Coast residents (65%), and represents a very highly acculturated group. The US Census Bureau (2002) reported that 49% of Asians lived in the West Coast and Chinese Americans comprised more than 20% of the Asian American population as the largest Asian American ethnic group. Even though the ethnic and location biases of this sample correspond to trends in the US population, caution should still be made when generalizing the results of this study to the overall Asian American population. The small variance of acculturation among study participants, coupled with their professional status, should be taken into account. Thus, interpretation of this study's findings should be limited to acculturated, professional

working mothers, and should not be applied to recent immigrant or small-business and family-business owners.

In terms of methodology, the study is cross-sectional and thus cannot be used to infer specific causation without future longitudinal research. In addition, this study did not include a White comparison group and thus cannot provide data in whether gender role ideology, role interdependence, and extended familial support are more related to Asian cultures than European American cultures. Their difference is inferred from pre-existing cross-cultural and qualitative studies instead. While an attempt was made to measure acculturation and enculturation, the sample was too acculturated to make a distinction between different acculturative statuses. Future studies should focus on recruiting participants from diverse acculturation backgrounds through the use of translated surveys in various Asian languages. Furthermore, it may be worthwhile for studies of cultural beliefs in the future to incorporate a values-based scale (e.g. Kim et al.'s 1999 Asian Values Scale) to take into account the difference in acculturation rates between behaviors and values. Finally, the measure of role interdependence does not have a high alpha even though it still showed support for potential mediation roles. Future studies should continue to develop this scale given its relevance to positive work-family outcomes and potential role in promoting work-family balance among Asian American professional women.

Implications for Clinical and Organizational Contexts

The findings have clinical implications for mental health professionals who work with Asian American employed mothers who are experiencing adjustment problems associated with work-family conflict. First, the results underscore the importance of

looking at both work and family domains rather than treating them as separate entities. Therapists should differentiate between the two directions of work-family conflict and work with patients to identify unique and shared antecedents. Specifically, the study demonstrates that domain role qualities are especially important in the development of negative work-family emotions, such as stress, sadness, and guilt. Cognitive therapists can help patients develop a more nuanced understanding of their problems by identifying unique and shared areas of satisfaction and stress, direction(s) of conflict/interferences, and the resultant negative emotion(s). Since family role quality is associated with both directions of conflict, therapists need to assess familial situations such as level of conflict and marital satisfaction regardless of whether the presenting problem is family-to-work or work-to-family conflict. Behaviorally, therapists can then help patients improve role quality by engaging in more satisfactory tasks and in garnering more social support. The results suggest that workplace support of individuals' familial obligations is especially important in ameliorating the intensity of work-to-family conflict. Therapists can support patients in seeking more workplace support for familial obligations or in exploring alternative career options that offer better support.

Qualitative accounts also indicate that participants often neglect self-care when juggling between the two roles. Apart from physical symptoms such as fatigue and sleep problems, Asian American working mothers may sacrifice hobbies, exercise, and socialization in order to attend to their work and family roles. Self-sacrifice has been related to acculturation in that more acculturated Asian Americans were found to have weaker sacrificial ideals than their less acculturated counterparts, even though it is still higher than European Americans (Suzuki & Greenfield, 2002). Thus, in educating Asian

American women on the importance of self-care, therapists need to take into consideration the cultural desirability of self-sacrifice. Through discussing the short- and long-term consequences of self-sacrifice, therapists can help patients in uncovering more adaptive coping strategies.

Although traditional clinical psychology work from a disease framework, recent developments in the field of positive psychology promote the importance of examining how people flourish and succeed in various life domains. The current findings suggest that both role interdependence and gender role ideology are related to positive emotions among Asian American mothers. As cultural-specific variables, they can be incorporated into schema work as part of cognitive therapy. Specifically, counselors can help Asian American women shift their cognitive framework to make their work-family experience more fulfilling. For example, patients who experience cognitive dissonance from working because they believe a woman should stay at home may benefit from discussing ways their work and family roles are interdependent. Therapists can also encourage patients to understand the cultural and familial origins of their work-family beliefs, which may in turn help them to assess the usefulness of these beliefs on managing their multiple roles.

Finally, the association between work family positive spillover and acculturation also has clinical value. For Asian American working mothers, work-family experiences may be closely tied to their levels of acculturation through factors such as acculturative stress, level of bicultural competency, and supervisor inter-group bias. It is important for therapists working with Asian American women to be mindful of workplace prejudice, especially in the presence of communication barriers and adjustment problems related to acculturation. Furthermore, employment discrimination and the glass ceiling

phenomenon may occur even if the patient is acculturated to the US culture. The bicultural nature of this particular sample also points to the potential role biculturalism plays in maximizing positive work-family experiences. When applicable, therapists can draw upon patients' past success in negotiating between the two cultures to help them in managing competing role demands from work and family domains.

The findings also have implications for organizational contexts. Work variables such as number of work hours, support of familial obligations, and role quality were found to be important in predicting work-to-family conflict. Like women from other cultural backgrounds, Asian American women will benefit from family-friendly resources such as flexible work schedules, childcare assistance, and parental leave. When assessing their work role quality, employers should also evaluate if their work satisfaction is impacted by acculturative stress and/or workplace prejudice. In terms of family-to-work conflict, Asian American working mothers appear to be prone to impacts from familial stress. Because Asian Americans tend to be reluctant to seek professional help due to feelings of shame and stigma (Bui & Takeuchi, 1992), employers can help them through making less stigma-laden referrals such as participation in ethnic-specific organizations, Asian American support groups, and Asian specific mental health agencies.

The association between acculturative variables and positive work-family outcomes should be interpreted with caution. Employers should not use the association to justify employment discrimination based on employees' levels of acculturation. Instead, the study suggests that it is advantageous for employers to equally value acculturation to the mainstream culture and maintenance of one's culture of origin as they help build positive spillover. Openness to cultural values difference and empathy toward

acculturative stress will likely improve employer-work relationships and increase productivity for workers from different cultural backgrounds. For example, recent studies have found that individuals who score high on the Multicultural Experience Survey (MES) demonstrate more creative performance and creativity-supporting cognitive processes than participants with lower MES scores (see review by Leung, Maddux, Galinsky, & Chiu, 2008).

On a broader level, policy makers should continue to support working families of all ethnicities. The only industrialized countries without paid maternity leave are the United States and Australia. According to a report prepared by the National Partnership for Women & Families (2007), even though the Family and Medical Leave Act of 1993 helps cover employees 12 weeks of unpaid leave each year to care for a new child or a seriously ill family member, nearly 40% of the workforce is not eligible for the job-protected leave the FMLA provides because they do not work full time, work in the same company long enough, or work for a big company with over 50 workers. Today, state legislators and advocates are advancing paid leave initiatives. A number of states have successfully enacted paid leave laws, including states with a large Asian population such as California, New York, New Jersey, and Hawaii. Some particularly innovative bills include family leave for school activities, family leave insurance and savings account, and flexible transfer of paid leave between employees and/or family members.

Future Directions

There are many potential directions for studying work-family experiences among Asian American women. In addition to the combination of both conflict and expansionist perspectives as shown in this study, future studies should also expand levels of analysis

to include dyads, families, and organizations. Given the interdependent nature of Asian American families, it would be interesting to explore whether having a working mother affects intergenerational interactions in Asian American families. On an organizational level, future studies can also examine ways in which employees may benefit from a workplace network, such as working with other women who are also juggling parenting and work roles. More broadly, researchers can also examine the effects of diversity and employment of minority members on work productivity and efficiency. Focus on systemic influences beyond individual differences can further inform policy-makers on ways to help working families while benefiting the society as a whole.

This study also underscores the importance of assessing the meanings attributed to one's roles when studying Asian American work-family experiences. As a construct, role interdependence is unique because it does not just reflect experience from an individual role, but it instead provides an overall perception of the *relationship* between various roles. Given its importance in the present study, researchers should identify factors that contribute to high work-family interdependence in Asian American mothers. For example, role modeling for one's children appears to contribute to higher role interdependence. Another potential construct mentioned in the previous sections is biculturalism. As the nation becomes more diverse, there are more opportunities for cultural integration, both on the individual level (e.g. biculturalism) as well as on the workplace level (e.g. workplace diversity). Inter-disciplinary work on biculturalism and integration of work and family roles may enhance our understanding of how individual experiences translate into organizational contexts and vice versa.

Another way to deepen our understanding of role meaning is to explore how they are developed in terms of one's cultural background. The use of a bilinear acculturation scale is a good start to teasing out cultural nuances in the experiences of ethnic minority members. The mutual association of acculturation and enculturation with role interdependence suggests that an increase in one's engagement in the dominant cultural norms would not necessarily result in a decrement in the retention of their culture of origin. Future studies should consider engaging in longitudinal methodology to understand the acculturation rates of work-family related beliefs and behaviors. Cross-sectional studies of workers from different SES background and occupations can also shed light on the relationship between career choice and work-family values.

Although participants in this study reported more positive spillover than work-family conflict, their qualitative data suggest that they still experience a lot of stress and consequently overlook themselves in the midst of juggling multiple roles. Whereas this study highlights role interdependence as a potential contributor to resiliency, future studies should also explore potential risk factors such as acculturative stress, language barriers, and social isolation when developing prevention and outreach programs for Asian American working mothers. Furthermore, this study only measures participants' gender role belief even though it is possible that the gender role ideology of their spouse or other family members can also influence their work-family experiences. By exploring gender role beliefs of other family members, researchers may uncover antecedents related to emotional as well as instrumental support. Finally, successful implementation of ethnic specific programs may involve psycho-education of non-minority workers in topics such as employment discrimination and workplace diversity.

In conclusion, the present study provides clinical and organizational implications for mental health professionals and employers working with Asian American women. Specifically, it outlines how beliefs such as attitude toward role interdependence, self-sacrifice, and gender roles influence their work-family experience. It also suggests cultural-specific strategies in helping these women increase their psychological gain from multiple roles. Finally, researchers must expand their level of analyses, work across disciplines, and explore specific cultural factors in order to broaden our understanding of work-family experiences among Asian American working mothers.

Asian American Multidimensional Acculturation Scale

Use the scale below to answer the following questions. Please circle the number that best represents your view on each item. Please note that reference to "Asian" hereafter refers to Asians in America and not Asia.

		Not very well/often		Somewhat			Very well/often
		1	**2**	**3**	**4**	**5**	**6**
1.	**How well do you <u>speak</u> the language of --**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	English?	1	2	3	4	5	6
2.	**How well do you <u>understand</u> the language of --**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	English?	1	2	3	4	5	6
3.	**How well do you <u>read and write</u> in the language of --**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	English?	1	2	3	4	5	6
4.	**How often <u>do you listen to music or look at</u> movies and magazines from**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
5.	**How much do you <u>like</u> the food of -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
6.	**How often do you <u>eat</u> the food of -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
7.	**How <u>knowledgeable</u> are you about the history of -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
8.	**How <u>knowledgeable</u> are you about the culture and traditions of -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6

		Not very Well/much		Somewhat			Very well/much
		1	**2**	**3**	**4**	**5**	**6**
9.	**How much do you <u>practice</u> the traditions and keep the holidays of -**						
a.	your own Asian ethnic culture?	1	2	3	4	5	6
b.	the White mainstream culture?	1	2	3	4	5	6
10.	**How much <u>do you identify with</u> -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
11.	**How much do you feel <u>you have in common with</u> people from -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
12.	**How much <u>do you interact and associate with</u> people from -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
13.	**How much <u>would you like to</u> interact and associate with people from -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
14.	**How <u>proud are you</u> to be part of -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6
15.	**How <u>negative</u> do you feel about people from -**						
a.	your own Asian ethnic group?	1	2	3	4	5	6
b.	the White mainstream groups?	1	2	3	4	5	6

Role Quality Scale

Please rate how <u>satisfied</u> you feel with each of these roles. Indicate "NA" if you do not occupy a given role.

Not at all Satisfied					Extremely Satisfied	
1	**2**	**3**	**4**	**5**	**6**	**N/A**
Wife						
1	2	3	4	5	6	
Caregiver of parents/in-law						
1	2	3	4	5	6	
Mother						
1	2	3	4	5	6	
Employee						
1	2	3	4	5	6	
House-keeper						
1	2	3	4	5	6	

Please rate how <u>stressed</u> you feel with each of these roles. Indicate NA if you do not occupy a given role.

Not at all Stressed Stressed					Extremely Stressed	
1	**2**	**3**	**4**	**5**	**6**	**N/A**
Wife						
1	2	3	4	5	6	
Caregiver of parents/in-law						
1	2	3	4	5	6	
Mother						
1	2	3	4	5	6	
Employee						
1	2	3	4	5	6	
House-keeper						
1	2	3	4	5	6	

Work-Family Conflict Scale

The statements below ask about how you feel about your work and family roles. Read each statement and indicate your agreement or disagreement.

Strongly Disagree						**Strongly Agree**
1	**2**	**3**	**4**	**5**	**6**	**7**

1. The demands of my work interfere with my home and family life.

    1   2   3   4   5   6   7

2. The amount of time my job takes up makes it difficult to fulfill family responsibilities.

    1   2   3   4   5   6   7

3. Things I want to do at home do not get done because of the demands my job puts on me.

    1   2   3   4   5   6   7

4. My job produces strain that makes it difficult to fulfill family duties

    1   2   3   4   5   6   7

5. Due to work-related duties, I have to make changes to my plans for family activities.

    1   2   3   4   5   6   7

6. The demands of my family interfere with work-related activities

    1   2   3   4   5   6   7

7. I have to put off doing things at work because of demands on my time at home.

    1   2   3   4   5   6   7

8. Things I want to do at work don't get done because of the demands of my family.

    1   2   3   4   5   6   7

9. My home life interferes with my responsibilities at work such as getting to work on time, accomplishing daily tasks, and working overtime.

    1   2   3   4   5   6   7

10. Family-related strain interferes with my ability to perform job-related duties.

    1   2   3   4   5   6   7

Work-Family Positive Spillover Scale

The following statements ask about your work and family roles. Please indicate how much you agree with each of the following statements.

Strongly disagree   **Strongly Agree**
     1   2   3   4   5

1. Skills developed at work help me in my family life.
             1   2   3   4   5

2. Successfully performing tasks at work helps me to more effectively accomplish family tasks.
             1   2   3   4   5

3. Behaviors required by my job lead to behaviors that assist me in my family life.
             1   2   3   4   5

4. Carrying out my family responsibilities is made easier by using behaviors performed at work.
             1   2   3   4   5

5. Values developed at work make me a better family member.
             1   2   3   4   5

6. I apply the principles my workplace values in family situations.
             1   2   3   4   5

7. Values that I learn through my work experiences assist me in fulfilling my family responsibilities.
             1   2   3   4   5

8. Skills developed in my family life help me in my job.
             1   2   3   4   5

9. Successfully performing tasks in my family life helps me to more effectively accomplish tasks at work.
             1   2   3   4   5

10. Behaviors required in my family life lead to behaviors that assist me at work.
              1   2   3   4   5

11. Carrying out my work responsibilities is made easier by using behaviors performed as part of my family life.
              1   2   3   4   5

12. Values developed in my family make me a better employee.
              1   2   3   4   5

13. I apply the principles my family values in work situations.
              1   2   3   4   5

14. Values that I learn through my family experiences assist me in fulfilling my work responsibilities.
              1   2   3   4   5

Measures of Supports from Family and Work

The following statements ask about the degree of support you receive from your family or workplace. Please indicate your level of agreement.

Not at all		**Sometimes**		**A lot of the time**
1	**2**	**3**	**4**	**5**

1. My husband helps me out by doing chores around the house and running errands.
    1   2   3   4   5

2. My husband helps me out by taking care of my child.
    1   2   3   4   5

3. I receive help in household chores and errands from a family member or a friend who is not my husband or children.
    1   2   3   4   5

4. I receive help in childcare from a family member or a friend who is not my husband or children.
    1   2   3   4   5

5. In general, my workplace is supportive of my family responsibilities (e.g. by providing onsite childcare, allowing flextime, or providing social-emotional support to being a working parent).
    1   2   3   4   5

6. My family hires someone to help out with childcare on a regular basis.
    Yes / No

7. My family hires someone to help out with chores and errands on a regular basis.
    Yes/No

Gender Role Ideology Scale

The following statements describe beliefs about women and work. Please indicate how much you agree with each of the following statements using the scale provided below.

Strongly disagree   **Strongly Agree**

| 1 | 2 | 3 | 4 | 5 |

1. A woman's most important task in life should be taking care of her children.

    1   2   3   4   5

2. A husband should earn more money than his wife.

    1   2   3   4   5

3. It should not bother a husband if his wife's job sometimes requires her to be away from home overnight.

    1   2   3   4   5

4. If jobs are scarce, a woman whose husband can support her ought not to work.

    1   2   3   4   5

5. A working mother can have just as good a relationship with her children as a mother who does not work.

    1   2   3   4   5

6. Even if the wife works outside the home, the husband should be the main breadwinner and the wife should carry the responsibility for the home and children.

    1   2   3   4   5

Appendix G

Work-Family Role Interdependence Scale

The following statements describe beliefs about women and work. Please indicate how much you agree with each of the following statements using the scale provided below.

Strongly disagree   **Strongly Agree**

1   **2**   **3**   **4**   **5**

1. In my opinion, working is part of being a good mother

   1   2   3   4   5

2. In my opinion, working is part of being a good wife

   1   2   3   4   5

3. My work contributes to my family's well-being

   1   2   3   4   5

4. My work is not related to my obligations toward my family.

   1   2   3   4   5

5. Giving up family time for work is one form of self-sacrifice a mother makes for the well-being of her family.

   1   2   3   4   5

Work-Family Emotions Scale

People experience a range of emotions from having family and work roles. Sometimes the emotions may be negative and sometimes they may be positive. Please complete the following statements regarding your emotional response to being a working mother:

"When I think about having both family and work roles and obligations, I feel…"

	Never				All the time
Happy	1	2	3	4	5
Sad	1	2	3	4	5
Stressed	1	2	3	4	5
Proud	1	2	3	4	5
Guilty	1	2	3	4	5
Energized	1	2	3	4	5

Appendix I

Open-Ended Questionnaire

Please answer the following open-ended questions.

1. Why did you decide to work?

2. In what way(s) does your work contribute positively to your family?

3. In what way(s) does your work negatively affect your family?

4. In what way(s) does your work contribute positively to you?

5. In what way(s) does your work negatively affect you?

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