

The Role of Social Support
in Relation to Parenting Stress and Risk of Child Maltreatment among
Asian American Immigrant Parents

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A DISSERTATION
in
Social Work
Presented to the Faculties of the University of Pennsylvania
In
Partial Fulfillment of the Requirements for the
Degree of Doctor of Social Work
2013

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ABSTRACT

Objective: This study examined the role of social support in relation to parenting stress and risk of child maltreatment among Asian American immigrant parents.

Methods: This study used a secondary analysis of data from the Survey of Asian American Families which was a cross-sectional study with a total sample size of 273. In the current study, a sample of 259 Asian American immigrant parents who identified to be first-generation was included for analysis. Descriptive, One-way ANOVA, and multiple regression analyses were conducted to examine study questions: relationships between parenting stress, social support, and risk of child maltreatment as well as potential moderating effect of social support.

Results: The results showed that there was a significant positive relationship between parenting stress and risk of child maltreatment even after controlling other predictors. While a significant relationship between social support and risk of child maltreatment was found, the relationship became weakened and insignificant as other predictors were controlled. Contrary to the hypothesized expectation, the moderating effect of social support possibly buffering the negative impacts of parenting stress on risk of child maltreatment was not warranted. Interestingly, there were significant differences in parenting stress, social support, and risk of child maltreatment among Asian ethnic subgroups.

Conclusions: This study suggests providing more culturally competent interventions that aim to reduce parenting stress and intergenerational transmission of child maltreatment, increasing utilization of available services and awareness on child protective services, and enhancing Asian immigrant families to develop a social support system of family and friends. The findings further suggest a possible direction for future research such as including more representative samples, adopting culturally sensitive measures, and examining similarities and differences in parenting stress, social support, and risk of child maltreatment among Asian American immigrants.

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CHAPTER ONE: INTRODUCTION

1. Introduction

Child maltreatment is one of the most serious and ever-growing concerns in the United States. According to a recent federal report on child maltreatment, approximately 3.7 million children were contacted by Child Protective Services in the form of investigation or alternative response for possible abuse and/or maltreatment, and 681,000 children (18.4%), which among 1,570 were fatalities, were identified as victims of maltreatment in 2011 (U.S. Department of Health and Human Services, 2011). Child maltreatment universally occurs across socio-economic, religious, cultural, racial, and ethnic groups (Goldman, Salus, Wolcott, & Kennedy, 2003). Maltreated children may experience devastating consequences such as significant problems in physical, social, emotional and cognitive development, permanent disabilities, trauma, suicide, alcohol and drug problems, difficulty forming relationships, and unstable job histories. In a systematic review of data from the East Asia and Pacific region, Fry and colleagues (2012) demonstrated that children who experience child maltreatment are at increased risk of experiencing mental and physical health problems, high-risk sexual behaviors, and increased exposure to future violence (Fry, McCoy, & Swales, 2012).

In order to design and implement appropriate prevention and remediation for child maltreatment, identifying potential predictors to child maltreatment is crucial. Acknowledging that there is no single known cause of child maltreatment, research has tried to recognize potential risk factors and antecedents. For the past two decades, parenting stress has been brought to the attention of researchers as one of the primary

pathways to child maltreatment. Many studies have found a significant relationship between parenting stress and child maltreatment (Chan, 1994; Crouch & Behl, 2001; Rodriguez & Green, 1997; Schaeffer, Alexander, Bethke, & Kretz, 2005; Whipple & Webster-Stratton, 1991). Research has also recognized that social support mitigates the effects of stress and decreases harmful behaviors in various populations (Jackson, 2009; Quittner, Glueckauf, & Jackson, 1990). Individuals who have a strong network of social support tend to adapt more effectively to the stress compared to those who have less social support. While social support has been widely studied in child maltreatment research, there is a lack of consensus on the roles of social support and how it is related to child maltreatment. Therefore, there is a need for further examination of the possible roles of social support on parenting stress and child maltreatment.

In this current study, the possible role of social support on parenting stress and risk of child maltreatment among Asian American immigrant parents was examined. Asian Americans are often viewed as a homogeneous group. However, Asian Americans in the United States do not necessarily belong to one homogeneous ethnic group. There are many differences in ethnic and cultural identities, languages, and socio-economic-political backgrounds. According to Reeves and Bennett (2004), “Asian refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent. Asian groups are not limited to nationalities but include ethnic terms as well, such as Hmong” (P. 2). Generally, ‘Asian’ and ‘Asian American’ are interchangeably used to refer to any Asian population or subgroup in the United States. In the current study, Asian American is referred to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent and who are

living in any legal territories of the United States regardless of their legal status. In order to increase homogeneity among sample population, the current study targeted Asian American parents who were born abroad and immigrated to the United States.

Asian Americans, compared to other ethnic groups, have disproportionately low reported rates of child maltreatment. According to the U.S. Department of Health and Human Services (2011), child maltreatment report among Asian American group was 1.7 per 1,000 children whereas it showed 14.3 per 1,000 for African-American children, 11.4 per 1,000 for American Indian or Alaska Native children, 10.1 per 1,000 for children of multiple races, 8.6 per 1,000 for Hispanic children, and 7.9 per 1,000 for White children. Zhai and Gao (2009) postulated that the combinations of underreporting and low incidence in Asian American group contribute to the low number of child maltreatment reports.

While Asian Americans generally have low rates of child maltreatment compared to other ethnic counterparts in the United States, Asian Americans have shown higher occurrence rates in physical abuse and lower rates of neglect and sexual abuse in contrast to the general population in the United States. For example, in a study that examined the characteristics and patterns of child abuse among immigrant Korean families in Los Angeles, Chang and colleagues (2006) found that immigrant Korean families were more likely to be charged with physical abuse (49.4%) and less likely to be charged with neglect (20.6%) in contrast to all other racial groups (13.2% for physical abuse and 27.1% for neglect, respectively). Child maltreatment studies conducted in Asian countries reported that physical punishment was used in 95% of the participants' homes and 46% of the homes were using beatings as the most severe form of punishment (Samuda, 1988).

Sixty-two percent of children in a sample of a study conducted in Hong Kong were physically punished (Tang, 2006), and 73.8 % of children in a sample of a study conducted in South Korea were reported to experience beatings (Chun & Park, 1991). Hahm and Guterman (2001) concluded that South Korea presented higher incident and prevalence rates of physical violence.

As past research shows, Asian Americans may differ from other racial and ethnic groups in exhibiting types and characteristics of child maltreatment. Therefore, it is critical to explore child maltreatment among Asian Americans and test the established theoretical frameworks that are mainly developed for Whites, African Americans, and Hispanics in the United States to find its suitability with implementation in Asian American population. Furthermore, Asian American immigrant parents may be at higher risk of experiencing increased parenting stress due to their recent immigration history, language difficulties, cultural differences, struggles with adjustment, and lack of access to mental health services. Separated from their families and friends, Asian American immigrant parents also may be exposed to these struggles with inadequate social support. Hence, it is essential to examine the levels of social support and parenting stress, and the roles of social support as a moderating factor on the relationships between parenting stress and risk of child maltreatment among this rapidly growing Asian American population in the United States.

2. Purpose of Study

The purpose of this study was to examine the interrelationships between parenting stress and parents' perceived social support in relation to risk of child maltreatment among Asian American immigrant parents. While the associations of parenting stress and social support with risk of child maltreatment were explored, parents' perceived social support was conceptualized as a potential moderator that may buffer the impact of parenting stress on risk of child maltreatment among Asian American immigrant parents.

Thus, the following research questions were proposed to examine child maltreatment among Asian American immigrant parents:

- To what extent is parenting stress related to risk of child maltreatment among Asian American immigrant parents?
- To what extent is social support related to risk of child maltreatment among Asian American immigrant parents?
- To what extent does social support moderate the impact of parenting stress on risk of child maltreatment among Asian American immigrant parents?
- To what extent do parenting stress, social support, and risk of child maltreatment differ among ethnic subgroups of Asian American immigrant parents?

CHAPTER TWO: BACKGROUND AND SIGNIFICANCE

1. Predictors of Child Maltreatment

There has been no clear consensus on defining child maltreatment which differs by legal, medical, social, and research definitions. The lack of consistent, reliable, and valid definition of child maltreatment has been one of the major obstacles to progress in child maltreatment research (Feerick & Snow, 2006). Despite the difficulties and limitations in defining child maltreatment, this current study was committed to conceptualize and measure risk of child maltreatment with a universally accepted definition in collecting data and surveillance of child maltreatment. The current study utilized secondary data collected from self-report approaches that was measured by the Conflict Tactic Scale of Parent-Child Version (CTSPC) which focuses on acts of maltreatment. The CTSPC has been widely utilized in epidemiological child maltreatment studies as this standardized self-report research method for measuring child maltreatment is beneficial and useful in several ways. Straus and Hamby (1997) claimed that a large portion of research on child maltreatment does not directly measure maltreatment due to the reliance on data from child protective agencies. Instead, the self-report method could provide data on the prevalence and chronicity of child maltreatment beyond relying on maltreatment reports. Adopting the uniform definition from the Centers for Disease Control and Prevention (Leeb et al., 2008), the current study defined child maltreatment as “Any act or series of acts of commission or omission by a parent or other caregiver that results in harm, potential for harm, or threat of harm to a child” (P. 11). The acts of commission include physical abuse, sexual abuse, and psychological abuse. The acts of omission refer child neglect which is “the failure to provide for a

child's basic physical, emotional, and educational needs or to protect a child from harm or potential harm" (P. 11). The definition of child maltreatment adopted for this study is based upon the premise that, as Straus and Hamby (1997) proposed, "Physical and verbal attacks on children are inherently acts of maltreatment, regardless of whether an injury occurs" (p. 121). The definition of child maltreatment does not require any acts of report, investigation, or substantiation by child protective agencies or any other legal entities. Since this current study was not conducted with a sample of substantiated cases, the term 'risk of child maltreatment' was consistently used to reduce any possible misunderstanding or confusion that may occur in the definition of child maltreatment.

While child maltreatment occurs universally across race, culture, ethnic group, socio-economic status, and religion, no consensus has been made on definite causes of child maltreatment. Researchers have come to acknowledge that any single factor, although being an important component of the ecological model, is inadequate for explaining the etiology of child maltreatment (Belsky, 1993; Cicchetti & Toth, 1995; Pianta, 1984). Instead, research has identified multiple and complex factors or characteristics that are commonly associated with child maltreatment.

The nature of child maltreatment, which is intersected by multiple and complex predicting factors, is grounded in the ecological system theory which was framed by the work of Bronfenbrenner (1979). In the later work of Bronfenbrenner (1994), he argued that "in order to understand human development, one must consider the entire ecological system in which growth occurs" (P. 37). Any ecological system encompasses microsystems, mesosystems, exosystems, macrosystems, and chronosystems. The

ecological system framework has provided a critical theoretical base for studies that have attempted to identify the risk factors or predictors of child maltreatment.

Drawing on the work of Bronfenbrenner (1979), Belsky and others used the theory of ecological system to develop a framework that explained child maltreatment as being complex and multiply-determined (Belsky, 1980, 1984, 1993; Garbarino, 1985; Kotch, et al., 1995). As one of the early pioneers in the etiology of child maltreatment, Belsky (1993) applied the developmental-ecological perspective to the question of the etiology of physical child abuse and neglect and identified the multiple contexts of child maltreatment: “developmental context,” which refers to the roles of parents and child characteristics and processes; “immediate interactional context,” which focuses on parenting and parent-child interactional processes; and “broader context,” which deals with community, cultural, and evolutionary contexts of child maltreatment.

Research studies have identified predictors or risk factors associated with child maltreatment. Kotch and his colleagues (1999) found that more maltreatment incidents were indicated in households in which the mothers were depressed, complained of psychosomatic symptoms, did not graduate from high school, drank alcohol, received public income subsidy, cared for more than one child, and/or were separated from their own mothers by the age of 14.

A longitudinal analysis of risk factors for child maltreatment indicated that 15 risk factors were associated with physical abuse, 9 factors with sexual abuse, and 21 factors with child neglect. For example, low maternal involvement, early separation from mother, and perinatal problems were notable factors that put children at risk for physical

abuse; poverty and large family size were strongly associated with child neglect; and daughters, handicapped children, children with a deceased parent, and children living with a stepfather were indicators of high risk for sexual abuse (Brown, Cohen, Johnson, & Salzinger, 1998).

In a cohort study of risk factors for child maltreatment in the UK, Sidebotham and Heron (2006) identified that parents who are young, parents with low educational achievement, and/or parents with past psychiatric history or a history of child abuse were more likely to be investigated for child maltreatment or to have a child placed on the child protection register. They argued that the highest risks were found with indicators of deprivation and poor social network.

Goldman and his colleagues grouped risk factors associated with child maltreatment into four domains: parent or caregiver factors (personality characteristics and psychological well-being, history of maltreatment, substance abuse, attitudes and knowledge on child abuse and neglect, age), family factors (family structure, marital conflict and domestic violence, stress, parent-child interaction), child factors (age and disabilities), and environmental factors (poverty, unemployment, social isolation and social support, violent communities). Children within families and environments in which these negative factors exist have more likelihood of experiencing child maltreatment (Goldman, Salus, Wolcott, & Kennedy, 2003).

In a study conducted in the Netherlands, Jansen and colleagues (2012) identified risk factors for harsh parental discipline. The finding is consistent with the Belsky's (1993) theory on complex and multiple causes of child maltreatment. Jansen and

colleagues' study (2012) presented psychosocial characteristics of parents, such as psychopathology, delinquent behavior, and family dysfunction, which are independently associated with harsh parental discipline. Moreover, immigration status, being first-generation non-Western immigrant parents, was found to be a significant indicator of harsh parental discipline. There were other socio-demographic characteristics such as financial difficulties and educational level associated with the use of harsh discipline strategies, but these were significant predictors only for mothers.

Although the dearth of previous research studies makes it difficult to identify predictors for child maltreatment among Asian Americans or Asian American immigrant parents in the United States, several child maltreatment studies conducted in Asian countries and in the United States suggest potential risk factors.

In a study to examine corporal punishment and physical maltreatment among children in Hong Kong, Tang (2006) presented that parental corporal punishment was significantly correlated with children's young age, being male, externalizing behaviors, young parents, unemployment, and marital dissatisfaction. For physical maltreatment by parents, children's externalizing behaviors and marital dissatisfactions were significantly correlated.

Park (2001) explored Korean immigrant mothers' attitudes toward child physical abuse. The study identified following predictors at each ecological level of environment: 1) Microsystem factors - amount of time spent with children, experience of corporal punishment as a child, children's age, children's gender, acculturation conflicts in family, mother's age, and mother's length of stay in the US, 2) Mesosystem factors -

involvement in children's life and involvement in social organization, 3) Exosystem factors - mother's education level, reported stress of immigrant life, and 4) Macrosystem factors - value of children in Korean culture, familiarity with child protective services, perceived discrimination, and value of corporal punishment.

Lau and colleagues (2006) examined the factors associated with reports of lifetime parent-to-child aggression both at minor and severe level among Asian American parents in a nationally representative sample. The study demonstrated that perceived discrimination and low social standing were significantly associated with minor and severe parent-to-child aggression. Interestingly, ethnic group differences and nativity were evident in minor aggression, but not in severe parent-to-child aggression. Among four Asian American ethnic subgroups (Vietnamese, Filipino, Chinese, Other Asian), Chinese parents reported the highest rate of minor assault whereas Vietnamese parents reported the lowest rate. Furthermore, this study identified other predictors such as the number of children, level of education, and greater family cohesion in minor aggression as well as parental age in severe parent-to-child aggression.

In studies of child maltreatment, previous research has mainly focused on exploring the risk factors or characteristics associated with child maltreatment. These studies have made great contributions in helping professionals working with children and families to identify child maltreatment and high-risk situations, and to provide appropriate programs and services by offering directions on which factors require influencing. While there is a vast amount of research on identifying risk factors, there has been lacked of research in identifying possible protective factors. While a few studies identified protective factors, these studies have consistently found that supportive and

emotionally satisfying relationships with a network of relatives or friends can help reduce the risk of child maltreatment, especially when experiencing stressful life events (Kotch, et al., 1995; Moncher, 1995; Quinton, & Rutter, 1988). Hence, identifying protective factors is as important as identifying risk factors and can also assist professionals working with children and their families to design more effective and appropriate programs to reduce the risk of and to prevent child maltreatment.

2. Relationships between Parenting Stress and Child Maltreatment

Supposedly, becoming a parent is a joyful experience and opportunity for personal growth. While parenting holds evolutionary, social, psychological and economic benefits, it also can be a source of distress resulting in dysfunctional parent-child relationships and being a risk factor for adult and child psychopathology (Deater-Deckard, 1998). According to a process model of parenting by Belsky (1984), parenting is determined and influenced directly by various forces such as parent personality, child characteristics, and social context (marital relations, social networks and occupational experience of parents). Parenting stress, defined as “a set of processes that lead to aversive psychological and physiological reactions arising from attempts to adapt to the demands of parenthood” (Deater-Deckard, 2004, P. 6), is assessed and understood within each parent-child characteristics and also in a broader contextual perspective.

Over the decades, parenting stress has been studied as one of the risk factors of child maltreatment. While research confirms that no single factor serves as a significant predictor of child maltreatment, parenting stress, as a unique and important predictor, has

increasingly come to the attention of researchers who hold interests in parental and familial context of child maltreatment. This focus on the family context is consistent with the theoretical frameworks of the development and maintenance of child maltreatment, which emphasizes the complex transactions between multiple levels of variables in the theoretical perspectives of ecological model of child maltreatment (Abidin, 1990; Ammerman, 1990; Belsky, 1993; Cicchetti & Lynch, 1993; Hillson & Kuiper, 1994; Webster-Stratton, 1990). Based on the implications of the interactions of variables, researchers have postulated that parenting stress may be due to parent-related factors (e.g., sense of competence and emotional functioning) and child behaviors (e.g., demandingness and distractibility/hyperactivity) with a primary focus on the functions of transactions between parents and children (Hillson & Kuiper, 1994; Webster-Stratton, 1990).

A number of studies have found that parenting stress is positively associated with child maltreatment (Chan, 1994; Crouch & Behl, 2001; Ethier, Lacharite, & Couture, 1995; Holden & Banez, 1996; Rodriguez & Green, 1997; Schaeffer, Alexander, Bethke, & Kretz, 2005; Whipple & Webster-Stratton, 1991). Crouch and Behl (2001) specifically examined the association between valuing corporal punishment, physical child abuse potential, and parenting stress. This study demonstrated that parenting stress is significantly associated with physical child abuse. It is interesting to note that the level of parenting stress was positively associated with physical child abuse only among parents who reported to have high level of belief in the effectiveness of corporal punishment while the association was not significant among parents who reported low level of the same belief. In a study conducted to examine potential child abuse among military

parents, Schaeffer and colleagues (2005) confirmed that parenting stress was significantly associated with child abuse both for fathers and mothers. In a study that explored parenting stress and the future child abuse potential within maltreating families, parenting stress was a significant predictor of future child abuse (Holden & Banez, 1996). In the Webster-Stratton's study (1991) conducted at a parenting clinic, parenting stress was found to play an important role among abusive families, with more reported stress among abusive mothers and more frequent practice of spanking among abusive fathers than their non-abusive counterparts.

In a study conducted in Canada, Ethier and colleagues (1995) identified that negligent mothers reported much more stress in their parenting roles than non-negligent mothers from similar socioeconomic backgrounds. There was a significant difference at the level of parenting stress between the negligent mothers and the control group. In the Rodriquez and Green's study (1997) conducted with two different samples of New Zealand parents, the positive correlation between parenting stress and child abuse potentials was supported while suggesting the joint contributions of parenting stress and anger expression.

Although there have been a few research studies examining child maltreatment among Asians or Asian Americans, the positive correlation between parenting stress and child maltreatment is also evident among the ethnic group as well. Chan (1994) conducted a study among Asians and found that abusive mothers showed significantly more stress than non-abusive mothers on the Parenting Stress Index. A preliminary study with Hong Kong parents implicated the potential pathway of parenting stress to child

maltreatment by showing a positive correlation between parenting stress and parental anger expression (Lam, 1999).

Despite empirical support for parenting stress as a significant contributing variable to child maltreatment, some limitations have been found in previous research. One of the significant constraints is that while most of the research identified the association between parenting stress and child maltreatment, little attention has been given to the protective factors (e.g., such as marital relationships, immigration, cultural and social networks) which may moderate direct and indirect effects of parenting stress both on parents and children. Furthermore, the majority of the research has rarely included minority ethnic groups or immigrant populations that may experience many facets of life stressors due to their lower socio-economic status, discrimination, and immigration. Since the previous study in Hong Kong (Lam, 1999) indicated the positive relationships between parenting stress and child maltreatment, it is meaningful to explore whether Asian American immigrant parents with greater level of parenting stress are more likely to maltreat their children.

3. Social Support and Child Maltreatment

In relations to predictors and risk factors for child maltreatment, previous research has tried to identify protective factors that may prevent child maltreatment or buffer the roles of risk factors. The current study specifically focused on social support as an important independent variable in order to examine the roles of social support which may moderate the impacts of parenting stress on risk of child maltreatment.

Although some debate centers on the most accurate definition of social support, social support in the current study was defined as the individual's perception that "one is cared for and loved, esteemed, and a member of a network of mutual obligations" (Cobb, 1976, P. 300). As Canty-Mitchell and Zimet (2000) pointed out, "Social support itself is a multifaceted construct which includes such diverse notions as the extent of the social network, the provision of instrumental support, and the perceptions of support adequacy" (P. 392). Since it is important to clarify the definition in formulating conceptualizations, this current study focused on parents' perceptions of social support from available multidimensional resources.

In respect to child maltreatment, research has found that a low level of real or perceived social support was positively related potential risk of child maltreatment (Bishop & Leadbeater, 1997, Chan, 1994; Guadin, Polansky, Kilpatrick, & Shilton, 1993; Kotch et al., 1997; Kotch, et al., 1999; Williamson, Borduin, & Howe, 1991). For example, Williamson and colleagues (1991) examined ecological factors of adolescent physical abuse, sexual abuse, and neglect, and revealed that mothers who were negligent and physically abusive reported lower level of tangible social support and appraisal of social support compared to mothers who were not abusive. Guadin and colleagues (1993) found that neglectful parents reported weaker informal social supports, higher life stressors, and greater level of depression and loneliness. According to Bishop and colleagues (1997), maltreating mothers have fewer friends in their social network system, fewer numbers of contact with friends, and lower recognition of quality of support received from friends than non-maltreating mothers. This study concluded that the degree of social support from friends was associated with child maltreatment. Kotch et al. (1997)

explored risk factors for maltreatment in the child's first year of life. In the study, subjects with lower social support and higher number of negative life events were significantly at higher risk of substantiating maltreatment compared to the other two groups: 1) subjects with lower social support and lower total life events, and 2) subjects with higher social support and higher total life events. The study result indicated that the half of the study population with low social support presented a higher risk of subsequent child abuse. Hence, although this study examined the relationship between life events and social support, low social support itself was found to be a significant predictor of child maltreatment. The risk of child maltreatment was even greater when the subjects had a high level of life event stress. In another study that explored predictors of child maltreatment in the first 4 years of life, Kotch et al. (1999) demonstrated that, in general, families with the low level of social support had a higher risk of child maltreatment. Even for families with the lower level of maternal depression and/or life event stress, low social support was positively correlated with risk of child maltreatment.

Although little attention has been given to Asians, Asian Americans, and specifically Asian American immigrant parents within the context of social support and child maltreatment, in a study that examined parenting stress and social support with physically abusive mothers in Hong Kong, Chan (1994) found that the abusive mothers had significantly been less social support compared to the non-abusive mothers.

Compared to the studies that examined negative roles of social support in child maltreatment, studies that examined the beneficial roles of social support have found that social support is a protective factor in the face of stressful events and has been associated with lower risk of child maltreatment (Jackson, 2009; Li, Godinet, & Arnsberger, 2011)

even in the presence of poverty (Hashima & Amato, 1994). For example, in a recent study which examined the protective factors for children at risk of maltreatment, Li et al. (2011) found that families with high level of social support were less likely to have a child maltreatment report. Another study with 758 women who had recently delivered babies in Japan showed that poor satisfaction with social support after childbirth was more strongly associated with abusive parenting than post-natal dysphoria itself (Kitamura et al., 2004).

4. Moderating Role of Social Support in Relation to Parenting Stress and Child Maltreatment

Conceptual frameworks of social support as a moderator postulate that social support may buffer the effects of stressful life events. In this theoretical regard, social support is expected to influence an individual's appraisal in stressful situations in two ways (Cohen & Wills, 1985): 1) individuals with a high level of perceived social support are less likely to appraise a particular situation as stressful than the ones with low social support, and 2) social support may intervene between the experience of stress and the individual's reactions to the stress so that the stressful event is not perceived as particularly stressful. Therefore, individuals with high level of perceived social support are more likely to report fewer negative reactions to high level of parenting stress than the ones with low social support.

In a study that examined the relationships between adolescent fathers' parenting stress, social support, and fathers' caregiving involvement with their infants, Fagan and

colleagues (2007) found that social support, especially from both teenagers' parents, buffered the negative impact of parenting stress on fathers' involvement with the baby. Although this study did not specifically explore the buffering effect of social support in relation to parenting stress and child maltreatment, the stress-buffering effect of social support between parenting stress and fathers' caregiving was supported.

In a study that examined the stress-buffering hypothesis for parenting with a sample of 218 divorced fathers, DeGarmo and his colleagues (2008) reported that parenting support buffered effects of changes in the role overload and co-parenting conflict on coercive parenting, which was conceptualized as punitive discipline, verbal and physical aggression, and harsh discipline. Social support having moderating effect on child maltreatment has also been supported by the study done on the intergenerational transmission of abuse. Litty and colleagues (1996) found that perceived social support moderates a parent's own experience of physical abuse from childhood and the potential abuse on their own children.

Despite the previous studies on the potential protective roles of social support in regard to child maltreatment, there is a dearth of research on the moderating role of social support, particularly regarding the relationship between parenting stress and child maltreatment. Previous studies which identify the relationship between social support and child maltreatment only explored significant relationships between the two variables, and rarely focused on the moderating roles of social support in relation to other child maltreatment predictors. Furthermore, previous studies which examined the relationship between parenting stress and child maltreatment have paid little attention to social support as a potential moderator. Therefore, there is a significant need to examine the role

of social support on parenting stress and the two predictors as well as the moderation model as a framework in regard to child maltreatment.

Goldman et al. (2003) argued that professionals who study child maltreatment must recognize potential predictors from multiple domains and tailor their assessments, preventions and remediating services accordingly. However, child maltreatment among Asian American immigrant parents has been largely understudied even though Asian Americans are one of the fastest-growing minority groups in the United States. Most existing studies among Asian Americans or Asian American immigrant parents have only focused on exploring descriptive patterns, characteristics and cultural roles, while attention has rarely been given to formulating sound theoretical and practical frameworks. Given the previous findings that parenting stress and social support are correlated with child maltreatment, it is critical to examine these two important predictors to child maltreatment among Asian American immigrant parents.

5. Statement of Research Questions and Hypotheses

A majority of Asian Americans are recent immigrants (US Census, 2008), and thus, are often at a stage where they are faced with tremendous life stressors related to acculturation, traumatic experiences, lack of social support, language barriers, separation from family and friends, discrimination, and long working hours. Furthermore, Asian Americans, especially those who are foreign-born, seek less help from mental health-related services than the general American population (Abe-Kim & Takeuchi et al., 2007). Due to a lack of access to mental health services, Asian American immigrant parents are more likely to experience vulnerability and suffer from stressors associated with their

parenting experiences. Thus, in this current study, parenting stress is seen as a critical predictor of child maltreatment among Asian American immigrant parents. Furthermore, social support has been identified as a key protective variable against child maltreatment among Asian American immigrant parents because it can buffer the impact of parenting stress on acts of child maltreatment.

This current study intended to fill the research gap not only by exploring the relationships between parenting stress and risk of child maltreatment, but also by examining the potential moderating role of social support on parenting stress in relation to risk of child maltreatment among Asian American immigrant parents. While previous studies were mainly focused on Chinese or Korean samples, this study included a diverse sample of Asian ethnic subgroups, including Chinese, Korean, Indian, Bangladeshi, Filipino, and Malaysian. The current study has the potential to broaden the knowledge base on the issue of child maltreatment and help grasp the specific relationships between parenting stress, social support, and risk of child maltreatment among Asian American immigrant parents. This current study aimed to help researchers, students, and child maltreatment professionals to gain insights into directions of further research as well as to help provide effective delivery of services to Asian American immigrant parents in order to prevent or intervene in child maltreatment.

This current study tested the following research questions and hypotheses in order to examine risk of child maltreatment among Asian American immigrant parents.

1) **Research question:** To what extent is parenting stress related to risk of child maltreatment among Asian American immigrant parents? Hypothesis 1-1: It was hypothesized that a greater degree of parenting stress among Asian American immigrant parents will be associated with a greater likelihood of child maltreatment.

2) **Research question:** To what extent is social support related to risk of child maltreatment among Asian American immigrant parents? Hypothesis 2-1: It was hypothesized that the greater degree of social support perceived by Asian American immigrant parents, the less likelihood of child maltreatment.

3) **Research question:** To what extent does social support moderate the relationships between parenting stress and risk of child maltreatment among Asian American immigrant parents? Hypothesis 3-1: It was hypothesized that Asian American immigrant parents with a higher level of social support will be more likely to exhibit less negative impacts of parenting stress on risk of child maltreatment than those with a lower level of social support.

4) **Exploratory research question:** To what extent do the levels of parenting stress, social support, and risk of child maltreatment differ among ethnic subgroups of Asian American immigrant parents?

CHAPTER THREE: METHODOLOGY

1. Data Source

In order to examine the relationship between two important predictors (parenting stress and social support) and risk of child maltreatment as well as potential moderating roles of social support, the current study used a secondary analysis of data from the study of the cultural values, childrearing practices, and child maltreatment among Asian Americans in New York City (Survey of Asian American Families). This survey was conducted by Qin Gao, Ph. D., Fordham University Graduate School of Social Service and Fuhua Zhai, Ph.D., School of Social Welfare at Stony Brook University. This survey was funded by the Lois and Samuel Silberman Fund and was approved by the Institutional Review Board of Fordham University. The current study attained an approval from the Institutional Review Board of University of Pennsylvania to use the secondary data.

From September 10, 2011 to April 15, 2012, a total of 273 Asian American parents were recruited and interviewed at the Child Center of New York. The purpose of the Survey of Asian American Families was to learn more about cultural values and childrearing practices among Asian American families in New York City.

2. Design

The Survey of Asian American Families employed an explanatory cross-sectional study design. An interview schedule was utilized to collect information on cultural values or childrearing practices, parenting stress, social support, risk of child maltreatment, and

family demographic information among a sample of Asian American parents in New York City who have one or more children under age 18.

From September 10, 2011, face-to-face interviews were conducted to obtain the survey data from 273 participants. To improve the quality and accuracy of data collection, 22 licensed bi-lingual mental health professionals, including clinical social workers and mental health counselors, were hired and trained to conduct interviews. The Survey of Asian American Families was designed to be carried out in collaboration with the Child Center of New York which is a major multi-service agency serving diverse races and ethnicities.

3. Setting

The Survey of Asian American Families was conducted at The Child Center of New York (CCNY) which is a family-focused non-profit organization established in 1953 as Queens Child Guidance Center. The CCNY provides comprehensive services to children, adults and their families including, but not limited to, family intervention, youth development, counseling, home visiting services, early intervention and child abuse preventive services. Each year, CCNY serves approximately 17,000 children and their families in more than 80 locations and more than 35 languages.

One of the major components of CCNY, the Asian Outreach Program (AOP), was established in 1993 to specifically serve the rapidly growing Asian immigrant populations including Chinese, Korean, and South Asians in New York City. The

services of AOP include individual and family counseling, group intervention programs, child abuse intervention programs, alcoholism and substance abuse services and community outreach services. AOP is one of a few programs in New York City that hire licensed bi-lingual social workers and mental health counselors to provide clinical and preventive services in 13 Asian languages including Mandarin, Cantonese, Korean, Hindi and Bengali. The clinical staff effectively serves Asian American children, adults, and their families in their own languages.

AOP has been particularly keen on addressing child maltreatment issues in the Asian American community. Through clinical services and extensive outreach activities, AOP strives to prevent child maltreatment among Asian Americans and to assist victims and their families. Specifically, AOP educates Asian American parents and children about child abuse and neglect through community workshops, parenting skills groups, in-school outreach services, and family-oriented after-school programs. AOP also provides interventions for domestic violence, substance abuse, and child abuse and neglect for both children and adults.

4. Sample Size and Recruitment Procedures

The target population for the Survey of Asian American Families consisted of parents of Asian American children served by the Child Center of New York (CCNY). At the time of sampling, the client body of CCNY included about 450 Asian American families. Among them, 40% were Chinese, 25% were Korean, 25% were Asian Indians, and the other 10% were of other Asian descents. The Survey of Asian American Families

recruited 273 Asian American participants, and 88 (32%) of the sample were Korean participants, 81 (30%) were Chinese, 58 (21%) were Indian, 23 (8%) were Bangladeshi, and 23 (8%) were from other Asian subgroups. Out of 273 participants, 259 Asian American immigrant parents identified that they were first-generation immigrants. In this current study, the 259 first-generation immigrant parents were selected for analysis.

To justify the optimum sample size, a power analysis was conducted and found to have enough power (Power=0.8, Alpha=0.05, sample size 231, Expected multiple regression coefficient R, $R^2=0.2$). Generally, a sample size of 259 is accepted to be sufficient in multiple regression studies since researchers “feel comfortable with anything more than 200 cases” (Allison, 1999, P. 130).

In the Survey of Asian American Families, quota sampling method was used to ensure each Asian ethnic subgroup was proportionally represented. The Survey of Asian American Families aimed to have the same sample proportion for Korean and Asian Indian families (i.e., about 63 in each group, 25% of 250 families) as in the study population. Bengali families were over-sampled in the Survey of Asian American Families (49 instead of 25) whereas Chinese families were under-sampled compared to their over-representation in the study population (i.e., 75 instead of 100).

The survey participants were recruited on a rolling basis to meet the predetermined quota of each ethnic group for the study period of September 10, 2011 through April 15, 2012. However, the sample size of each Asian ethnic group did not

exactly represent the proportion as planned due to some limitations. Despite the effort to make the sample reflect the clientele of CCNY using the quota sampling method, the quotas were not met as planned. The survey sample was a convenient sample that was limited to a single agency and the selection was limited to only those served by AOP. Therefore, the survey sample was not representative of the population of Asian American families in New York City, but rather represents a treatment sample from one agency.

In the survey of Asian American families, a parent was defined as someone who begets, gives birth to, or nurtures and raises children as a caregiver such as a father or a mother. The term, parent includes biological parents, stepparents, adoptive parents, and grandparents. A caregiver is defined as someone who is responsible for the direct care, protection, and supervision of their children which may include parents, grandparents, or others. The sample criterion for inclusion in the Survey of Asian American Families was the following: Asian American parents, grandparents or other primary caregivers, 1) who were 18 years or older, 2) who had one or more children under age 18 in household, and 3) who recognized and identified themselves as Chinese, Korean, Asian Indian, Bangladeshi, or other Asian ethnic subgroups. The Survey of Asian American Families interviewed the child's mother upon their availability. If the child's mother was unavailable, the child's father was interviewed. If the child's father was also unavailable, this survey interviewed the child's grandparent or other primary caregiver of the child. According to the principle investigators, the reason to give the mother priority was to have results that are more comparable across participants. Furthermore, the Institutional Review Board of Fordham University requested this method.

In order to recruit Asian American participants at CCNY, the Survey of Asian American Families team hired and trained 22 licensed mental health professionals (licensed master social workers, licensed clinical social workers, and licensed mental health counselors) with a minimum of a master's degree in social work and/or related fields. These clinicians distributed the survey flyers and recruited participants as well as conducted interviews. The survey flyers were distributed to adult clients, parents, grandparents, and other main caregivers who visit the AOP for counseling, case management, and medication management. When the interviewers were conducting parenting workshops in schools or in Asian communities, the flyers were also distributed to potential participants. Once potential participants were recruited, interviewers explained the purpose of the study and participants were asked to sign two consent forms (one copy for participant to keep and one for the researcher). If participants voluntarily agreed, they were interviewed either during or after their assessment session or workshop.

5. Measures

The Survey of Asian American Families utilized a comprehensive set of variables: 1) cultural values, 2) childrearing practices and beliefs, 3) parental stress and mastery, 4) child discipline (child maltreatment), 5) competency in regard to parenting and their perceived social support, 6) life experiences, and 7) family demographic information. To measure these variables and enable cross-study comparison of findings with other studies, this survey adopted standard scales that had been used in many cross-cultural studies. The survey was back-translated by two bilinguals into the following

languages: Korean, Chinese, Hindi, and Bengali. For other Asian ethnic subgroups, the English version was utilized.

For the current study, the following variables were extracted from the comprehensive survey questionnaires of the Survey of Asian American Families and were utilized for analysis.

- 1) Child maltreatment was measured by the Conflict Tactic Scale of Parent-Child Version (CTSPC), which is a modified version of the well-known Conflict Tactic Scale (CTS) to assess the degrees of psychological aggression, physical assault, neglect, and nonviolent discipline by parents to their children regardless of whether the child was actually injured or not (Portwood, 2006). The CTSPC was known to be better suited for measuring child maltreatment than the original conflict tactic scale and is, therefore, useful for epidemiological research on child maltreatment in the general population. Since most studies on child maltreatment have focused on clinical populations and substantiated cases by judicial agencies, the CTSPC was deemed to be practical in assessing the prevalence of child maltreatment in general population (Straus et al., 1998). Straus (2006) reported that 65 articles utilized CTSPC as a measuring tool to study child maltreatment. The CTSPC is a 5 point Likert-type scale survey comprised of 22-items that measures parental physical assault (13 items; e.g., “slapped child on the hand, arm or leg”) and psychological aggression (5 items; e.g., “shouted, yelled, or screamed at child”). Parents were also asked about their nonviolent discipline strategy (4 items; e.g., “explained why

something is wrong”). Five supplemental questions measured neglect (e.g., “had to leave your child home alone, even when you thought some adult should be with child”). Almost all intra-responder reliability kappa estimates of CTSPC were above 0.75, and internal consistency estimates ranged from 0.49 to 0.68 depending on the scale and type of perpetrator (Reichenheim & Moraes, 2006). In a national study, internal consistencies for subscales varied from overall physical assault scale (0.55), psychological aggression (0.60), and nonviolent discipline (0.70). The test-retest correlations over a 14-week period for physical aggression were found to be 0.80 (Touliatos et al., 2001). In a Chinese study conducted in Hong Kong, Chan et al. (2011) found that the Chinese version of CTSPC showed a satisfactory reliability for nonviolent discipline ($\alpha = .77$), psychological aggression ($\alpha = .87$), corporal punishment ($\alpha = .86$), physical maltreatment and severe physical maltreatment ($\alpha = .88$), and neglect ($\alpha = .82$). The CTSPC was used to measure the prevalence of child maltreatment in epidemiological studies in China (Leung et al., 2008; Wong et al., 2009), Hong Kong (Chan, 2005; Chan et al., 2011; Chan, 2011; Tang, 2006), and Taiwan (Shen, 2009). In a recent study of child maltreatment conducted with a sample of 1,094 children in Hong Kong (Chan, 2011), the Chinese version of CTSPC demonstrated a satisfactory reliability for nonviolent discipline ($\alpha = .78$), psychological aggression ($\alpha = .88$), corporal punishment ($\alpha = .87$), physical maltreatment and severe physical maltreatment ($\alpha = .87$), and neglect ($\alpha = .82$). In another study conducted with Korean immigrant women in the United States, CTSPC showed a reliability ($\alpha = .95$) (Lee, 2007). In the Survey of Asian American Families, the child discipline section utilized the CTSPC where participants were

asked how they responded in the previous year when their children did something wrong, disobeyed, or made them angry. In this current study, the CTSPC also demonstrated sound reliability ($\alpha = .84$).

- 2) Social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS), which is a 7-point Likert-type scale and consists of 12 items (Zimet et al., 1988). In the Survey of Asian American Families, the MSPSS was measured in the section 5 as, “feelings of being a parent and social support.” The MSPSS seeks to measure the perceived adequacy of social support from three subscales: family (e.g., “My family really tries to help me”), friends (e.g., “I have friends with whom I can share my joys and sorrows”) and a significant other (e.g., “There is a special person who is around when I am in need”) (Zimet et al., 1988). The internal consistencies of the total scale and subscales are high, ranging between 0.79 and 0.98 in various samples (Canty-Mitchell & Zimet, 2000; Kazarian & McCabe, 1991; Zimet et al., 1988) and test-retest reliability over a 2 to 3-month period gives correlations ranging between 0.72 and 0.85 (Zimet et al., 1988). A Chinese version of MSPSS was found to have good internal reliability with Cronbach’s alpha of 0.88 for the total scale, and 0.81, 0.85, and 0.91 for Family, Friend, and Significant Other subscales, respectively (Chou, 2000). Furthermore, Chou (2000) demonstrated test-retest reliability of 0.85 was reported and the construct validity of MSPSS Chinese version was established. In another study with Vietnamese parents, Cronbach’s alpha values were 0.88 for mothers and 0.90 for fathers respectively (Shin et al., 2006). In a study with 325 antenatal women in

Pakistan (Akhtar, et al., 2010), the Cronbach's alpha of MSPSS was 0.92. In the current study, the MSPSS showed sound reliability with an $\alpha = .953$.

- 3) Parenting Stress was measured by the parental distress scale from the Parenting Stress Index, Short Form (PSI-SF) (Abidin, 1995). The PSI-SF is a widely used and well-researched measure of parenting stress which is 5-point Likert-type scale and consists of 36 items derived from the Parenting Stress Index. The PSI-SF is comprised of three scales: Parental Distress (e.g., "I feel trapped by my responsibilities as a parent"), Difficult Child Characteristics (e.g., "My child rarely does things for me that make me feel good"), and Dysfunctional Parent-Child Interaction (e.g., "There are some things my child does that really bother me a lot"). The Survey of Asian American Families did not include all three subscales of the PSI-SF. Instead, the 12-questions of the parenting distress scale were included. As one of the three subscales of PSI-SF, the subscale of parental distress determines the level of parental stress resulting from personal factors, such as conflicts with a partner and life restraints from the demands of child-rearing (Haskett et al., 2006). Abidin (1995) explained that "the component of stresses associated with the parenting distress subscale are impaired sense of parenting competence, stresses associated with the restrictions placed on other life roles, conflict with the child's other parent, lack of social support, and presence of depression" (p. 56). "The parental distress subscale score was highly correlated with the parent domain score of the full-length parenting stress index ($r = .92$)" (Abidin, 1995, P. 61). The parenting distress questions have been utilized to measure the level of parental stress

in the Fragile Family and Child Wellbeing Study which is a longitudinal national study that follows a large cohort of 4,700 families from 75 hospitals in 20 cities across the United States (Reichman, Teitler, & McLanahan, 2001; The Bendheim-Thoman Center for Research on Child Wellbeing of the Woodrow Wilson School of Public and International Affairs, 2012). The parenting stress data in the Fragile Family and Child Wellbeing Study were utilized in several family and parenting studies (Bronte-Tinkew et al., 2010; Guterman et al., 2009; Rebeckca et al., 2009). Several studies have demonstrated the reliability and validity of PSI-SF in measuring parenting stress. The internal consistencies were $\alpha = 0.83$ for total stress and $\alpha = 0.78$ for parental distress (Haskett et al., 2006); and $\alpha = 0.91$ for total stress and $\alpha = 0.87$ for parental distress (The National Child Traumatic Stress Network, 2010); $\alpha = 0.63$ (Rebeckca et al., 2009) and $\alpha = 0.77$ for parental stress respectively (Bronte-Tinkew et al., 2010). The test-retest reliability was stable ($r = 0.75$, $p < 0.01$ for total stress and $r = 0.61$, $p < 0.05$ for parental distress) (Haskett et al., 2006). In the Haskett's study, the construct validity was also acceptable since the parental distress scale was significantly related to the Global Severity Index scores on the SCL-90-R ($r = 0.54$, $p < 0.01$). In a psychometric study with the Chinese version of the Parenting Stress Index, Short form (Yeh et al., 2001), the Chinese version of PSI-SF was found to have good internal consistency (Cronbach's alpha of 0.87 for parenting distress subscale, 0.88 for dysfunctional interaction subscale, and 0.79 for difficult child subscale, respectively) and validity. In a parenting stress study with Vietnamese parents, the Cronbach's alpha values of the Parenting Stress Index were found to be

0.75 for mothers and 0.73 for fathers respectively (Shin et al., 2006). In the current study, the reliability for parenting distress showed sound reliability ($\alpha = .894$).

4) **Control Variables:** The current study controlled child and parent' covariates. Park (2001) identified variables as the ones that affect Korean immigrant mothers' attitudes toward physical abuse on their children. In addition, the current study controlled major predictors of child maltreatment that have been identified in previous research (Goldman, Salus, Wolcott, & Kennedy, 2003). Using the variables identified in these two studies, this current study included the following control variables:

- Caregiver's experience of corporal punishment as a child (operationalized as whether participants were physically hit, spanked, or choked intentionally before the age of 18 by adults in their family as a form of punishment or discipline: yes, no)
- Child's gender (operationalized as whether child was a boy or a girl)
- Child's Age (operationalized by age in years based upon the year and the month that participants' child was born)
- Caregiver's age (operationalized by age in years based upon the year and the month that participants were born)
- Level of education (operationalized by the highest level of education participants completed: less than high school, high school diploma/ GED, technological/ vocational school, some college, Bachelor's degree, Graduate degree)

- Familiarity with child protective services (operationalized by the participants' familiarity with Child Protective Services: very familiar, moderately familiar, somewhat familiar, slightly familiar, not at all familiar)
- Public assistance (operationalized by total household income of previous year and as whether anyone in participants' household were in public welfare programs or not: what was the total household income last year, receive welfare or TANF, WIC, Food Stamp /SNAP, SSI, housing assistance, or unemployment insurance)
- Domestic violence (operationalized as whether participants have ever been physically hit, spanked, or choked intentionally by their spouse/partner; yes, no)

6. Training of Interviewers

For the Survey of Asian American Families, 22 Chinese, Korean, Asian Indian and Bengali bi-lingual interviewers were recruited. In order to facilitate understanding of the importance of the Survey of Asian American Families and the study contents, a one-time interviewer training was conducted at the setting (CCNY group conference room with minimal distraction). During the training, interviewers learned about 1) the purpose and importance of the Asian Family Survey, 2) the survey translated in Chinese, Korean, Hindi, and Bangladeshi, 3) the sampling logic and process, 3) terms of confidentiality, 4) the format and procedure of the interview, 5) ethical issues, 6) interviewer bias, 7) the potential risk management and 8) child abuse and neglect reporting issues and procedures.

7. Analysis

For statistical analysis of the current study, SPSS Ver. 18 software was utilized. The following statistical analyses were conducted in order to examine the characteristics of child maltreatment, correlations among hypothesized variables, and moderating effect of social support.

1) Descriptive statistics and One-Way ANOVA analysis: the collected data were analyzed with descriptive statistics to examine the general types and frequencies of family demographic characteristics as well as parenting stress, social support, and risk of child maltreatment. In order to examine whether parenting stress, social support, and risk of child maltreatment differ from each subgroup of Asian American immigrant parents, One-Way ANOVA analysis was utilized.

2) Testing hypotheses: As aforementioned in the previous section, the research questions of the current study focused on the relationships between parenting stress, social support, and risk of child maltreatment with close attention on moderating role of social support. To answer these research questions, multiple linear regression analysis was utilized. First, the main effect model of regression analysis was used to investigate the possible correlations of parenting stress and social support with risk of child maltreatment. The main effect model was also intended to explore the main effects of parenting stress and social support on risk of child maltreatment, controlling for selected variables among family demographics. This is shown through the statistical formula of $Y_i = I + I.V.\beta_1 + C.V.\beta_j$ (where Dependent variable:

Y_i , Intercept: I, Independent variable: I.V., Control variables: C.V.). Second, in adopting the general framework proposed by Baron and Kenny (1986), moderation analysis was used to detect possible moderation effects of social support in relation to parenting stress and risk of child maltreatment among Asian American immigrant parents, controlling for child and parent's covariates in the family demographics. In order to explore the moderating effect of social support in relation to parenting stress and risk of child maltreatment, the interaction effect model was utilized. This model is described through the statistical formula as follows: $Y_i = I + I.V. \cdot \beta_1 + M.V. \cdot \beta_2 + I.V. \times M.V. \cdot \beta_3 + C.V. \cdot \beta_j$ (where Dependent variable: Y_i , Intercept: I, Independent variable: I.V., Moderation variable: M.V., Control variables: C.V.). Before conducting regression model, this study tested multicollinearity by using VIF test and tolerance test.

List of control variables: As described in the previous measurement section, the control variables included caregiver's experience of corporal punishment as a child, child's gender and age, caregiver's age, level of education, familiarity with child protective services, public assistance and domestic violence. The ethnicity was also added as a control variable. The multiple regression analysis with control variables were performed in three phases: phase 1- controlling child variables, phase 2- parent variables, and phase 3- combining child and parent variables. A multiple regression analysis was performed while controlling the child and parent variables and ethnic variable with Korean as a reference group

8. Administrative Arrangements

In order to implement the Survey of Asian American Families, the principal research investigators organized a research team comprised of two principal investigators, four research assistants, and two agency collaborators (the clinic administrator and assistant project director of the Child Center of New York), and 22 bilingual interviewers who were full-time or part-time clinicians. The principal investigators offered one-day training for the recruited interviewers. The interviewers were trained in unbiased interviewing practice, the importance of ethical practice, voluntary recruitment procedures, and child abuse and neglect reporting process. The agency administrator served as a consultant for the interviewers and provided clear ethical and administrative guidelines to the interviewers when they encountered issues related to the survey.

The principal investigators were responsible for:

- 1) Obtaining funding to cover the cost of the study,
- 2) Designing the interview to be used in this proposed study,
- 3) Training licensed bi-lingual mental health professionals who work at the AOP of CCNY to be interviewers, and
- 4) Overseeing the implementation of the research project.

The two agency collaborators at CCNY, including the author of the current study, were responsible for:

- 1) Recruiting licensed bi-lingual mental health professionals who are clinical staff at the AOP to be interviewers,

- 2) Recruiting Asian American immigrant parents to be interviewees,
- 3) Facilitating the implementation of the face-to-face interviews,
- 4) Providing spaces for interviewing and training,
- 5) Providing suggestions and feedback regarding this research project to the principal investigators, and
- 6) Setting a clear guideline for handling and reporting potential child abuse and neglect information that might arise during the interview process.

Since the Survey of Asian American Families was conducted in collaboration with CCNY, an agreement letter for the collaboration was signed by the executive director and the clinic administrator and the research investigators.

9. Human Subjects

All the research participants of the Survey of Asian American Families were protected based on the ethical principles described in the Belmont report: respect for persons, beneficence, and justice (Department of Health, Education, and Welfare, 1979). To implement the ethical principles, the Survey of Asian American Families included the following procedures:

- 1) In order to facilitate the ethical principles, the Survey of Asian American Families underwent the review for the protection of human subjects and attained the approval from the IRB of Fordham University.

- 2) In order to minimize any potential risks to research participants, the Survey of Asian American Families maintained confidentiality through the following provisions: a) all the research interviewers were trained on the importance of confidentiality and the necessary procedures to protect participants from potential violations, b) all the completed interviews were kept in a sealed envelope in a locked cabinet located in the clinic administrator's office and no one at the agency had access to any part of the survey data, c) completed survey interviews were transported to Dr. Qin Gao by the clinic administrator, d) all personal information was not revealed to any third parties and was only used for the research purposes. In the analysis and publishing of the collected information, personal identification will not be included, and only aggregate data will be presented.
- 3) In order to respect the participants, the Survey of Asian American Families acknowledged the nature of autonomy and protected the right of self-determination of human subjects. Therefore, all the study participants were asked to voluntarily participate and were freely allowed to withdraw from participating at any time from the research without being asked to provide a reason for doing so, or without affecting the services they were receiving or would receive from AOP of CCNY.
- 3) In order to protect research participants and to facilitate informed participation, the Survey of Asian American Families attained a signature on the informed consent form from every participant. This consent form was back -translated into four languages: Chinese, Korean, Hindi, and Bengali. In order to reduce any potential

risks of undue influence, coercion, and unjustifiable pressures, the Survey of Asian American Families trained the interviewers and research assistants about ethical violations and monitored any possible violations by the research investigators and agency collaborators. AOP program participants from both clinical services and community workshops were introduced and invited to the Survey of Asian American Families. The interviewers distributed to program participants the survey information flyers in their own languages or in English. If the program participants agreed to participate in the survey, the interviewers asked the potential participants to read the informed consent in their own language and answered any questions the potential participants had in relation to their participation. The interviewers obtained two signed consents (one kept by the participant and one for researcher). The decision to participate or not in the survey did not influence the services that the participants would receive or were currently receiving at AOP of CCNY.

- 4) Assessment of any potential risks and benefits (extracted from the Survey of Asian American Families Proposal): The participation of Survey of Asian American Families may have the following risks: a) while answering some personal questions, participants may become uncomfortable, b) since incidents of child abuse and neglect are reportable, the interviewers, who were licensed mental health professionals/ mandated reporters, may come across a situation where they needed to report incidents of child abuse to the professional hotline of Administration of Children's Services of New York City. In other words, participating in the Survey of Asian American Families did not exempt participants from the child abuse and

neglect reporting requirement. However, no reportable cases were identified during the interview process among study participants because they had already been assessed by the mental health professionals as a part of comprehensive psychosocial evaluation upon admission to the program. The Survey of Asian American Families was justified with the following benefits: firstly, this survey was the first significant research project targeting Asian American immigrant parents who have long been underrepresented in child maltreatment research. Therefore, the survey results would be utilized in planning and implementing more culturally attuned prevention and remediating programs for Asian American immigrant parents. Secondly, the Survey of Asian American Families would assist the mental health professionals at AOP of CCNY to broaden their understanding of the potential roles of parenting stress and social support and would, in turn, implement more evidenced based and effective interventions for Asian American immigrant parents and their children in New York City.

- 5) Child abuse and neglect reporting procedure: The reportable child abuse and neglect cases, which might be indicated in the process of the interview, were planned to be handled in full accordance with the regulations and rules of both the Administration of Children's Services of New York City (ACS) and the agency incident reporting procedures of CCNY. The interviewers were told to report the cases to the clinic administrator and/or file a formal incident report form, and also report it to the case managers of ACS intake unit by calling the child abuse hotline number for mandated reporters. Before reporting the cases to any responsible parties, the interviewers/

mental health professionals were told to explain the scope and procedures of child abuse and neglect reporting as well as explaining any possible services to Asian American parents who may not be familiar with child protective agencies. This measure was undertaken in order to ease Asian American parents' anxieties and worries as well as reduce of their resistance toward the necessary reporting. It has been known that Asian American parents are reluctant to utilize public services or to be reported to any protective agencies. Therefore, all the trained interviewers were informed of these unique values that these potential participants might have, and were trained to provide knowledge and education regarding the reporting process accordingly. During the data collection, no child abuse or neglect reporting was made of study participants.

CHAPTER FOUR: RESULTS

The results of the data analyses are presented in the following order: (1) descriptive statistics of the sample; (2) the result of One-Way ANOVA analysis comparing the ethnic differences among Asian subgroups in relation to parenting stress, social support, and risk of child maltreatment; (3) the results of multiple regression analysis showing relationships of hypothesized variables - parenting stress and social support on risk of child maltreatment, and the moderation effect of social support on risk of child maltreatment; (4) multiple regression analysis while controlling critical variables in three phases: phase 1- controlling child variables, phase 2- parent variables, and phase 3- combining child and parent variables; and (5) the result of multiple regression analysis while controlling the child and parent covariates and ethnic variable with Korean as a reference group.

1. Sample Characteristics

Tables 1 illustrates socio-demographic characteristics of the sample and mean scores of parenting stress, social support, and risk of child maltreatment.

A total of 273 respondents were recruited in the Survey of Asian American Families. Out of 273 respondents, 259 Asian American immigrant parents were selected and included in the sample for analysis as they were identified to be first-generation immigrants. Hence, a total sample size was 259 for this study.

As shown on Table 1, the mean age of the sample was approximately 41 years old. Slightly more than three-fourths of the sample was female (78.4 %) and the rest was male

(21.6 %). By ethnicity, Koreans were the largest ethnic subgroup (32.8%) followed by Chinese (30.9%), Asian Indian (19.3%), Bengali (9.3%), and other Asian subgroups (7.7%).

Approximately, 57% percent of the respondents reported that they completed some college or higher education while 20% high school or GED, and 22.7% less than high school. Most of the participants were employed either full-time (33.7%) or part-time (10.8%). Approximately 37% of the participants were homemaker or self-employed, 1.6% were in school, and 16.4% were unemployed.

Among the study sample, 65.2% did not report any history of physical abuse by adult before 18 and 34.8% reported history of physical abuse. While the vast majority of participants (89.1%) reported no physical abuse by their spouse or partner, 10.9% reported physical abuse history by their spouse or partner. Close to thirty-three percent of the participants reported that they received some kind of public assistance during the past 12 months while 67.2% answered that they did not. Forty-three percent of the participants reported being unfamiliar or slightly familiar with child protective services, 19.9% somewhat familiar, 21.1% moderately familiar, and 15.9% very familiar. More than half of the participants (57.6%) reported household income below \$49,999.

The participants were asked to select one child, if they had more than one, with the most recent birthday and answer the survey questions referring to that one child. The mean age of children who were referred to by the sample respondents was 9.96 years old, and there were more boys (57.1%) than girls (42.9%).

In the current study, the parenting stress was measured by the parental distress scale from the Parenting Stress Index, Short Form (PSI-SF) (Abidin, 1995). Among the study sample, the mean score of parenting stress was 2.74(SD=.80) out of maximum score of 5. In other words, higher score means higher degree of parental distress. In a study of psychometric properties of the PSI-SF examined in a sample of 185 mothers and fathers, the full mean score of parental distress was 2.44 (SD = .62) while the mean score among abusive parents was 2.54 (SD = .64) and non-abusive comparison groups was 2.35 (SD = .58) (Haskett et al., 2006).

Social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS), which is a 7 point Likert-type scale and consists of 12 items (Zimet et al., 1988). In the current study, the mean score of social support was 5.27 (SD=1.15) out of maximum mean score of 7. The higher mean score indicates the higher degree of social support. In a psychometric study of MSPSS with samples of 255 pregnant women, 74 adolescents, and 55 pediatric residents, the mean scores of social support were 6.01 (SD = .90) for pregnant women, 5.60 (SD = .80) for adolescents, and 5.58 (SD = .98) for residents (Zimet et al., 1990).

In the current study, risk of child maltreatment was measured by the Conflict Tactic Scale of Parent-Child Version (CTSPC) which has been deemed to be useful in assessing the prevalence of child maltreatment in general population (Straus et al., 1998). Among the study sample, the mean score of risk of child maltreatment was .51 (SD=.63).

Table 1. Characteristics of Asian American Immigrant Caregivers

N=259	N	%
Age		
Mean (SD)	41.13(7.760)	
Gender (%)		
Female	203	78.4
Male	56	21.6
Ethnicity (%)		
Korean	85	32.8
Chinese	80	30.9
Asian Indian	50	19.3
Bengali	24	9.3
Others	20	7.7
Education (%)		
Less than high school	58	22.7
High school diploma/GED	51	20.0
Technical/vocational school / Some College	48	18.8
Bachelor degree	73	28.6
Graduate school	25	9.8
Employment (%)		
Full-time	84	33.7
Part-time	27	10.8
Homemaker/self-employed	89	35.7
In school, not working	4	1.6
Not working, looking for a job	20	8.0
Not working, not looking for a job	21	8.4
Others	4	1.6
Parent history of physical abuse by adult before age 18 (%)		
Yes	88	34.8
No	165	65.2
Physical abuse by spouse/partner (%)		
Yes	28	10.9
No	228	89.1
Public assistance during last 12 months (%)		
Yes	85	32.8
No	174	67.2

N=259	N	%
Familiarity with child protective service (%)		
Very familiar	40	15.19
Moderately familiar	53	21.1
Somewhat familiar	50	19.9
Slightly familiar	34	13.5
Not at all familiar	74	29.5
Household income (%)		
Less than \$24,999	76	35
\$25,000-\$49,999	49	22.6
\$50,000-\$74,999	27	12.4
\$75,000-\$99,999	19	8.8
\$100,000 and up	21	9.7
Refused to share	25	11.5
Selected child’s age		
Mean (SD)	9.96(4.96)	
Selected child’s gender (%)		
Girl	109	42.9
Boy	145	57.1
Parenting stress		
Mean (SD)	2.74 (.80)	
Range(Low-High)	1-5	
Social support		
Mean (SD)	5.27(1.15)	
Range(Low-High)	1-7	
Child maltreatment		
Mean (SD)	.51(.63)	
Range(Low-High)	0-4.39	

2. Differences Between Ethnic Subgroups

For explorative purpose, the current study examined differences among ethnic subgroups in parenting stress, social support, and risk of child maltreatment.

Table 3 shows the result of One-Way ANOVA analysis. As shown on Table 3, the results substantiate that there are significant ethnic differences in the level of parenting stress, social support, and risk of child maltreatment. For example, Asian Indian immigrant parents (mean 2.03) presented low parenting stress level while Korean (mean=2.89) and Chinese (mean=3.09) immigrant parents presented high parenting stress. Bengali (mean=2.67) and other Asian ethnic immigrant parents (mean=2.47) presented moderate parenting stress level comparably. For social support, Asian Indian immigrant parents reported highest level with the mean score of 5.93 while Chinese (mean=5.07), Korean (mean=5.11), and Bengali (mean=5.15) presented relatively low level of social support. Furthermore, Chinese (mean=.69), Korean (mean=.66), and other Asian ethnic immigrant parents (mean=.53) presented high level of child maltreatment while Asian Indians (mean=.13) and Bengali immigrant parents (mean=.21) showed relatively low level of child maltreatment.

Table 2. Differences of Asian Ethnic Subgroups in Parenting Stress, Social Support, and Risk of Child Maltreatment

	Parenting Stress(SD)	Social Support(SD)	Child Maltreatment(SD)
Korean	2.89(.689)	5.11(1.40)	.66(.58)
Chinese	3.09(.646)	5.07(.86)	.69(.82)
Asian Indian	2.03(.842)	5.93(.83)	.13(.17)
Bengali	2.67(.806)	5.15(1.34)	.21(.26)
Other	2.47(.564)	5.44(.88)	.53(.55)
F-value	17.84***	4.84**	8.78**

<.05, *<.01

3. Parenting Stress, Social Support, and Moderating Effect of Social Support in Relation to Risk of Child Maltreatment

Table 3 provides the result of multiple regressions related to parenting stress, social support, and moderating effects of social support in relation to parenting stress and risk of child maltreatment.

Hypothesis 1: It was hypothesized that a higher level of parenting stress among Asian Americans will be associated with a greater likelihood of child maltreatment.

As shown on Model 1 of Table 3, it was found that there was a statistically strong significant relationship ($\beta=.171$, $s.e=.052$, $P<.001$) between the level of parenting stress and risk of child maltreatment among Asian American immigrant parents. Parenting stress explained 4.8% of risk of child maltreatment ($R^2=.048$) and an increase of one unit in parenting stress increased risk of child maltreatment by .171 for each unit. Therefore, the data supported the hypothesis 1.

Hypothesis 2: It was hypothesized that the more social support perceived by Asian Americans, the less likelihood of child maltreatment will occur.

As shown on Model 2 of Table 3, it was found that there was a statistically significant relationship ($\beta=-.088$, $s.e=.038$, $P<.05$) between the degree of social support and the likelihood of child maltreatment among Asian American immigrant parents. Social support explained 2.4% of risk of child maltreatment ($R^2=.024$). In other words, an increase of one unit in social support decreased risk of child maltreatment by .088 for each unit. Therefore, the data supported the hypothesis 2.

When both parenting stress and social support were tested together, as shown on Model 3, the parenting stress and social support explained 5.5 % of risk of child maltreatment ($R^2=.055$). The effect of parenting stress on risk of child maltreatment was still statistically significant ($\beta=.156$, $s.e=.060$, $P<.01$). As one unit of parenting stress increased, risk of child maltreatment increased by .156 for each unit when social support was controlled. However, when controlled for parenting stress, the relationship between social support and risk of child maltreatment became statistically insignificant.

Hypothesis 3: It was hypothesized that Asian American parents with a higher level of social support will be more likely to exhibit less negative impacts of parenting stress on risk of child maltreatment than those with a lower level of social support.

As shown on Model 4 of Table 3, the moderating effect of social support in relation to parenting stress and risk of child maltreatment was tested. When the interaction between parenting stress and social support was added to the previous regression model, the model 4 explains 5.7% ($R^2=.057$) of risk of child maltreatment and the interaction effect was not statistically significant ($\beta=-.032$, $s.e=.048$). Therefore, the data did not support the hypothesis 3. There was no significant moderation effect of social support to the parenting stress' impact on risk of child maltreatment.

Table 3. Parenting Stress, Social Support, and Moderation Effect of Social Support on Risk of Child Maltreatment

	Model 1		Model 2		Model 3		Model 4	
	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)
Parenting Stress	.171(.052)****	.069-.273			.156(.060)***	.037~.274	.335(.276)	-.208~.878
Social support			-.088(.038)**	-.162~-.013	-.034(.043)	-.119~.051	.064(.154)	-.239~.368
Stress x Social support							-.032(.048)	-.126~.062
Constant	.043(.149)	-.250-.336	.985(.204)	.582~1.387	.278(.340)	-.393~.950	-.286(.913)	-2.087~1.515
<i>R square</i>	.048		.024		.055		.057	

<.05, *<.01, ****<.001

4. Parenting Stress, Social Support in Relation to Risk of Child Maltreatment with Control Variables

Before proceeding to the multiple regression analysis for independent and control variables, multicollinearity test was conducted. Since none of the VIF scores of variables were more than 2.5, the issue of multicollinearity was not evident in the multiple regression tests.

Controlling for child and parent covariates, relationship between parenting stress and social support was tested in relation to risk of child maltreatment. When controlling for the child variables (child age and child gender), as shown on Model 1 of Table 4, the model explained 7.4% of risk of child maltreatment ($R^2=.074$) and indicated that only parenting stress showed statistically significant relationship with risk of child

maltreatment ($\beta=.154$, $s.e=.061$, $P<.05$). This model showed that one unit increase in parenting stress increased .154 for each unit in risk of child maltreatment.

Controlling for parents' variables (caregiver age, history of physical abuse before 18, education level, history of spousal abuse, public assistance, and familiarity with child protective services), as shown on Model 2 of Table 4, this model explained 13.6 % ($R^2=.136$) of risk of child maltreatment. In this model, the association between parenting stress and risk of child maltreatment was marginally significant ($\beta=.129$, $s.e=.075$, $P<.10$). A one unit increase of parenting stress increased .129 for each unit in risk of child maltreatment. Among the control variables, the history of physical abuse by adult before 18 showed statistical significance ($\beta=.326$, $s.e=.100$, $P<.001$). One unit increase in physical abuse variable increased .326 for each unit in risk of child maltreatment. The familiarity with child protective services also showed statistical significance ($\beta=.074$, $s.e=.035$, $P<.05$). One unit increase in familiarity with CPS increased .074 for each unit in risk of child maltreatment.

When controlling for child and parents' variables together as shown in Model 4 of Table 4, this model explained 16.6% of risk of child maltreatment ($R^2=.166$). The relationship between parenting stress and risk of child maltreatment was still marginally significant ($\beta=.138$, $s.e=.076$, $P<.10$). The one unit increase in parenting stress increased .138 for each unit in risk of child maltreatment. The history of physical abuse by adult before age 18 ($\beta=.368$, $s.e=.102$, $P<.001$) and the familiarity with CPS ($\beta=.065$, $s.e=.035$, $P<.10$) showed statistical significance. The one unit increase in the physical abuse by adult before 18 increased .368 for each unit in risk of child maltreatment.

The one unit increase in the familiarity with CPS increased .065 for each unit in risk of child maltreatment.

Table 4. Parenting Stress and Social Support on Risk of Child Maltreatment when Controlled for Child and Parent Variables

	<i>Model 1</i>		<i>Model 2</i>		<i>Model 3</i>	
	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)
Parenting Stress	.154(.061)**	.034~.274	.129(.075)*	-.019~.276	.138(.076)*	-.013~.288
Social support	-.038(.044)	-.125~.049	.006(.047)	-.087~.099	.006(.048)	-.089~.102
Child Related Variables						
Child age	.010(.009)	-.008~.027			.016(.011)	-.007~.038
Child gender (Boy #)	.130(.088)	-.044~.304			.155(.094)	-.030~.340
Parent Related Variables						
Caregiver Age			.003(.006)	-.009~.014	-.005(.007)	-.019~.010
Physical Abuse before 18			.326(.100)****	.128~.524	.368(.102)****	.167~.570
Education (Less than high school ##)			.033(.029)	-.024~.091	.035(.030)	-.024~.093
Spousal abuse			.097(.145)	-.189~.383	.123(.148)	-.168~.415
Public assistance			.020(.102)	-.182~.222	.031(.103)	-.171~.234
Familiarity with CPS			.074(.035)**	.005~.142	.065(.035)*	-.005~.135
Constant	.027(.372)	-.707~.761	-.423(.465)	-1.340~.494	-.538(.480)	-1.485~.410
<i>R square</i>	.074		.136		.166	

* $<.10$, ** $<.05$, *** $<.01$, **** $<.001$ (* $<.10$ was included in order to show the changes of statistical significance of hypothesized variables when tested with child and parent variables controlled)

Male: reference group

Less than high school: reference group / Operationally defined by less than high school, high school diploma/ GED, technological/ vocational school, some college, bachelor's degree, graduate degree

5. Parenting Stress, Social Support in Relation to Risk of Child

Maltreatment with Control Variables and Ethnicity

When controlling for ethnicity (Korean, Chinese, Asian Indian, Bengali, and Other) as shown on Model 1 of Table 5, this model explained 13.4 % of risk of child maltreatment ($R^2=.134$). The parenting stress and social support did not show any significant relationships with risk of child maltreatment when controlling for ethnic variable. However, when Korean was set as a reference group, Asian Indian ($\beta=-.457$, $s.e=.141$, $P<.001$) and Bengali ($\beta=-.424$, $s.e=.158$, $P<.01$) showed significantly lower risk of child maltreatment while Chinese and other showed no significant difference.

When controlling for child and parent variables and ethnic variable as shown on Model 2 of Table 5, this model explained 20.5% of risk of child maltreatment ($R^2=.205$). The parenting stress and social support did not show any statistical significance with risk of child maltreatment when controlling for ethnic variable and other control variables in the model. However, the history of physical abuse by adult before age 18 ($\beta=.319$, $s.e=.032$, $P<.01$) and education level ($\beta=.065$, $s.e=.035$, $P<.10$) still showed statistical significance. The one unit increase in the physical abuse increased .319 for each unit in risk of child maltreatment while one unit increase in the education increased .052 for each unit in risk of child maltreatment.

Table 5. Parenting Stress and Social Support with Ethnicity and Control Variables on Risk of Child Maltreatment

	Model 1		Model 2	
	β (s.e.)	95% C.I. (Lower-Upper)	β (s.e.)	95% C.I. (Lower-Upper)
Parenting Stress	.042(.067)	-.091~.175	.064(.084)	-.102~.229
Social support	-.030(.042)	-.112~.053	.003(.048)	-.092~.097
Ethnicity				
Korean(Reference Category)	-	-	-	-
Chinese	.036(.105)	-.170~.242	.155(.132)	-.106~.416
Asian Indian	-.457(.141)****	-.735~-.179	-.296(.162)*	-.616~.023
Bengali	-.424(.158)***	-.735~-.113	-.250(.217)	-.677~.178
Other	-.052(.170)	-.387~.284	-.026(.198)	-.417~.366
Child Related Variables				
Child age			.017(.011)	-.005~.039
Child gender (Boy #)			.102(.095)	-.087~.290
Parent Related Variables				
Caregiver Age			-.002(.008)	-.017~.012
Physical Abuse before 18			.319(.105)***	.113~.526
Education (Less than high school ##)			.057(.032)*	-.007~.121
Spousal abuse			.136(.147)	-.154~.425
Public assistance			.023(.109)	-.191~.238
Familiarity with CPS			.052(.036)	-.019~.122
Constant	.675(.351)	-.016-1.366	-.331(.520)	-1.358~.696
<i>R square</i>	.134		.205	

* $<.10$, ** $<.05$, *** $<.01$, **** $<.001$ (* $<.10$ was included in order to show the changes of statistical significance of hypothesized variables when tested with ethnicity as well as child and parent variables controlled)

Male: reference group

Less than high school: reference group / Operationally defined by less than high school, high school diploma/ GED, technological/ vocational school, some college, bachelor's degree, graduate degree

CHAPTER FIVE: DISCUSSION AND CONCLUSION

1. Discussion

This current study aimed to examine interrelationships of parenting stress and social support in relation to risk of child maltreatment among Asian American immigrant parents. The discussion section addresses the following: parenting stress and risk of child maltreatment, social support and risk of child maltreatment, and the moderation effect of social support on parenting stress in relation to risk of child maltreatment. For an exploratory purpose, the current study also tested the similarities and differences in parenting stress, social support, and risk of child maltreatment among various ethnic groups of Asian American immigrants. The following section addresses ethnic comparisons in parenting stress, social support, and risk of child maltreatment.

1) Parenting Stress and Risk of Child Maltreatment

The findings of multiple regression analysis revealed that there was a strong and positive association between the parents' parenting stress and risk of child maltreatment. Because child maltreatment has been explained as being complex and multiply-determined in previous findings (Brown, et al., 1998; Kotch et al., 1999; Goldman et al., 2003), the current study included critical control variables in its analysis. Despite the inclusion of control variables, the findings demonstrated that parenting stress still showed positive relationship with risk of child maltreatment. Asian American immigrant parents who held greater parenting stress reported significantly higher risk of child maltreatment. The study results corroborate with findings that parenting stress is positively associated with child maltreatment (Chan, 1994; Crouch & Behl, 2001; Ethier, Lacharite, & Couture,

1995; Holden & Banez, 1996; Rodriguez & Green, 1997; Schaeffer, Alexander, Bethke, & Kretz, 2005; Whipple & Webster-Stratton, 1991).

The positive relationships between parenting stress and risk of child maltreatment among Asian immigrant parents are explained in the following ways.

First, parenting stress, as one of the critical determinants in parenting process, directly or indirectly affects the parenting behaviors. Belsky (1984) claimed that parental functioning is determined by multiple domains such as personal psychological resources of parents, characteristics of a child, and contextual sources of stress and support. In his process model of competent parental functioning, those multiple domains have both a direct and indirect effects on parenting behaviors. Consistent with this model, it is believed that parenting stress is interrelated with other ecological factors that shape parental functioning which in turn influences the parenting behaviors in a negative way. Farmer and Lee (2012) demonstrated that there was a direct negative association between parenting stress and the level of positive parent-child interactions. Hence, Asian American immigrant parents with higher level of parenting stress may be less likely to engage in positive parent-child interactions and demonstrate more negative parenting behaviors which may be associated with increased risk of child maltreatment.

Second, parenting stress has some associations with more authoritarian and power-control types of parenting styles. For example, Xu et al. (2005) found that Chinese mothers' parenting distress was positively associated with authoritarian parenting, dysfunctional mother-child interactions, and negatively predicted authoritative parenting. This study explained that parenting responsibilities overwhelm the levels of parenting

distress. For example, parents who may be lacking psychological resources to handle children's needs sensitively are more likely to experience feelings of helplessness and become easily upset with their children's non-compliance. In turn, parents choose controlling and power-assertive parenting styles to manage their children's behavior. The findings from the current study support the assumption that Asian American immigrant parents who seem to present higher level of parenting stress turn to more authoritarian and power-control parenting methods which are positively associated with risk of child maltreatment behaviors.

Third, parenting stress negatively impacts the cognitive process of parents and in turn increases risk of child maltreatment. Pinderhughes et al. (2000) demonstrated that higher level of parenting stress was associated with negative perceptions of their children and more intense cognitive-emotional processes which were measured by hostile attributions, emotional upset, worry about child's future, available alternative disciplinary strategies, and available preventive strategies.

As discussed above, Asian American immigrant parents are more likely to be exposed to parenting stress due to acculturation process which requires immigrants to change and negotiate new cultural and psychological experiences (Bornstein & Bohr, 2011). Berry (2005) indicated that immigrants are exposed to acculturation stress especially in the case that marginalization is pursued than integration. Xie and colleagues (2004) identified acculturation stress as including language barriers, loneliness, loss of social status, and identity confusion. In addition, acculturation stress among immigrants can also originate from lack of understanding of cultural norms, discomfort with individualistic values, and lack of social support network (Kim, Lau, & Chang, 2006). At

the level of parent-child interaction, stress and conflict can arise when the rates of acculturation are different between immigrant parents and their children (Farver, Narang, & Bhadha, 2002). Therefore, the immigration experiences that Asian American immigrant parents have gone through require them to adjust to new language and cultures which may trigger acculturation stress. In turn, the acculturation stress can exacerbate the parents' burdens on caregiving responsibilities and cause significant parenting stress in carrying out their parenting roles. Nomaguchi and House (2012) demonstrated the potential impact of acculturation stress on parenting stress in that immigrant mothers reported more parenting stress than native-born mothers.

2) Social Support, Risk of Child Maltreatment, and Moderation Effect

In line with previous studies (Bishop & Leadbeater, 1997, Chan, 1994; Guadin, Polansky, Kilpatrick, & Shilton, 1993; Jackson, 2009; Kotch et al., 1997; Kotch, et al., 1999; Li, Godinet, & Arnsberger, 2011; Williamson, Borduin, & Howe, 1991), the current study showed that there was a statistically significant negative association between social support and risk of child maltreatment among Asian American immigrant parents without accounting for parenting stress and other control variables. However, with both parenting stress and other variables controlled, the negative relationship between social support and risk of child maltreatment was found to be statistically insignificant. Furthermore, contrary to the hypothesis, the moderation effect of social support in relation to parenting stress and risk of child maltreatment was not statistically significant. Hence, the current study was unable to support the buffering model of social support on parenting stress in relation to risk of child maltreatment among Asian American immigrant parents.

The findings from the current study can be understood in following ways.

Firstly, some Asian American immigrant parents may be reluctant to call on their social support networks in time of parenting stress. In general, Asian cultures promote collectivism and are believed to encourage interdependence in relationships with family members and/or other social networks. However, a number of studies that examined the cultural differences in use of social support proposed counterintuitive cultural patterns indicating that Asians and Asian Americans may be less likely to rely on social support and prefer different types of support compared to European Americans when they are faced with stressful life problems.

For examples, Taylor et al. (2004) and Kim et al. (2006) found that contrary to the general perception, Asian and Asian Americans were less likely to use social support for coping with stress than European Americans. Kim and colleagues (2008) highlighted that Asian Americans were less willing to openly seek support from close others than European Americans and rather preferred to use a type of support that does not engage in explicit disclosure of personal stressful events and distressful feelings. Taylor et al. (2004) found that Asian cultural norms appear to discourage use of social support networks for help in coping with stress or in solving personal problems since individual goals are seen as means for promoting relationships in the Asian cultural context. In other word, Asians and Asian Americans who view their help-seeking behaviors as burdensome for their family members or other social networks, they may prefer not to call on them for help in order to preserve the collectivistic value of promoting harmonious relationships. Likewise, some Asian American immigrant parents may be concerned that pursuing supports to cope with parenting stress may burden their family

members or other social networks. Therefore, they may be reluctant to rely on social support. As Kim and colleagues (2008) found in their study, some Asian American immigrant parents may not be willing to rely on social support since otherwise they may lose face upon disclosing their personal stressful events or negative feelings to others. As little attention has been shown in previous studies on the cultural differences in the relationships between social support and risk of child maltreatment, the findings from the current study suggest considering potential implications of cultural difference in understanding the role of social support among Asian American immigrant parents.

Secondly, although previous studies mainly focused on the beneficial roles of social support in dealing with stresses, Sangalang and Gee (2012) examined how the social support and strains may be associated with depression and anxiety among Asian Americans. In their study with the nationally representative sample of Asian Americans (n=2,066), family support was associated with decreased odds of Diagnostic and Statistical Manual of Mental Disorders (4TH ed., text rev.) criteria for both major depressive disorder (MDD) and general anxiety disorder (GAD) both for men and women. Interestingly, family strain was associated with increased odds of GAD both for men and women whereas friend strain was associated with increased odds of GAD among women, but not in men. This study indicates that the very relationships that provide social support can also cause strains such as conflicts, feelings of obligations, and demands. Furthermore, the study suggests that social support and strains are independent and distinct concepts in that strain does not mean merely low social support. The findings from Sangalang and Gee (2012) may explain weaker relationship between social support and risk of child maltreatment after controlling other variables in the current study. It

may be possible that the relationships providing social support for Asian American immigrant parents also serves as strains that increases the level of parenting stress and risk of child maltreatment.

Thirdly, in the current study, social support was measured by the Multidimensional Scale of Perceived Social Support (MSPSS) which simply focuses on caregiver's perceived adequacy of social support from family, friends, and significant other. Assessing the mere level of perceived social support may not grasp whether the Asian American immigrant parents really use their social support resources and benefit from them or not. Furthermore, the MSPSS may not be culturally sensitive in assessing the perceived social support among Asian American immigrant parents. This suggest future research to be conducted with more culturally sensitive measures which show construct validity and reliability as well as capacity to consider Asians' unique values, attitudes, and cultures.

Lastly, the findings from the current study indicate that parenting stress has shown a very strong relationship with risk of child maltreatment. Even after controlling other variables, the significant relationship was substantiated. In order to moderate the impact of parenting stress on risk of child maltreatment, the effects of social support should be strong enough to exert buffering roles. However, as previously indicated, the effect of social support in relation to risk of child maltreatment was attenuated and became statistically insignificant after parenting stress and other control variables were entered into the model. Therefore, it may be interpreted that the moderating effect of social support on parenting stress was not found significant since social support was not

statistically strong enough to buffer the negative role of parenting stress which may exert a strong impact on risk of child maltreatment among Asian American immigrant parents.

3) Parent's Own Experiences of Abuse and Familiarity with Child Protective Services as Critical Predictors

It is quite alarming to note that there was a statistically significant relationship between a parent's own experience of abuse under the age of 18 and risk of child maltreatment on their own children when parenting stress and social support were tested along with child, parent, and ethnicity variables. Over the past decades, studies have found substantial support for the intergenerational transmission of child maltreatment. For example, Buchanan (1996) argued that considerable numbers of families repeat the patterns of their own child abuse experience with their own children. In addition, Pears and Capaldi (2001) found that parents who experienced abuse in their childhood were significantly more likely to engage in abusive behaviors toward their own children. Particularly, according to their study, parents who experienced multiple acts of abuse with at least one being physical act were more likely to become abusive. Kim (2009) also concluded that young parents who experienced physical abuse and neglect in their childhood were more likely to display physically abusive and neglectful parenting behaviors. The findings in this study support that the intergenerational transmission of child maltreatment was also evident among Asian American immigrant parents.

Another critical predictor that was significantly associated with risk of child maltreatment among Asian American immigrant parents identified in the current study was familiarity with Child Protective Services (CPS). Remarkably, even when tested with

important covariates, Asian American immigrant parents' level of awareness or familiarity with child protective services had a significant relationship with risk of child maltreatment. Although previous studies have rarely explored the potential relationship between the familiarity of Child Protective Services and risk of child maltreatment, the finding in the current study has shown that increased familiarity with CPS indicates less likelihood of risk of child maltreatment among Asian American immigrant parents. As one of the critical protective factors of risk of child maltreatment, future research needs to further address the potential role of the knowledge and familiarity of CPS among Asian American immigrant parents.

4) Explorative Question: Differences among Asian Ethnic Subgroups

Few studies have paid attention to differences in prevalence and types of child maltreatment among Asian or Asian American ethnic subgroups. However, existing studies have demonstrated conflicting findings.

For example, Lau, Takeuchi, and Alegria (2006) analyzed the data from the National Latino and Asian American study and found that there were significant differences in rates of reported parental aggression among Asian American groups (Chinese, Filipino, Vietnamese, and Other Asian descent). The study indicated that Chinese Americans were at relatively higher risk of pursuing physical discipline than other groups of Asian American heritages.

On the other hand, in a study conducted by Ima and Hohm (1991) among 158 child maltreatment cases of Asian and Pacific Islander, Koreans, Filipinos, and Hmong were underrepresented compared to their population share in the study sample while

Vietnamese and Cambodian families were overrepresented. However, this study included very small number of sample numbers who were Korean (n=2) and Hmong (n=2) while most cases in the sample were Vietnamese (n=57), Filipino (n=38), and Cambodian (n=37). Furthermore, the study sample was only collected in one agency, the Union of Pan Asian Communities in San Diego, which provides services to facilitate the adjustment of Asian refugees and immigrants. Therefore, the findings from this study would not be an appropriate representative sample for explaining the prevalence of child maltreatment among Asian American parents nor would the differences in the reported cases among Asian ethnic subgroups be statistically comparable.

Similarly, in a study that explored patterns of child maltreatment referrals among Asian and Pacific Islander (API) families in Washington State, Pelczarski and Kemp (2006) reported that Cambodian, Thai, Laotian, Asian Indian, and Vietnamese families were overrepresented in the sample compared to their presentation in the state population of API. On the other hand, Filipino, Korean, Chinese, and Japanese families were underrepresented compared to their representation in the state. This study not only suggested that there are differences among Asian American subgroups in prevalence and patterns of child maltreatment, but also structural and cultural differences. However, the findings from the current study did not explore the referral cases of child maltreatment, but focused on acts of child maltreatment among Asian American immigrant parents. Therefore, it is vital to keep the differences in mind before directly comparing the findings from Pelczarski and Kemp's study (2006) to the current study.

In a study that examined prevalence, characteristics, predictors, and beliefs about physical violence among South Asian, Middle Eastern, East Asian, and Latina women,

Maker and colleagues (2005) indicated that 73% of the South Asian and Middle Eastern subsample and 65% of East Asian subsample reported experiencing at least one type of physical abuse. In the study, South Asian and Middle Eastern subsamples were collapsed into one subgroup due to the minimal sample size of Middle Eastern subgroup. It was also unclear as to what South Asian groups were included in the study. Despite the non-identical sample compositions and different research methods, Maker and colleagues (2005) presented slightly different explanations in describing prevalence of child maltreatment among this population since the current study reported that Asian Indians were less likely to show child maltreatment compared to Korean and Chinese subgroups.

In sum, previous studies have limitations in generalizability and present conflicting prevalence rates and patterns among Asian ethnic subgroups. It is suggestive that more rigorous studies with larger representative samples should be implemented to compare the Asian subgroups on risk child maltreatment. Since Asian Americans are known to be different in culture, language, and even their child rearing practices, there are limitations to generalizing the study findings from the current study for all the Asian subgroups.

It is quite interesting to note that there were also ethnic differences in parenting stress, social support, and risk of child maltreatment in the current study. Although there have not been studies comparing Asian American ethnic subgroups on the level of parenting stress and social support in relation to risk of child maltreatment, it is significant to note that the current study found variances in experiencing parenting stress, social support, and risk of child maltreatment among Asian American immigrant parents. It is understandable in that Asians are not a homogenous group but rather show

significant differences in their social and cultural roots, languages, traditions, and religions although they do share some similarities.

For example, Sailer (2002) in his column on United Press International (UPI) argued that there are visible differences between South Asians and East Asians. The column cites a statement made by Pyong Gap Min, a professor at Queens College of the City University of New York, “It is a political term used by Asian-American activists and enhanced by governmental treatment. In terms of culture, physical characteristics, and pre-migrant historical experiences, I have argued, South and East Asians do not have commonalities and as a result, they do not maintain close ties in terms friendship, intermarriage or sharing neighborhoods” (Sailer, 2002). Furthermore, Sailer (2002) explained that all Indian immigrants are from the upper castes among Hindu, and speak an Indo-European language, a linguistic family to which English belongs. Farver, Narang, and Bhadha (2002) explained that due to the experiences with British colonial rule of India, most Indian Americans are fluent in English and have been exposed to Western values. Following these arguments, it is hard to compare Asian Indian immigrants who come from a different religion, culture, and linguistic origin to East Asian immigrants who share different backgrounds. Thus, we cannot be simplistic in understanding parenting stress, social support, and risk of child maltreatment among Asian American immigrant parents. Furthermore, future research is needed to examine the patterns, types, and bases underlying these potential differences for various ethnic subgroups.

Park (2010) found that the role of social support differs in buffering the negative effects of acculturative stressors among Asian ethnic subgroups in her dissertation study

which analyzed the secondary data of nationally representative Asian American sample (600 Chinese Americans, 508 Filipino Americans, and 520 Vietnamese Americans). For example, the protective role of social support in relation to stress was found only among Pilipino Americans. Park (2010) also suggested that each ethnic subgroup should be considered individually due to the differences in immigration history, culture, and religions. In line with Park's study findings, it is highly predictive in the current study that Asian American immigrant parents differ in the perceived level of social support and in the buffering roles of social support on their parenting stress by ethnic subgroups. Therefore, it is recommended that practitioners and researchers consider the heterogeneity of Asian Americans. It would be deemed effective or culturally competent if assessments or services are provided to the Asian American immigrant parents with respecting the different values, attitudes, and cultures embedded in each of the Asian ethnic subgroups.

2. Limitations

This current study was able to examine interrelationships between parenting stress, social support, and risk of child maltreatment among the fast-growing Asian American immigrant parents from diverse ethnic subgroups including Korean, Chinese, Asian Indians, and Bengali. The findings generated significant implications for direct practice, policy, and future research for the populations. However, this study also showed the following limitations.

First, although Asian Americans include diverse ethnic subgroups that differ in language, culture, pre-immigration history, and biological features, the current study treated the Asian ethnic subgroups as a homogeneous sample population. The findings from the current study may not subsume the heterogeneous characteristics in parenting stress, social support, and risk of child maltreatment. The sample size for each ethnic subgroup was too small for conducting separate multiple regression analyses. Even in the categorized groups, there were a small number of minority samples such as Pilipino, Laotian and Vietnamese immigrant caregivers. When the current study controlled ethnicity in multiple regression analysis, none of the independent variables were found to be significantly correlated with risk of child maltreatment among Asian American immigrant parents. This result implies that there may be differences among Asian ethnic subgroups that may explain the hypothesized relationships among independent variables and dependent variable. Therefore, this current study was limited in generalizing the findings to all Asian American immigrant parents.

Second, this current study utilized a secondary data analysis from the Survey of Asian American Families which was collected at one agency, the Asian Outreach Program of the Child Center of New York (CCNY). Furthermore, the study sampled clients of CCNY who received individual or family interventions or attended community workshops. Hence, the sample is not representative of Asian American general populations and is biased to a treatment population. Therefore, the study findings are limited in its generalizability to understanding the role of social support in relation to parenting stress and risk of child maltreatment among Asian American immigrant parents in the United States. In the future, a larger scale national survey with enough sample size

for each ethnic group could certainly provide information that could be more generalizable among the various Asian American subgroups.

Third, the current study utilized a cross-sectional method which cannot identify causal relationships between hypothesized independent variables and dependent variable. For instance, although parenting stress might cause risk of child maltreatment, reverse explanation may be possible as well in that risk of child maltreatment may be causing parenting stress. Therefore, the findings in the current study are limited in examining the causal relationships between variables.

Fourth, as the nature of secondary analysis, the current study was limited by measures used in the original study, the Survey of Asian American Families. For example, although the concept of parenting stress encompasses multiple domains of parent-child characteristics and interactions, a limitation of this current study is in its reliance on only the parental distress subscale that measures parenting stress rather than utilizing the full scale of the parenting stress Index. In conducting secondary data analysis, the current study was restricted to analyze data from the Survey of Asian American Families, which was not designed to focus primarily on parenting stress, and thus, only used one of the three subscales of the Parenting Stress Index. Acknowledging the multiple domains of parenting stress, it is advisable to initiate future research that examines the comprehensive nature of parenting stress among Asian American immigrant parents.

Fifth, although the measures of social support, parenting stress, and risk of child maltreatment that have been utilized among Asians and/or Asian Americans showed reliable psychometric properties, we still should be cautious when considering that they

may not be culturally sensitive measures. In this current study, although all three standard measures showed high level of Cronbach's alpha scores, the construct validity of the measures was not clear. Therefore, the data collected from the standard measures may not provide a valid picture of those participating in the survey.

Lastly, the current study obtained secondary data that were collected from interviews. Although measures were implemented to ensure the reliability of collected data, the data were not free from interviewer effects, misunderstanding, and self-presentation concerns. Furthermore, it may not be true that respondents intentionally minimized their child maltreating practices due to social desirability. It is also a concern that respondents were worried to be reported to child protective services and stigma associated with child maltreatment may hinder honest responses. Therefore, the data collected from the survey of Asian American families may be somewhat biased or distorted.

3. Implications

Findings from the current study suggest significant implications for social work practice.

First of all, since there were potential variances in the levels of parenting stress, social support, and risk of child maltreatment, social work service providers need to underscore heterogeneous characters within this population. Due to the "model minority" perception, social work practitioners should not treat the heterogeneous groups as homogenous ones without considering differences among the subgroups. It is advisable

for social work practitioners to consider the ethnic differences that are embedded in diverse cultural, linguistic, historical, socio-political factors and also strive for more culturally sensitive services and programs when serving various ethnic groups.

Second, the findings from this current study suggest that, in line with ecological model's perspectives, multiple predictors should be considered in prevention and remediation of child maltreatment among Asian American immigrant parents. While parenting stress and social support were associated with risk of child maltreatment in the current study, intergenerational transmission of child maltreatment was also evident among the Asian American immigrant parents across different ethnic subgroups even with other important covariates controlled. Previous research found that approximately one-third of abused American children are likely to become abusive parents (Kaufman & Zigler, 1987). While individuals with a history of child abuse and neglect in their own childhood were identified to be at increased risk of maltreating their own children, this was not the case for the two third of parents with a history of child abuse and neglect. As intergenerational transmission has been noted to be a significant predictor in child maltreatment in previous research and this study, it is very important to recognize different pathways that lead to transmission of child maltreatment and possible changes that can occur in the course of these relationships. Social work practitioners need to explore the reasons that may possibly explain why some parents with a history of maltreatment do not become abusive parents. As Litty and colleagues (1996) found that perceived social support moderates parents' own experiences of abuse and the potential risk of child abuse on their own children, social work practitioners can provide interventions that help parents with child maltreatment histories to receive extensive

emotional and social support from family members and significant others. Social work practitioners need to break the maladaptive cycle of child maltreatment among Asian American immigrant parents by providing professional interventions such as psychoeducation on the roles of cultural values and attitudes of corporal punishment, effective parenting skills program, psychotherapeutic approaches for anger management and stress reduction, and community awareness campaigns and outreach activities.

Third, as the current study indicated, the potential protective role of knowledge and familiarity with Child Protective Services should be taken into account when social work practitioners provide preventive services to Asian American immigrant parents. Since most Asian Americans parents are recent immigrants (US Census, 2008), social work practitioners and child protective services can help the parents to understand the laws, regulations, and programs of child maltreatment through community educational workshops and distribution of informative brochures in each Asian languages in collaboration with community social service agencies, mental health organizations, religious organizations, pediatricians, daycare centers, and local ethnic newspapers and broadcasting agencies.

Fourth, the results in the current study support the significant positive relationships between parenting stress and risk of child maltreatment among Asian American immigrant parents. The relationship indicates that parenting stress is a strong predictor for the risk of child maltreatment which may lead to substantiated child maltreatment. In order to prevent child maltreatment, social work practitioners need to implement programs to reduce parenting stress within the population. Due to their immigration and stress related to acculturation, Asian American immigrant parents are

more vulnerable for the risk of parenting stress. Furthermore, Asian Americans have been found to be less likely to utilize mental health services. The rates of mental health service usage among foreign-born Asian Americans have been found to be lower than American-born Asian Americans (Abe-Kim et al., 2007). Therefore, social work practitioners need to provide more culturally sensitive interventions that aim to reduce parenting stress and encourage utilization of the services through outreach activities at community cultural centers, religious organizations, social service agencies, and mental health organizations.

Fifth, the findings suggest that Asian immigrant parents' perceived social support was negatively associated with risk of child maltreatment. Although the relationship became weakened when other child and parent variables were controlled, social workers need to carefully assess social support factors and consider the potential protective roles of social support in preventing child maltreatment among Asian American immigrant families. The loss of social support could gravely impact vulnerable Asian American immigrant parents who do not develop or use sound social support networks. There is considerable evidence that indicates the benefits of social support in times of traumatic and stressful life events. Asian American immigrant parents may receive benefits from social support through tangible aid, provision of information and resources, and advice and suggestions as to how to cope with parenting stress (Taylor et al., 2004). It is crucial for social work practitioners to consider the cultural differences in the use of social support among Asian American immigrant parents. In order to assist Asian American immigrant parents to benefit from social support networks, social work practitioners can design and implement culturally sensitive interventions that are tailored to help them

cope with their stressful events with the appropriate social support networks and resources which may enhance the benefits and minimize the potential negative effects in using social support. Social work practitioners can also carefully explore risk of child maltreatment and provide case management services or preventive interventions that can specifically reduce and prevent potential occurrence of child maltreatment by substituting professional supports for informal supports for Asian American immigrant families.

Lastly, as the number of Asian Americans in the United States continues to increase, social workers need to be prepared to address child maltreatment issues in this population. For effective interventions, more Asian American social workers need to be recruited. A study from National Association of Social Workers (NASW, 2003) reported that approximately nine in ten regular NASW members (89%) listed their racial/ethnic origin as White/Caucasian, 5% selected African American, and less than 1% Asian. According to a NASW's survey of its Child Welfare Specialty Practice Section (2004) conducted in 2003 with 718 members, 77% were White, 14 % African American, and 5 % Hispanic/Latino respectively while Asian was not even categorized due to the small number. As the recent US census data (US Census Bureau, 2010) released, Asian Americans are comprised of 4.3% (14.6 million) of the total population in the U.S., which is 43% increase from the population size in the 2000 U.S. census. In order to resolve the underrepresentation of Asian Americans in the social service workforce, more efforts should be made to increase the number of Asian American social workers who share culture and language with their clients. Given the fact that language barriers play a significant role in reducing the quality in health and mental health services (Webb, 2010), recruiting bilingual and bicultural Asian American social workers and child protective

workers would be significant in more effectively serving the Asian immigrant parents who may be at risk of child maltreatment.

4. Recommendations for Future Research

The findings from the current study suggest a number of recommendations that may guide future research for child maltreatment among Asian American immigrant parents.

First, the findings support the importance of heterogeneity of parenting stress, social support, and risk of child maltreatment among Asian American subgroups. Although there were significant differences among subgroups, the current study was limited in examining further implications due to the small numbers in each of the ethnic subgroups in the study sample. In order to define the similarities and differences within the groups, future studies should include enough sub sample sizes for each ethnic subgroup to conduct appropriate analyses.

Second, the current study utilized secondary data from the survey of Asian American families collected from one Asian American social service agency located in New York City. Despite the significance of the survey that included diverse Asian American immigrant groups, the current study was limited in its generalizability in applying the findings to all Asian American immigrant parents in the U.S.. Therefore, future research should adopt more rigorous sampling methods with larger sample sizes for ethnic subgroups that could represent Asian American immigrant parents in the U.S. The future research should also consider the pitfalls of the current study that analyzed the

secondary data that were collected from treatment population. It is highly recommended for future researchers to recruit study samples from non-treatment populations, but rather from the general populations.

Third, future research must use racially and culturally sensitive measures of parenting stress, social support, and risk of child maltreatment. Although the standard measures adopted from previous studies showed good reliability and acceptable construct validity, it is unclear whether the measures are well suited to assessing complicated social issues among Asian American immigrant parents. Furthermore, this current study analyzed data collected from the survey of Asian American families which relied on self-disclosure through interviews. Due to stigma and social desirability, the interview participants may not have revealed some facts or may have minimized or distorted their information. Future research needs to discover ways to reduce these limitations by using social desirability measures such as the Marlowe-Crowne Social Desirability Scale (Crowne & Marlowe, 1960), the short form of Marlowe-Crowne Social Desirability Scale (Fischer & Fick, 1993), and indirect questioning such as asking respondents to answer questions from another person's perspective (Fisher, 1993).

Fourth, future researchers could launch research using a combination of quantitative and qualitative methods in assessing sensitive social issues of child maltreatment among Asian American immigrant parents. Qualitative research method would be deemed appropriate to satisfy exploring such poorly understood, sensitive, and ethnically-specific social phenomenon of child maltreatment among Asian American immigrant parents. Adding qualitative method to a quantitative cross-sectional method could also evoke in-depth knowledge of the psychological, social, and cultural

experiences as well as general characteristics and statistical significance among hypothesized variables in regard to risk of child maltreatment among Asian American immigrant parents. In addition, the combined research method could be conducted to better understand social support and its relationship to strains to parenting stress among Asian American immigrant parents.

Lastly, Asian Americans have been excluded for or in only a few samples have they been included in national studies with larger representative samples. Future research should include fast growing Asian American population in their samples for national epidemiological studies.

5. Conclusion

The goal of the current study was to examine the main effects of parenting stress and social support on risk of child maltreatment as well as testing the moderating effect of social support on parenting stress in relation to risk of child maltreatment among Asian American immigrant parents. The current study provides evidence for significant positive relationships between parenting stress and risk of child maltreatment. Although statistically significant negative relationship between social support and risk of child maltreatment was found, the relationship became weakened and insignificant when controlling other predictors of child and parent variables. Contrary to the hypothesized expectation, the moderating effect that hypothesized the social support buffers the negative impacts of parenting stress on risk of child maltreatment was not warranted., This study suggests providing more culturally competent interventions that aim to reduce parenting stress and intergenerational transmission of child maltreatment, increasing utilization of available services and awareness on child protective services, and enhancing Asian immigrant families to develop a social support system of family and friends. It is essential to note that there were significant differences in parenting stress, social support, and risk of child maltreatment among Asian ethnic subgroups. Therefore the exploratory findings for the current study suggest future research to focus on potential heterogeneity of parenting stress, social support, and risk of child maltreatment among the Asian American immigrant parents. It is also recommended for future research to adopt culturally sensitive measures that take into account the unique psychosocial contexts of Asian American immigrant parents and the various subgroups.

CHAPTER SIX: REFERENCES

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APPENDICES

1. Conflict Tactic Scale of Parent-Child Version (CTSPC)
2. Multidimensional Scale of Perceived Social Support (MSPSS)
3. Parenting Stress Index-Short Form

1. Conflict Tactic Scale of Parent-Child Version (CTSPC)

	Once	Twice	3-5 times	6-10 times	11-20 times	More than 20 times	Happened but not last year	Never happened
Explained why something was wrong	1	2	3	4	5	6	7	0
Put him/her in "time out" (or sent to his/her room)	1	2	3	4	5	6	7	0
Shook him/her	1	2	3	4	5	6	7	0
Hit him/her on the bottom with a belt, hairbrush, a stick or some other hard object	1	2	3	4	5	6	7	0
Gave him/her something else to do instead of what he/she was doing	1	2	3	4	5	6	7	0
Shouted, yelled, or screamed at him/her	1	2	3	4	5	6	7	0
Hit him/her with a fist or kicked him/her hard	1	2	3	4	5	6	7	0
Spanked him/her on the bottom with your bare hand	1	2	3	4	5	6	7	0
Grabbed him/her around the neck and choked him/her	1	2	3	4	5	6	7	0
Swore or cursed at him/her	1	2	3	4	5	6	7	0
Beat him/her up, that is you hit him/her over and over as hard as you could	1	2	3	4	5	6	7	0
Said you would send him/her away or kick him/her out of the house	1	2	3	4	5	6	7	0
Burned or scalded him/her on purpose	1	2	3	4	5	6	7	0
Threatened to spank or hit him/her but did not actually do it	1	2	3	4	5	6	7	0
Hit him/her on some other part of the body besides the bottom with a belt, hairbrush, or a stick	1	2	3	4	5	6	7	0
Slapped him/her on the hand, arm or leg	1	2	3	4	5	6	7	0
Took away privileges or grounded him/her	1	2	3	4	5	6	7	0
Pinched him/her	1	2	3	4	5	6	7	0
Threatened him/her with a knife or gun	1	2	3	4	5	6	7	0
Threw or knocked him/her down	1	2	3	4	5	6	7	0
Called him/her dumb or lazy or some other name like that	1	2	3	4	5	6	7	0
Slapped him/her on the face or head or ears	1	2	3	4	5	6	7	0
Had to leave your child home alone, even when you thought some adult should be with him/her	1	2	3	4	5	6	7	0
Were so caught up with problems that you were not able to show or tell your child that you loved him/her	1	2	3	4	5	6	7	0

Were not able to make sure your child got the food he/she needed	1	2	3	4	5	6	7	0
Were not able to make sure your child got to a doctor or hospital when he/she needed it	1	2	3	4	5	6	7	0
Were so drunk or high that you had a problem taking care of your child	1	2	3	4	5	6	7	0

2. Multidimensional Scale of Perceived Social Support

Multidimensional Scale of Perceived Social Support (Zimet, Dahlem, Zimet & Farley, 1988)

Instructions: We are interested in how you feel about the following statements. Read each statement carefully. Indicate how you feel about each statement.

Circle the “1” if you **Very Strongly Disagree**

Circle the “2” if you **Strongly Disagree**

Circle the “3” if you **Mildly Disagree**

Circle the “4” if you are **Neutral**

Circle the “5” if you **Mildly Agree**

Circle the “6” if you **Strongly Agree**

Circle the “7” if you **Very Strongly Agree**

- | | | | | | | | | | |
|----|--|---|---|---|---|---|---|---|-----|
| 1. | There is a special person who is around when I am in need. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | SO |
| 2. | There is a special person with whom I can share my joys and sorrows. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | SO |
| 3. | My family really tries to help me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fam |
| 4. | I get the emotional help and support I need from my family. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fam |
| 5. | I have a special person who is a real source of comfort to me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | SO |
| 6. | My friends really try to help me. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fri |
| 7. | I can count on my friends when things go wrong. | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fri |
| 8. | I can talk about my problems with my | 1 | 2 | 3 | 4 | 5 | 6 | 7 | Fam |

family.

9.	I have friends with whom I can share my joys and sorrows.	1	2	3	4	5	6	7	Fri
10.	There is a special person in my life who cares about my feelings.	1	2	3	4	5	6	7	SO
11.	My family is willing to help me make decisions.	1	2	3	4	5	6	7	Fam
12.	I can talk about my problems with my friends.	1	2	3	4	5	6	7	Fri

The items tended to divide into factor groups relating to the source of the social support, namely family (Fam), friends (Fri) or significant other (SO).

3. Parenting Stress Index-Short Form

Instructions

This questionnaire contains 36 statements. Read each statement carefully. For each statement, please focus on the child you are most concerned about, and circle the response that best represents your opinion.

Circle the SA if you strongly agree with the statement.

Circle the A if you agree with the statement.

Circle the NS if you are not sure.

Circle the D if you disagree with the statement.

Circle the SD if you strongly disagree with the statement.

SA= Strongly Agree	A=Agree	NS=Not Sure	D=Disagree	SD=Strongly Disagree
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1. I often have the feeling that I cannot handle things very well.

SA A NS D SD

2. I find myself giving up more of my life to meet my children's needs than I ever experienced.

SA A NS D SD

3. I feel trapped by my responsibilities as a parent.

SA A NS D SD

4. Since having this child, I have been unable to do new and different things.

SA A NS D SD

5. Since having a child, I feel that I am almost never able to do thing that I like to do.

SA A NS D SD

6. I am unhappy with the last purchase of clothing I made for myself.

SA A NS D SD

7. There are quite a few things that bother me about my life.

SA A NS D SD

8. Having a child has caused more problems than I expected in my relationships with my spouse

SA A NS D SD

(or male/female friend).

9. I feel alone and without friends.

SA A NS D SD

10. When I go to a party, I usually expect not to enjoy myself.
SA A NS D SD
11. I am not as interested in people as I used to be.
SA A NS D SD
12. I don't enjoy things as I used to.
SA A NS D SD
13. My child rarely does things for me that make me feel good.
SA A NS D SD
14. Sometimes I feel my child doesn't like me and doesn't want to be close to me.
SA A NS D SD
15. My child smiles at me much less than I expected.
SA A NS D SD
16. When I do things for my child, I get the feeling that my efforts are not appreciated very much.
SA A NS D SD
17. When playing, my child doesn't often giggle or laugh.
SA A NS D SD
18. My child doesn't seem to learn as quickly as most children.
SA A NS D SD
19. My child doesn't seem to smile as much as most children.
SA A NS D SD
20. My child is not able to do as much as I expected.
SA A NS D SD
21. It takes a long time and it is very hard for my child to get used to new things.
SA A NS D SD

For the next statement, choose your response from the choices "1" to "5" below.

22. I feel that I am :
1 2 3 4 5
- 1. not very good at being a parent
 - 2. a person who has some trouble being a parent
 - 3. an average parent
 - 4. a better than average parent
 - 5. a very good parent
23. I expected to have closer and warmer feelings for my child than I do and this bothers me.
SA A NS D SD

24. Sometimes my child does things that bother me just to be mean.

SA A NS D SD

25. My child seems to cry or fuss often than most children.

SA A NS D SD

26. My child generally wakes up in a bad mood.

SA A NS D SD

27. I feel that my child is very moody and easily upset.

SA A NS D SD

28. My child does a few things which bother me a great deal.

SA A NS D SD

29. My child reacts very strongly when something happens that my child doesn't like.

SA A NS D SD

30. My child gets upset easily over the smallest thing.

SA A NS D SD

31. My child's sleeping or eating schedule was much harder to establish than I expected.

SA A NS D SD

For the next statement, choose your response from the choices "1" to "5" below.

32. I have found that getting my child to do something or stop doing something is :

1 2 3 4 5

- 1. much harder than I expected
- 2. somewhat harder than I expected
- 3. about as hard as I expected
- 4. somewhat easier than I expected
- 5. much easier than I expected

For the next statement, choose your response from the choices "10+" to "1-3."

33. Think carefully and count the number of things which your child does that bother you.

10+ 8-9 6-7 4-5 1-3

For example: dawdles, refuses to listen, overactive, cries, interrupts, fights, whines, etc.

34. There are some things my child does that really bother me a lot.

SA A NS D SD

35. My child turned out to be more of a problem than I had expected.

SA A NS D SD

36. My child makes more demands on me than most children.

SA A NS D SD