

### **DISSERTATION APPROVAL SHEET**

### Title of Dissertation: A CULTURALLY-GUIDED EXAMINATION OF PARENTING AND PRESCHOOLERS' SOCIO-EMOTIONAL DEVELOPMENT IN ASIAN AMERICAN FAMILIES

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### ABSTRACT

Title of Document:

A CULTURALLY GUIDED EXAMINATION OF PARENTING AND PRESCHOOLERS' SOCIO-EMOTIONAL DEVELOPMENT IN ASIAN AMERICAN FAMILIES

Xiaofang Xue, Ph.D., 2021

Directed By:

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This dissertation project sought to examine unique patterns in Asian American mothers' socialization goals, the determinants (i.e., racial discrimination) that undermine their socialization practices (i.e., psychologically controlling parenting), as well as the contributions of maternal socialization goals and practices to children's positive development (i.e., socio-emotional school readiness) and negative outcomes (i.e., social withdrawal and peer exclusion) in the United States. The first paper investigated underlying groups in Asian American mothers' socialization goals and examined potential differences in children's socioemotional school readiness (i.e., prosocial behaviors, sociability, and on-task behaviors) between the different classes. One hundred and ninety three Chinese and Korean immigrant mothers and their preschoolers participated. Two different patterns of mothers' socialization goals were identified, with most mothers (86%) highly emphasizing autonomy-oriented and relatedness-oriented goals (class 1), whereas 14% mothers endorsing relatedness-oriented goals at high level but emphasizing autonomy-oriented goals at low levels (class 2). Moreover, children of mothers in class 1 were more sociable and on-task, compared to children with mothers in class 2. The second paper explored the associations between the experiences of racial discrimination and three sub-dimensions of psychologically controlling

parenting among 226 Chinese American mothers by considering the mediating roles of negative (depressive symptoms) and positive (psychological well-being) psychological functioning and the moderating role of maternal acculturation towards the mainstream culture. Maternal racial discrimination was both directly and indirectly (through depressive symptoms but not psychological well-being) associated with all three sub-dimensions of psychological control (i.e., love withdrawal, guilt induction, and shaming practices). Importantly, the indirect associations through depressive symptoms were further moderated by maternal acculturation towards the mainstream American culture. Specifically, racial discrimination was not significantly associated with three sub-dimensions of psychological control through depressive symptoms among mothers with high levels of acculturation towards American culture. The third study aimed to advance our understanding regarding the directionality in the associations between Chinese American mothers' intrusive overcontrol and children's reticence and peer exclusion experience by investigating their bidirectional relations using a longitudinal design. The moderating role of gender was also examined in the reciprocal associations. Chinese American mothers and their preschoolers in the U.S. participated (n = 226 at Time 1, n = 163 at Time 2). The findings showed the parent-driven effects of maternal intrusive overcontrol with mothers' overcontrol predicting more children's reticence among both boys and girls, and leading to more peer exclusion only among boys but not girls. However, the child-driven effects of children's reticence and peer exclusion on maternal intrusive overcontrol were not significant. Together, these findings can contribute to broadening our theoretical and practical understanding of culturally infused socialization goals and practices among Asian American families, their determinants, and their contributions to children's positive and negative development in the U.S.

# A CULTURALLY GUIDED EXAMINATION OF PARENTING AND PRESCHOOLERS' SOCIO-EMOTIONAL DEVELOPMENT IN ASIAN AMERICAN FAMILIES

By

Xiaofang Xue

Dissertation submitted to the Faculty of the Graduate School of the University of Maryland,

Baltimore County, in partial fulfillment of the requirements for the degree of Doctor of

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#### **Chapter 1: General Introduction**

As the fastest growing population in the United States, Asian families are expected to become the largest immigrant group by 2055 (Budiman, 2020). Within this group, Chinese and Korean Americans are two large subgroups with long histories of immigration and wellestablished ethnic communities (Sun & Ryder, 2016; U.S. Census Bureau, 2016; Zhou & Kim, 2006). The overall focus of the three papers of this dissertation is to understand the parenting experiences in Asian Americans (i.e., Chinese and Korean Americans) and their young children's social and emotional development.

For Asian American (i.e., Chinese and Korean Americans) mothers, their socialization goals for their children may involve constant negotiations between the cultural values of both their heritage and mainstream American cultures (Bornstein & Lansford, 2010). In traditional collectivistic Asian cultures, an interdependent construal of self is valued and promotes interpersonal harmony and cooperation between members of the group (Markus & Kitayama, 1991). Reflecting these traditional cultural values, mothers may maintain an emphasis on children's psychological interdependence with family group members, although material interdependence among these members may decrease due to economic development and modernization (Kagitcibasi, 2005).

In contrast, in Western cultures that are more individualistic, an independent construal of self is valued and leads to an emphasis on the fulfillment of personal potentials (Harwood et al., 1995; Markus & Kitayama, 1991). Mothers may expect children to develop their talents and abilities as individuals and promote their children's self-confidence and self-sufficiency to facilitate their adaptation within this cultural context. Thus, for Asian American mothers who migrate from Confucian-based cultures that are more interdependent-focused to more

independent focused ones, interdependence-oriented socialization goals may coexist with independence-oriented goals, which are considered adaptive within the larger mainstream U.S. society (Durgel et al., 2009). However, although there is likely heterogeneity in the culturalinfused socialization goals of Asian American mothers, the issue has not received enough research attention. Thus, the first paper in this dissertation focuses on identifying heterogeneity in the parenting socialization goals of Asian American (i.e., Chinese and Korean Americans) mothers, which would build the foundation for further examination of their unique implications for child development.

In order to achieve their socialization goals, mothers tend to engage in specific socialization practices. However, the degree to which these socialization practices are valued may vary across cultural contexts according to the adaptive meanings attached to it within that context (Chao, 2001; Chen et al., 2000). The second and third papers of the current dissertation focus on psychologically controlling parenting, which tends to be emphasized in Asian cultures (Chao, 2002). Psychologically controlling parenting is characterized by parents' indirect control of children's behaviors by constraining or manipulating children's thoughts and emotional experiences (Barber, 1996). Instead of fostering children's individuality, psychologically controlling parenting is characterized by parenting is thought to be somewhat aligned with the Asian cultural notions of nurturing children's interconnected sense of selves. Indeed, psychologically controlling parenting has been found to be more prevalent in interdependence-oriented cultures than in Western cultures (e.g., Wu et al., 2002).

Several subtypes of psychologically controlling parenting have been identified (Nelson et al., 2013). For Chinese American mothers, three dimensions of psychologically controlling parenting, love withdrawal, guilt induction and shaming practices, have received particular

attention because the findings regarding their detrimental versus beneficial effects on child development is equivocal (Yu et al., 2015; 2019). Moreover, although many theoretical models have suggested contextual stressors as an important contributing factor of parenting practices, the determinants of psychologically controlling parenting practices remain understudied (García Coll et al., 1996). As an ethnic-racial minority group, Chinese American mothers have been stereotyped as "model minorities" who have overcome racial barriers and succeeded in achieving the American dream (Yip et al., 2021). However, research consistently shows that Chinese American experience discrimination based on their race, with detrimental effects on their mental and physical health (Benner & Wang, 2018; Carter et al., 2019). The invisibility of Chinese American mothers' experiences with racial discrimination and potential impacts on parenting and mental health warrants further attention to this issue.

In addition to the need to investigate the determinants of parents' behaviors, the contributions of parental socialization goals and practices on children's adjustment outcomes also require further attention. Parents' socialization goals play a crucial role in children's adjustment as they can guide parents' childrearing practices (Li et al., 2010). For example, Asian mothers who rated academic achievement as an important socialization goal (Pearson & Rao, 2003) were more likely to be involved in children's academic learning during preschool in order to promote their children's preparedness for later formal schooling (Chao, 2000).

Being well-prepared enables a young child to make a successful transition into formal schooling and predicts their later academic achievement (Blair & Raver, 2015; Duncan et al., 2007). There is a consensus among educators that school readiness is a holistic construct, which not only includes cognitive and language skills, but also includes socio-emotional development (Bierman et al., 2008; Denham, 2006; Fink et al., 2019; Kokkalia et al., 2019; Linder et al., 2013;

Noble et al., 2005). Indeed, children's social and emotional adjustment improves their chances for success in school (Raver, 2002). Specifically, children's display of prosocial behaviors characterized by sharing, helping, and cooperating promoted their optimal performance in school (Caprara et al., 2002). Children's abilities to initiate interpersonal behaviors, engage in ongoing peer activities and make new friends (i.e., sociability) can prepare them to be school-ready by gaining social preference and friendships in the school context (Fink et al., 2019). Moreover, young children's difficulties in following directions (i.e., on-task behaviors) have been identified as leading to difficult transitions to school (Rimm-Kaufman et al., 2000) due to their negative impact on harmonious teacher-children relationships. Thus, in the present study, we assessed children's prosocial behaviors, sociability, and on-task behaviors are representative of their socio-emotional school readiness.

Socio-emotional school readiness is especially important for children in immigrant families (Sawyer et al., 2021; Simons et al., 2021; Winsler et al., 2008), including Asian American preschoolers and their families as first-generation parents may be less familiar with the U.S. educational system (Gottfried & Kim, 2015). These children must learn to meet the expectations of the U.S. school context (Tenenbaum & Ruck, 2007), which may differ from those of their parents. However, the social-emotional school readiness of Asian American preschoolers has not received enough research attention. The model minority myth also perpetuates the notion that young Asian American children do not experience academic struggles, resulting in less research attention on this group (Chao, 2002; Tran & Birman, 2010). The existing previous research has been dedicated to examining the academic performance of older Asian American children and adolescents (e.g., Chao, 2002). Thus, Paper 1 of the current dissertation project also aims to examine the contributions of Asian American (i.e., Chinese and Korean Americans) mothers' socialization goals to their children's socio-emotional school readiness.

Parents' socialization practices also directly impact children's adjustment. For example, parents' psychologically controlling practices may exacerbate negative functioning in their children as such practices fail to nurture children's psychological need for autonomy (Nelson et al., 2013). Based on self-determination theory (Deci & Ryan, 1985; Ryan & Deci, 2000), the basic psychological need for autonomy is considered essential to an individual's optimal development. The intrusive aspect of psychologically controlling parenting can stifle children's sense of autonomy, and thus, impede children's motivation to engage in peer interactions (i.e., social withdrawal in peer contexts) and hinder their peer experiences (i.e., peer exclusion). While the peer experiences of children in China, including the consequences of social withdrawal, have been well-documented (e.g., Coplan et al., 2016; Liu et al., 2015), these processes have received little attention among Chinese American children, especially using longitudinal designs.

Moreover, Chinese and Korean immigrant groups share some similarities in terms of their heritage cultural values and reasons for immigration. For example, Chinese and Korean immigrants in the United States share an East Asian ancestry and close geographical origins. These two groups also tend to hold Asian values that stem from Confucian ideologies, including a collectivistic orientation, conformity to norms, emotional self-control, family recognition through achievement, filial piety, and humility (Cheah & Leung, 2011; Kim, Yang, Atkinson, Wolfe, & Hong, 2001). In addition, Chinese and Korean immigrants in the United States tend to migrate for educational opportunities and occupational success (Cheah et al., 2011). Therefore, both Chinese and Korean immigrant families were examined in the first paper. However, despite the similarities between Chinese and Korean ethnic groups and their shared experiences in the

United States under the larger "Asian American" umbrella, previous studies have revealed the importance of considering heterogeneity within the broader Asian American group (e.g., Suzuki, 2002) and emphasized the importance of examining specific subethnic Asian American groups. Therefore, in papers two and three, I focused on one specific Asian American (i.e., Chinese and Korean Americans) subgroup, that is, Chinese American families to explore variations in developmental processes within this group.

Taken together, the overall aim of this dissertation project was to examine culturally infused socialization goals and practices, which are particularly relevant to Asian American families, their determinants, as well as their contributions to children's positive and negative development. Across three papers, I examined unique patterns in Asian American (i.e., Chinese and Korean Americans) mothers' socialization goals, and factors (racial discrimination) that undermine their socialization practices (psychologically controlling parenting). In addition, I examined the contributions of maternal socialization goals and practices to children's positive development (i.e., socio-emotional school readiness) and negative outcomes (i.e., social withdrawal and peer exclusion) in the United States.

Briefly, the first dissertation paper used a person-center approach to: (1) identify the heterogeneity in the socialization goals among Asian American (i.e., Chinese and Korean Americans) mothers based on the assumption of the coexistence of both independence-oriented and interdependence-orientated among Asian American (i.e., Chinese and Korean Americans) mothers (Tamis-LeMonda et al., 2008); (2) examine the role of cultural and demographic characteristics in the identification of the different patterns of socialization goals; and (3) investigate the relations between different patterns of mothers' socialization goals and their preschoolers' socioemotional school readiness in the United States.

The second paper examined: (1) the contributions of Chinese American mothers' experiences with racial discrimination to their engagement in three specific sub-dimensions of psychologically controlling parenting (i.e., love withdrawal, parent-oriented guilt induction, and shaming); (2) two underlying psychological mechanisms (i.e., depressive symptoms and psychological well-being) that are proposed to explain the link between racial discrimination and the three sub-dimensions of psychologically controlling parenting; and (3) the moderating role of Chinese American mothers' acculturation towards the mainstream American culture in the associations between racial discrimination and their depressive symptoms and psychological well-being.

Finally, in the third paper, we explored the longitudinal bidirectional associations between: (1) Chinese American mothers' overprotective practices/intrusive overcontrolling; (2) children's reticence (i.e., a subdimension of social withdrawal) in peer contexts; (3) Chinese American children's peer exclusion six months later; and (4) to examine gender differences in the bidirectional associations between maternal intrusive control and children's reticence and peer exclusion. Together, these papers contributed to the developmental literature by examining factors and processes associated with the adaptation of Asian American families.

#### **Chapter 2: Paper One**

Heterogeneity in Asian American Mothers' Socialization Goals and Associations with Preschoolers' Socioemotional School Readiness in the U.S.

The aim of the first dissertation paper (see Supplement 1), which is currently under review for publication, was to: (1) examine the long-term socialization goals among Asian American (i.e., Chinese and Korean Americans) mothers, (2) identify their predictors, and (3) assess their contributions to preschoolers' socioemotional school readiness. We focused on young children's socioemotional school readiness skills, such as prosocial, sociable, and on-task behaviors, due to their crucial role in children's later adjustment in formal schooling (Duncan et al., 2007).

Children's socioemotional school readiness may promote their school success through their engagement in ongoing learning activities, and positive interpersonal relationships with peers and teachers (McClelland et al., 2000). We focused on children's prosocial skills, sociability, and on-task behaviors at school. Children's prosocial behaviors, such as sharing and showing sympathy to others, predict their positive peer relationships and academic achievement (Caprara et al., 2000). Sociability refers to children's ability to initiate interpersonal behaviors, engage in ongoing peer activities, and make new friends. The lack of social interaction with peers is associated with more maladjustment and poorer academic achievement (Bohlin et al., 2000; Hall et al., 2016). Children's on-task behaviors, including compliance with teachers' instructions and finishing class assignments in a timely manner, have been found to predict their math and reading skills at the end of elementary school (Mahar et al., 2006; McClelland et al., 2006). Given the significance of these school readiness skills, we also examined the potential contributors, specifically parenting.

Maternal long-term socialization goals refer to mothers' hopes and expectations toward their children's developmental outcomes that they will achieve when they grow up (Cheah & Rubin, 2003). Based on the psychologically-interdependent model, parents' emphasis on autonomy in children does not mean separateness from others is encouraged (Kağıtçıbaşı, 2005). Rather, relatedness with others may serve as a pathway towards obtaining autonomy, while autonomy may promote children's relatedness to individuals in their social networks and families (Tamis-LeMonda et al., 2008). The psychological interdependence family model might be particularly relevant for Asian American families. Asian American mothers may endorse both independence-oriented goals (e.g., being self-confident) to facilitate their children's adaptation, and interdependence-oriented goals (e.g., establishing harmonious relationships) that are consistent with their heritage culture (Tamis-LeMonda et al., 2008). However, within Asian American mothers, whether there are different patterns of socialization goals is unclear.

Therefore, in paper 1, we utilized a person-centered approach to identify patterns of heterogeneity in mothers' socialization goals across both independence-oriented goals (i.e., two goals: self-maximization and self-control) and traditionally interdependence-oriented goals (i.e., three goals: proper demeanor, decency, and lovingness). Mothers' self-maximization goals refer to their expectations that children will be independent, self-confident, and develop their personal potential (Harwood et al., 1996). Mothers in cultures that promote independence and individuality (e.g., Western cultures) tend to emphasize self-maximization goals (Harwood et al., 1996). In addition, mothers' expectations that children should control negative impulses toward aggression and egocentrism are labeled self-control goals. Self-control goals are endorsed in both interdependent and independent cultural contexts. In more interdependent cultural contexts, such as China, self-control goals focus on controlling emotions and desires in public settings, which

facilitate interpersonal harmony (Luo et al., 2013). On the other hand, self-control is also emphasized in independent cultural contexts like Germany, as the ability to control negative impulses reflects individual autonomy, consistent with cultural values of independence (Durgel et al., 2009).

Next, proper demeanor goals refer to parents' expectations that children will be respectful and obedient. Proper demeanor has been found to be especially valued in more interdependent and hierarchical cultural contexts (e.g., Leyendecker et al., 2002). These goals can also be traced to filial piety ethics in Confucian-based cultures such as China and Korea that emphasize parents' authority and child obedience (Lew et al., 2011). Another goal emphasized within more interdependence-oriented cultures is decency, which pertains to children's ability to meet basic societal expectations regarding moral or ethical conduct (e.g., avoiding drugs) and promote personal integrity (e.g., being honest) (Harwood et al., 1996). Finally, the goals of lovingness are characterized as interdependence-oriented goals, which refer to children's ability to have emotionally warm relationships with others and be helpful to others (Luo et al., 2013).

Taken together, the purpose of the first dissertation paper was to determine if underlying groups based on all five socialization goals (i.e., self-maximization, self-control, proper demeanor, decency, and lovingness) could be identified among Asian American (i.e., Chinese and Korean Americans) mothers. We used Latent Class Analysis (LCA) to identify different groups of mothers, with each identified group representing a unique pattern of socialization goals. In addition, the different classes were correlated with cultural (i.e., mothers' ethnicity, and their psychological adherence towards Asian cultural values) and sociodemographic factors (i.e., mothers' educational level and age, and their children's age and gender). Finally, we investigated the associations between different patterns of socialization goals and preschoolers'

socioemotional school readiness (i.e., prosocial, sociability and on-task behaviors) over and above the effects of cultural and demographic variables.

The participants comprised first-generation Chinese (N = 96,  $M_{age} = 37.60$  years,  $SD_{age} = 4.38$ ) and Korean American mothers (N = 97,  $M_{age} = 35.87$  years,  $SD_{age} = 3.89$ ) with their preschool-aged children (Chinese:  $M_{age} = 4.33$ ,  $SD_{age} = 0.82$ ; 54% boys; Korean:  $M_{age} = 4.18$ ,  $SD_{age} = 1.08$ ; 48% boys) residing in the Baltimore-Washington, D.C. corridor in the United States. Mothers reported on their ethnicity, age, country of origin, education (see Appendix A), their adherence to Asian cultural values (Asian Values Scale-Revised (AVS-R; see Appendix B); Kim et al., 2004), and child age and gender. A semi-structured Socialization Goals Interview was used to capture mothers' socialization goals (Harwood et al., 1996; see Appendix C). Using the *Socialization Goals of Coding Scheme*, five socialization goals were coded: *Self-maximization*, *Self-Control, Proper Demeanor, Decency*, and *Lovingness* (Harwood, 1992). Teachers rated children's three aspects (i.e., prosocial, sociability and on-task behaviors) of socioemotional school readiness (Social Skills Questionnaire (SSQ-S; see Appendix D); Hart & Robinson, 1996).

The findings revealed two different groups of mothers with specific patterns of socialization goals. Most of the mothers in our sample were classified into the high autonomyhigh relatedness-oriented class, in which mothers emphasized both the maximization of their children's personal potentials and the children's maintenance of their relatedness with others. This pattern supports the psychologically-interdependent model, where socialization values of autonomy coexist with those of relatedness (Kağıtçıbaşı, 2005). These first-generation Asian American mothers in the United States may not view relatedness as oppositional to their child's achievement of autonomy. Instead, relatedness with others may be perceived to be a pathway

towards obtaining autonomy, while autonomy may serve to promote children's relatedness to individuals in their social networks and families (Tamis-LeMonda et al., 2008). A much smaller percentage of mothers were classified in the low autonomy-high relatedness class, which may represent the more traditional interdependence family (Kağıtçıbaşı, 2005). Mothers in this class endorsed less independence, while emphasizing qualities that facilitate interdependence, and endorsing characteristics that center on having strong moral principles, including decency and avoiding illicit behaviors.

Neither class of mothers emphasized high proper demeanor goals such as obedience to authority, which might reflect Asian American mothers' awareness of the negative evaluations of strict child obedience in the United States (Cheah et al., 2013). Moreover, neither class of mothers placed a high emphasis on self-control. However, self-control goals may need to be more contextualized. For example, self-control, or more specifically the lack thereof, was more prominent in mothers' socialization goals when they were asked to describe undesirable child qualities, which was not the emphasis of the current study (Harwood et.al, 1996).

Importantly, the two different patterns of maternal socialization goals (i.e., high autonomy-high relatedness-oriented versus low autonomy-high relatedness-oriented class) were not related to most of the cultural and demographic characteristics that we examined, including mothers' ethnicity (i.e., Chinese versus Korean), psychological adherence towards Asian cultural values, educational level, or their children's age and gender. Only mothers' age was associated with the classification of the two classes, with younger mothers more likely to be classified in the high autonomy-high relatedness-oriented class, as expected. This finding supports Rowe et al. (2005)'s proposed hypothesis that younger mothers' beliefs about child development may be different from older mothers.

We also found that Asian American children whose mothers held both high autonomyoriented and high relatedness-oriented goals had better socioemotional school readiness. These findings provided evidence for the adaptive meaning of the psychologically-interdependent model. Kağıtçıbaşı (2005) proposed that the model of psychological interdependence likely represents a heathy universal, as it better recognizes and satisfies the basic human needs for both autonomy and relatedness. Asian American mothers who emphasized both self-confidence and being helpful to others had children who were more likely to be accepted by their peers and make new friends easily. These mothers' emphasis on developing both autonomous functioning and relatedness with others may foster children's proactive initiation of social interactions and maintenance of positive relationships (Bosacki, 2015).

Moreover, children whose mothers emphasized both autonomy-oriented and relatednessoriented goals were also more efficient at carrying out daily tasks and attending to teachers' instructions than children whose mothers endorsed high relatedness- but low autonomy-oriented socialization goals. Mothers who emphasized self-maximization goals have been found to be more likely to encourage children's independent behaviors, and autonomous and task-oriented behaviors in school (Joussemet et al., 2004; Schulze et al., 2001). Asian American children's engagement in prosocial behaviors, including sharing and helping others, were not significantly different between the two classes of mothers, which may reflect the similar valuing of prosocial behaviors for preschool-age children among mothers across different cultural contexts (Park & Cheah, 2005).

Collectively, the findings have important theoretical and applied implications. In addition to providing empirical support for the psychologically-interdependent model (Kağıtçıbaşı, 2005), the associations between different patterns of socialization goals and children's school readiness

skills supported the adaptiveness of bicultural pattern of socialization goals (Nguyen & Benet-Martínez, 2013). Asian American mothers' emphasis on socialization goals that were consistent with social expectations for children held by the host cultures as well as goals of relatedness valued by their heritage Asian culture appeared to contribute to their children's greater sociability and behaviors. Hence, intervention and prevention programs should foster mothers' bicultural goals when promoting Asian American children's adjustment in schools.

### **Chapter 3: Paper Two**

## Racial Discrimination and Chinese American Mothers' Psychologically Controlling Parenting Practices: A Moderated Mediation Analysis

The overall aim of the second paper (see Supplement 2), which is currently under review for publication, was to investigate the impact of Chinese American mothers' racial discrimination on specific sub-dimensions of their psychologically controlling parenting (i.e., love withdrawal, guilt induction and shaming practices). We also explored potential underlying mechanisms, specifically, mothers' psychological functioning (i.e., depressive symptoms and positive psychological well-being). Moreover, the moderating role of mothers' behavioral acculturation towards the mainstream American culture was examined.

Racial discrimination is defined as unequal treatment, denigration and devaluation based on one's race (Goto et al., 2002). However, Asian Americans' struggle against racism tends to be invisible due to the "model minority" stereotype, which portrays them as having succeeded in achieving academic and socioeconomic success due to their diligence and cultural valuing of education (Yip et al., 2021). Experiences of chronic racial discrimination has been found to be more strongly associated with Asian American's negative mental and physical health outcomes compared to other racial-ethnic minority groups (Benner & Wang, 2018; Carter et al., 2019). García Coll et al.'s (1996) integrative model of the development of racial-ethnic minority children emphasizes the crucial role of contextual stressors stemming from racial discrimination and prejudice. Racial discrimination functions as a specific sociocultural stress that may shape parenting practices among ethnic-racial minority parents. However, most studies focus on the negative impact of discriminatory experiences on parental racial-ethnic socialization practices (e.g., Hughes et al., 2006). Only few empirical studies examined the associations between parents' racial discrimination experiences and their engagement in non-racial-ethnic socialization practices (Anderson et al., 2015; Brody et al., 2008). We focused on such as psychologically controlling parenting.

Psychologically controlling parenting is conceptualized as a coercive multidimensional construct (Barber, 1996). Among Chinese and Chinese-American mothers, three dimensions (i.e., love withdrawal, guilt induction and shaming practices) were identified (e.g., Fung & Lau, 2012; Yu et al., 2015). Love withdrawal is described as a "love-oriented" method of child rearing that temporarily withdraws love and attention or threatens to do so to obtain children's compliance with parental or societal demands (e.g., Wu et al., 2002). Parent-oriented guilt induction includes elements of effortful inductive reasoning regarding consequences that are designed to help children better attune to parents' thoughts and feelings (e.g., telling children that their actions cause others to worry) by evoking guilt laden emotions (e.g., Fung & Lau, 2012; Yu et al., 2019). Finally, shaming contains elements of humiliation and losing face and induces inferior feelings as parents draw children's attention to how much they fall short of normative group norms and expectations in comparison to other individuals (e.g., classmates, siblings). (e.g., Chao & Tseng, 2002; Yu et al., 2015). Although these three dimensions have been found to undermine psychosocial adjustment in children from Western cultures (Nelson et al., 2013), their implications for young Chinese American children's adjustment appear to vary by the specific dimensions (Cheah et al., 2019; Yu et al., 2019). Thus, we examined the contributor for each separate dimension of psychologically controlling parenting.

Based on the Belsky's (1984) parenting process model, contextual stressor can play a role either by directly impacting parenting or indirectly through its effects on parental psychological functioning. A strong link between racial discrimination and depressive symptoms has been

consistently found across diverse racial-ethnic groups (Priest et al., 2013), including Asian Americans (Lee & Ahn, 2011). However, empirical evidence for the relation between racial discrimination and positive psychological functioning remains inconclusive (Paradies, 2006; Priest et al., 2013). These findings suggest that racial discrimination may differentially impact negative versus positive psychological functioning. Therefore, to clarify with greater specificity how these processes work together (Bornstein, 2017), we examined the simultaneous mediating role of negative and positive psychological functioning in the relation between racial discrimination and parenting practices.

Given the aversive effect of parents' racial discrimination, identifying potential protective factors that can buffer this harmful impact has significant implications for understanding resilience processes in the face of discrimination (Neblett et al., 2012). Acculturation towards the mainstream American culture (AMC), which is characterized by immigrants' behavioral participation in the mainstream American culture (Berry, 2009), has been proposed to be a potential protective factor, but empirical findings are limited and inconclusive. Some studies have demonstrated a protective role of AMC (Delgado et al., 2011), including for Asian Americans (Deng et al., 2010), whereas other studies have either indicated no effect or suggested that AMC exacerbates the negative impact of racial discrimination on adjustment (Alamilla et al., 2010; Anhalt et al., 2020).

In an effort to clarify this literature, the second dissertation paper examined: (a) the associations between Chinese American mothers' experiences with racial discrimination and their psychologically controlling parenting; (b) the mediating roles of mothers' depressive symptoms and positive psychological well-being in these associations; and (c) the moderating role of mothers' behavioral AMC in the associations between racial discrimination and maternal

psychological functioning. Because mothers' age and educational level, as well as children's age and gender have been found to be associated with their parenting behaviors (Mcfadden & Tamis-Lemonda, 2013; Yu et al., 2019), they were considered as potential covariates.

First-generation Chinese American mothers (N = 226,  $M_{age} = 37.65$  years,  $SD_{age} = 4.39$  years) and their preschool-aged children ( $M_{age} = 4.40$  years,  $SD_{age} = 1.13$  years; 53% boys) were recruited from Chinese schools, supermarkets, churches, and daycare centers throughout the Baltimore-Washington, D.C. corridor. Mothers reported on their' age, education level, marital status, length of time living in the United States, children's age, and gender (see Appendix A). Mothers also reported on their experiences with racial discrimination (Asian American Perceived Racial Discrimination Scale; Yoo & Lee, 2005; see Appendix E), depressive symptoms (Beck Depression Inventory—II; Beck et al., 1996; see Appendix F), psychological well-being (Psychological Well-Being Scale; Ryff & Keyes, 1995; see Appendix G), acculturation towards the mainstream American culture (Cultural and Social Acculturation Scale (CSAS); Chen & Lee, 1996; see Appendix H), and their endorsement of three psychologically controlling parenting practices (i.e., love withdrawal, guilt induction, and shaming; Psychological Control Measure; Yu et al., 2015; see Appendix I).

The results revealed that Chinese American mothers with higher levels of perceived racial discrimination were more likely to withdraw love from their children, employ parentoriented guilt induction tactics, and engage in shaming practices. Maternal depressive symptoms were found to mediate the associations between experiences of racial discrimination and all three sub-dimensions of psychological control. Racial discrimination may isolate ethnic minority groups from the mainstream society and limit their access to social and emotional resources (García Coll et al., 1996). The social and psychological disconnection or segregation created by racial discrimination experiences appeared to contribute to Chinese American mothers' risk for developing depressive symptoms (Priest et al., 2013). In turn, maternal depressive symptoms were related to greater tendencies to withdraw love from their children, induce guilt-laden feelings, and use degrading shaming practices with their children.

The psychological well-being of Chinese American mothers did not mediate the association between racial discrimination and mothers' engagement in the three dimensions of psychologically controlling parenting. Chinese American mothers' racial discrimination experiences were not associated with their decreased sense of self-determination and positive self-evaluation (Ryff & Singer, 1996). These aspects of wellness might be more vulnerable to social rejection among younger individuals as compared to adult Chinese American mothers (Eilans et al., 2018), whose psychological well-being might be accounted for by other life experiences, such as positive marital status (e.g., Waite et al., 2009) and social support (e.g., Seo et al., 2018).

Our findings further revealed the protective role of Chinese American mothers' behavioral AMC. Specifically, for Chinese American mothers who are less acculturated to the mainstream American culture, their experiences of racial discrimination were associated with more depressive symptoms, which in turn, led them to engage in higher levels of love withdrawal, parent-oriented guilt induction and shaming practices, perhaps amplifying Chinese cultural parenting practice norms (Yu et al., 2015). In contrast, the discrimination-depressive symptom link was nonsignificant for mothers who were more engaged in the mainstream American culture.

The protective role of greater mainstream American acculturation among Chinese American mothers can be explained by more highly acculturated mothers' greater access to

social resources in the broader social context and their various coping strategies in response to discriminatory experiences which can reduce the risk of developing depressive symptoms. (Kosic, 2004; Noh & Kaspar, 2003). Alternatively, mothers with different levels of AMC may vary in the way they attribute the causes of the racism-related experiences (Harrell, 2000). Mothers with greater behavioral involvement in mainstream American society may be less likely to internalize the negative message regarding their race-ethnicity and self-blame due to their acquisition of knowledge regarding the historical context and institutional causes of racial discrimination in the United States. Moreover, although Chinese American mothers' behavioral AMC was positively correlated with their psychological well-being, behavioral AMC did not moderate the associations between racial discrimination and psychological well-being. This association may be moderated by psychological aspects of acculturation including mothers' ethnic-racial identity (e.g., Vu et al., 2019), which were not examined.

Overall, by examining the role of racial discrimination as a contextual stressor and assessing its specific associations with parenting practices, our findings provided empirical support for the integrative model, which emphasizes the role of racial discrimination and other social positioning in understanding the development of racial-ethnic minority families in the United States (García Coll et al., 1996). These findings can inform the development of parenting intervention programs and policies to take into account the stressors from the sociocultural context to support mental health and parenting practices among racial-ethnic minority groups (Kotchick & Forehand, 2002). As mothers' negative psychological adjustment can serve as a potential underlying factor, practitioners can also consider mothers' mental health prior to implementing intervention program to reduce coercive parenting among Chinese American mothers. Furthermore, our findings can inform intervention programs regarding the strength of

cultivating Chinese American mothers' awareness of their behavioral engagement in the mainstream American culture as a "racism-resistant armor" (Harrell, 2000). Supporting Chinese American mothers' engagement in and access to various resources in the mainstream context may help alleviate some of the adverse impact of racial discrimination on mothers' psychological health and ultimately on their coercive parenting behaviors.

### **Chapter 4: Paper Three**

Longitudinal Bidirectional Associations between Chinese American Mothers' Intrusive Parenting and Children's Social Adjustment

### Background

Parental intrusive overcontrol refers to parents' display of intrusion on children's activities, overprotective behaviors, as well as the encouragement of interdependence (Hastings et al., 2019; Rubin et al., 2009). Although this parenting construct was not included in Barber's work (1996) as a subdimension of psychologically controlling, the overprotective nature of intrusive control has been considered an important aspect of psychologically controlling parenting because of its contextually inappropriate and overbearing characteristics which may convey anxiety, concern, and a lack of confidence in children (Hastings et al., 2019; Mills & Rubin, 1998). In Confucian-based Chinese culture, controlling parenting is emphasized towards fulfilling parents' responsibilities of governing and disciplining their children (Chao, 1994; Wu et al., 2002). This practice is considered a training tool to achieve child obedience and teach right from wrong (Fung, 1999; Cho et al., 2021). However, overcontrolling parenting may lead to children's display of social withdrawal behaviors as it can undermine secure attachment in children (Ainsworth et al., 2015; Bowlby, 1988). There is a need to examine contributors of overcontrolling parenting to young children's social withdrawal behavior (Rubin et al., 2009), which has long-term negative consequences for them, including lower self-regard, and higher loneliness and depression during adolescence and adulthood (Hymel et al., 1990; Rubin et al., 1989; 1995; 2009), especially in Chinese American families who are parenting with values and practices of both their heritage and the host cultures, which may differ in their valuing of controlling parenting.

As a sub-dimension of social withdrawal, reticence is defined as children's frequent display of unoccupied, off-task, and onlooking behaviors in social contexts with peers (Coplan et al., 1994). The third dissertation study focused on reticent behavior because children who display behavioral reticence are interested in peer interactions but avoid such interaction (i.e., internal approach-avoidance conflict) (Coplan et al., 1994) due to social anxiety and fearfulness (Asendorpf, 1990; Coplan et al., 1994), unlike children who engage in solitary play, which reflects their disinterest in peer interactions.

The display of reticent behaviors in peer contexts, tends to co-occur with peer relationship difficulties including experiences of being excluded by peers, even across different cultural groups, including Chinese children (Balkaya et al., 2018; Chen & Tse, 2008; Gazelle & Ladd, 2003; Hart et al., 2000; Menzer et al., 2010). As a form of peer maltreatment, peer exclusion is referred to peers' harmful behaviors, including ignoring or refusing to build connection with a child in the peer context (Buhs et al., 2006). Researchers have argued that peer exclusion among racial-ethnic minority children, such as Chinese American children, deserve special attention as they tend to be visible targets of peer rejection which represents peers' negative attitudes towards a child (Boivin & Hymel, 1997; Gazelle & Ladd, 2003). Unlike the attitudinal construct of peer rejection, peer exclusion represents isolating behaviors that peers engage in and tend to be communicated in a tangible manner (e.g., "is told to go away by other children"), and therefore, is more observable (Gazelle & Ladd, 2003).

Although peer exclusion is less extreme than peer victimization (i.e., physical or relationship aggression), this form of peer rejection is more common and just as detrimental to children's emotional and school adjustment (Epkins et al., 2011). For example, experiences of

peer exclusion, regardless of the reasons, has been found to be associated with elevated social anxiety and depression (Epkins et al., 2011; Gazelle & Ladd, 2003; Gazelle & Rudolph, 2004). The harmful consequences of peer exclusion are not limited to internalizing problems. Peer exclusion also contributes to diminished self-esteem, fewer displays of prosocial behaviors (Coyne et al., 2011; Stanley & Arora, 1998; Verkuyten & Thijs, 2006), increased academic difficulties (Buhs et al., 2006), as well as reduced expressive regulatory abilities among Chinese adolescents (Wang et al., 2020). Such negative consequences associated with peer exclusion among children in different cultural contexts support the need for increased research attention on this construct and its contributors.

According to the bidirectional theory on parents' socialization and children's behaviors (Bell, 2017), parental effects on child development can also be interpreted as child effects on parental behaviors. Thus, developmental researchers assert that the relations between intrusive overprotection and children's social withdrawal are bidirectional (Rubin et al., 2009). Overcontrolling parenting may promote children's reticent behaviors in peer context due to the lack of secure attachment. Children's demonstration of social withdrawal may lead to more overprotective behaviors from their mothers because children's social anxiety. Similarly, parents' engagement in overcontrol may put their children at risk for vulnerability to experiences of peer exclusion as overcontrolling parenting may encourage characteristics of over-dependence on others, which are not valued by peers (Chen, 2012). At the same time, parents may also react to peer exclusion with more overprotective behaviors to prevent their children from potential anxious or fearful emotional distress associated with their perceptions of other children's rejection of their children (Rubin et al., 2006; 2009).

Despite the bidirectional theoretical framework, empirical evidence regarding the transactional relations between parenting behaviors and children's development are inconclusive. For example, some studies only found child-driven effects, but not parent-driven effects, showing that children's shyness or anxious solitude predicted more parents' overprotective or overcontrolling parenting behaviors at a later time point, while parental overprotection or overcontrol did not predict children's shyness or displays of anxious solitude (Gazelle & Cui, 2020; Rubin et al., 1999). However, in another recent study examining the bidirectional relations between maternal overcontrolling parenting and children's inhibited temperament, neither parent-driven effects nor child-driven effects were found (Edwards, 2018). Given this inconclusive evidence, the third dissertation study aimed to clarify the directionality in the associations between: (1) Chinese American mothers' intrusive overcontrolling parenting, (2) children's reticence, and (3) children's peer exclusion by using a short-term longitudinal design. Moreover, parents' intrusive behaviors may have different implications for boys versus girls (Guimond et al., 2012; Nelson et al., 2006) and the evocative effects of children's reticence and peer experiences may vary for boys and girls as parents may perceive children's behaviors differently based on gender (Simpson & Stevenson-Hinde, 1985). Therefore, we also examined gender differences in the bidirectional associations between maternal intrusive overcontrol and Chinese American children's reticence and peer exclusion.

# Parent Effects: Overcontrolling Parenting and Children's Reticence

Attachment theory can be drawn upon to understand the contribution of parenting practices to children's reticent behaviors. Parenting behaviors shape children's internal working model, which includes the representation of themselves in interactions with others, the impressions that others have of them, as well as the ways others behave towards them. These

internal operative models govern and guide children's behaviors in the social milieu (Ainsworth et al., 2015; Bowlby, 1988). Although aiming to shield children from experiencing failure or engaging in emotion-upsetting situations, parents' controlling and intrusive behaviors tend to foster insecure and avoidant attachment in children. These insecurities can lead children to withdraw from others in social contexts due to the lack of positive expectations that others will be sensitive to their needs and provide well-timed help and support (Erickson et al., 1985; Rubin et al., 2009). These intrusive parenting behaviors exhibited in a highly overprotective way may also cultivate a belief system in children that circumstances are beyond their control and heighten children's sense of threat, ultimately discourage them from proactive exploration and engagement in peer activities (Chorpita & Barlow, 1998; Hudson & Rapee, 2001; Taylor & Alden, 2006).

Compared to studies on children's reticence, empirical research on the potential negative effects of overcontrolling parenting is limited (Rubin et al., 2001; 2006). Children who exhibit reticent behaviors in peer interactions tend to have mothers who engage in oversolicitous behaviors (Rubin et al., 2001). Similarly, one study demonstrated that mothers' overcontrolling parenting predicted their children's socially reticent behaviors two years later (Guimond et al., 2012). Although these findings are informative, they assessed children's display of socially reticent behaviors in the laboratory setting in which children were grouped based on gender and indices of shyness and inhibition-related behaviors (Rubin et al., 2001; 2002), or competition among peers was elicited (Guimond et al., 2012). Moreover, only one study has examined the implications of these practices among children of Chinese heritage (Nelson et al., 2006), and none have focused on Chinese American children. Thus, to provide a better understanding of the

determinants of Chinese American children' display of reticent behaviors in the school context, the current study assessed children's reticence using teacher reports.

### Child Effects: Children's Reticence and Overcontrolling Parenting

Although most research on children's social development has focused on parent-driven effects, child characteristics and experiences may in turn shape overcontrolling and overprotective parenting strategies. Children's reticence in peer contexts may elicit concerns in mothers regarding their children's social adjustment. Thus, mothers may respond in an overprotective manner as an attempt to reduce their children's social anxiety associated with reticent behaviors. Examinations of child-driven effects of children's reticence are limited although several related constructs have been studied. Relatedly, Gazelle (2020) assessed anxious solitude, which they conceptualized as children's hindered tendency to interact with peers due to social anxiety and found that children's anxious solitude was associated with maternal overcontrol one year later. Furthermore, children's low cardiac vagal tone, a physiological index of social reticence (Rubin et al., 1997), predicted mothers' engagement in restrictive parenting practices (Kennedy et al., 2004). Other studies also demonstrated that children's shyness, anxiety, and inhibition predicted more mothers' overprotective behaviors (Edwards et al., 2010; Rubin et al., 1999). However, other studies did not find child-driven effects of these related constructs on mothers' overprotective or overcontrolling parenting (Edwards, 2018; McShane & Hastings, 2009).

Given the inconsistent evidence, more research attention is needed to better understand the child-driven effects of children's reticent behaviors on overcontrolling parenting, especially for children of Chinese heritage. Although children's withdrawn behaviors are becoming more undesirable in Chinese culture (Chen et al., 2005), socially withdrawn behaviors in children are

traditionally thought to be acceptable in the Chinese cultural context because such behaviors tend to promote interpersonal harmony and social order which are highly valued in Confucian-based Chinese cultures (Chao, 1994). Indeed, shy children are considered "well-behaved" (Chen et al., 1998; 2009; Chen & Rubin, 1992). Therefore, social withdrawal in young children may not evoke concern to the extent that it elicits Chinese immigrant parents' overprotective or intrusive behaviors.

# Parent Effects: Overcontrolling Parenting and Children's Peer Exclusion

Attachment theory can also help frame conceptual linkages between parenting behaviors and peer relationships. Parents' display of intrusion and overcontrolling behaviors may fail to promote emotional and relational security in children and encourage dependence and submissiveness (Levy, 1943; Rubin et al., 2002). Moreover, parents' overcontrolling parenting may discourage children's autonomy and exploration, prevent their children from opportunities to practice social skills and coping and problem-solving strategies, which can foster acceptance and popularity in peer groups. Therefore, children's relational insecurity with their mothers can negatively impact their peer relationships, and therefore, put themselves at risk for peer exclusion due to the lack of socially competent skills and adherence to peer-valued characteristics, such as independence and assertiveness in Western societal contexts. Although overcontrolling parenting may be more normative in Chinese compared to Western cultures (Lin & Fu, 1990; Nelson et al., 2006; Wu et al., 2002), we would expect based on attachment theory, that such parenting would similarly leads to fewer opportunities for Chinese American children to practice social skills and have negative peer consequences in a Western context.

Despite the theoretical framework supporting the contributions of parental intrusive overcontrol to children's poor peer relationships, empirical studies have mainly focused on the relation between overcontrolling parenting practices and peer victimization with inconsistent results. For example, some studies demonstrated that children whose parents exhibited intrusive demandingness, overprotection, and other dimensions of psychologically controlling (i.e., guilt induction and love withdrawal) tended to experience high levels of peer victimization (Georgiou, 2008; Ladd & Ladd, 1998; Li et al., 2015), while in other studies, the significant associations between maternal overprotection and peer victimization were not found (Veenstra et al., 2005) or were only exhibited among boys (Finnegan et al., 1998). Although peer victimization is more extreme than peer exclusion, peer exclusion occurs more frequently, and its adverse impact can be just as detrimental (Buhs & Ladd, 2001; Killen et al., 2008; Killen & Rutland; 2011). Only one study revealed the adverse role of mothers' overprotection in children's peer exclusion among Chinese children (Zhu et al., 2020). Moreover, the previous findings were derived from concurrent data, which prevent us from making conclusions regarding the directionality of the relations between overprotection and children's poor peer relationships. Thus, the present study attempted to examine the contributions of maternal intrusive overcontrol to peer exclusion among Chinese American children using a short-term longitudinal design.

# Child Effects: Children's Peer Exclusion and Overcontrolling Parenting

Children's negative experiences and stress from peer exclusion may spill over to the family context and lead to maternal intrusive overcontrol (Gazelle & Ladd, 2003). However, to our knowledge, only one recent study examined the longitudinal paths from children's peer exclusion to mothers' overcontrolling parenting during the elementary school years (Gazelle & Cui, 2020). The findings revealed that peer exclusion did not directly elicit more maternal overcontrolling parenting, but indirectly evoked mothers' overcontrolling parenting through increased display of anxious solitude. However, peer exclusion occurs as early as kindergarten

(Gazelle & Ladd, 2003). This early onset of peer exclusion not only supports the importance of early intervention but also illustrates the need to investigate this form of negative peer experience and its effects on parenting behaviors, especially overcontrolling parenting, which could potentially further exacerbate children's peer difficulties. It is especially important to examine the role of peer exclusion among children with Chinese cultural heritage. Even though peer exclusion occurs at an early age (Gazelle & Ladd, 2003), children at a young age tend to be considered innocent and incapable of understanding the consequences of their behaviors (i.e., below the "age of understanding") in Chinese culture (Ho, 2008). Thus, peer exclusion may not draw Chinese American mothers' attention because they may not consider exclusionary behaviors to be intentional. Thus, this third dissertation study aimed to examine whether Chinese American children's experiences of peer exclusion elicit their mothers' intrusive overcontrolling parenting practices.

# Gender as a Moderator

Gender differences may exist in these bidirectional associations between maternal intrusive practices and children's social reticence. Some studies have shown that Chinese mothers' directiveness and overprotective parenting were associated with more reticent behaviors in girls, but not in boys (Nelson et al., 2006), while others demonstrated that maternal and paternal overprotection predicted subsequent reticent behaviors only in boys (Guimond et al., 2012). In addition, parents may perceive behavioral reticence in boys as being less acceptable than the same behavior exhibited in girls due to gendered expectations for males to be assertive (Simpson & Stevenson-Hinde, 1985). Parents, therefore, may become more intrusive in attempting to help their sons overcome the undesired characteristic of social reticence.

In terms of the bidirectional associations between maternal intrusive practices and peer exclusion, maternal controlling parenting tends to discourage children's independence, which may constrain opportunities for children to practice social skills and problem-solving strategies, and promote their overcompliance to peers' demands (Rubin et al., 2002; Rubin & Coplan, 2004). The lack of autonomy and social skills and display of overcompliant behaviors may be more problematic for boys than girls, as they violate the gender norms of male assertiveness, self-assuredness, and sociability (Caspi et al., 1998). Indeed, studies have found that overprotected boys are more likely to experience peer victimization than overprotected girls (Ladd & Kochenderfer-Ladd, 1998; Olweus, 1993). As a result, these negative peer experiences in boys may promote parents' engagement in intrusive overcontrol in an effort to prevent or reduce psychological distress derived from these negative experiences. Overall, understanding the role of child gender is especially important among children of Chinese cultural heritage due to the strong male preference in traditional Chinese culture (Chan et al., 2002). Thus, boys' negative experiences may be more likely to elicit Chinese American mothers' concern and overprotective behaviors than girls' experiences. Thus, the current study also explored potential child gender differences in the paths linking maternal intrusive overcontrol and children's social reticence and peer exclusion.

## The Present Study Aims and Hypotheses

In light of the limitations of previous research noted above, the purpose of the third dissertation study was to examine the reciprocal effects between mothers' intrusive overcontrol and young Chinese American children's peer experiences across two time points. We investigated both children's lack of peer interaction (i.e., reticent behaviors) as well as their experiences of peer exclusion in school setting. The third study used a short-term (six months

apart) longitudinal design and maternal reports of parenting behaviors and teacher ratings of children's peer experiences (i.e., reticence and peer exclusion) in school.

Several demographic variables were considered as potential covariates. The maternal maturity hypothesis proposes that older mothers are more able to provide optimal parenting than younger mothers as they may be psychologically mature and well-prepared (Camberis et al., 2016; López Turley, 2003). Indeed, mothers' age has been found to be associated with parenting practices (Berlin et al., 2002; Bornstein, 2006; Bornstein & Putnick, 2007; McFadden & Tamis-Lemonda, 2013), including mothers' overcontrol, with older mothers engaging in less overcontrolling parenting (Borelli et al., 2018). Given its significant role in maternal overcontrol, the present study included maternal age as a potential covariate. Moreover, mothers' education was considered a potential covariate due to the associations between maternal education and parenting (Dai et al., 2017). Specifically, mothers with higher levels of education tend to exhibit fewer controlling practices than mothers with lower education (Tamis-LeMonda et al., 2009). Child age was also examined as a potential covariate in current study as child age has been found to be associated with children's display of social reticence (Coplan et al., 1994; Grady & Karraker, 2014) and parents' engagement in parenting practices (Lau, 2010; Yu et al., 2018). Finally, children's birth order was considered as a covariate in the current study because parents were found to provide less autonomy to earlier-born children than their later-born siblings (Hotz & Pantano, 2015). Our specific aims and hypotheses were as follows:

**Aim 1:** The first aim of this third dissertation study was to investigate the parent-driven effects of Chinese American mothers' intrusive overcontrol at Time 1 (T1) on children's display of reticent behaviors at Time 2 (T2) after controlling for children's initial levels of reticence at T1.

*Hypothesis 1*: We predicted that maternal intrusive overcontrol at T1 would be positively associated with children's reticence at T2 because intrusive and overcontrolling parenting may provide children with a sense of insecurity and threat and discourage children's proactive engagement in peer interaction (Ainsworth et al., 2015; Taylor & Alden, 2006).

**Aim 2:** To examine the child-driven effects of Chinese American children's reticent behaviors at T1 on mothers' intrusive overcontrol at T2 after controlling for the previous levels of children's reticence at T1.

*Hypothesis 2*: We expected that children's reticence at T1 would not predict more maternal intrusive overcontrol at T2 because withdrawn characteristics in young children may be acceptable among Chinese American mothers (Chao, 1994; Chen et al., 1998; 2009; Chen & Rubin, 1992).

**Aim 3:** The third aim of the current study was to explore the parent-driven effects by examining the role of T1 Chinese American mothers' intrusive overcontrolling parenting in predicting T2 children's peer exclusion after controlling for T1 peer exclusion.

*Hypothesis 3*: Based on the evidence from previous research examining the associations between parenting practices and the related construct of peer adversity (e.g., Finnegan et al., 1998; Georgiou, 2008; Ladd & Ladd, 1998; Zhu et al., 2020), we expected that mothers' intrusive overcontrolling parenting at T1 would predict more peer exclusion at T2.

**Aim 4:** To investigate the child-driven effects of Chinese American children's experiences of peer exclusion at T1 on maternal intrusive overcontrol at T2 after controlling for the initial levels of peer exclusion.

*Hypothesis 4*: We expected that peer exclusion at T1 would predict more maternal intrusive overcontrol at T2.

Aim 5: To explore gender differences in the bidirectional associations between maternal intrusive overcontrol and Chinese American children's social reticence and peer exclusion.

*Hypothesis 5*: Based on the evidence derived from the limited previous empirical studies (Guimond et al., 2012; Simpson & Stevenson-Hinde, 1985), we expected that the adverse effects of maternal intrusive parenting on children's reticence and peer exclusion would be stronger among boys than girls, and the evocative effects of children's behaviors on parenting practice would also be stronger for boys than girls.

### Method

# **Participants**

Two-hundred and twenty-six Chinese American mothers ( $M_{age} = 37.65$  years,  $SD_{age} = 4.39$ ) and their young children (53.5% male,  $M_{age} = 4.40$  years,  $SD_{age} = 1.13$ ) were included in third dissertation study. Most of the mothers in our sample were from mainland China (82.3%), 13.9% of the mothers were from Taiwan, 3.3% were from Hong Kong, and 0.5% of the mothers were from other Asian countries. The sample for the third study was drawn from an ongoing longitudinal study with four time points. The sample from two time points of the larger study, with each time point being 6 months apart, were included.

### Procedures

Participants were recruited from Chinese schools, supermarkets, churches, and daycare centers across the Baltimore-Washington, D.C. corridor. Trained bilingual research assistants visited mothers at their homes to collect data using mothers' preferred language (traditional Chinese, simplified Chinese, and English). Participants received \$40 after each home visit to compensate their time for participating in the study. Written informed consent was obtained from mothers before data collection commenced. After obtaining mother's permission to contact their child's teacher, data on children's reticence and peer exclusion in the school setting were collected from teachers via telephone or e-mail.

### Measures

### **Demographic Information**

The Family Description Measure (FDM; Bornstein, 1991) was used to obtain general demographic information including mothers' age, education levels, countries of origin, child age, gender, and birth order at T1 (see Appendix A).

#### Maternal Intrusive Overcontrol

Maternal intrusive overcontrol was assessed using 4 items adapted from the Psychological Control and Overprotective/Intrusive Measure (PCOIM) (Nelson et al., 2006; see Appendix J) at T1 and T2. Chinese American mothers rated the frequency of each behavior on a 5-point Likert scale: 1 (never), 2 (once in a while), 3 (half of the time), 4 (very often), and 5 (always). Three of the four items (i.e., "Tends to be over-protective with our child;" "Readily intervenes if there is a chance that our child will fail at something;" and "Tends to be overly involved in child's activities.") were drawn from the measurement in Nelson's et al., (2006) article. However, one remaining item (i.e., "it is important to supervise all of our child's activities") was not used because it assesses parental beliefs regarding controlling parenting rather than behaviors. To better assess maternal behavioral control instead, we included the item, "Tries to control much of what our child does", which was thought to be more relevant to overcontrolling parenting behaviors. The confirmatory factor analysis was used to assess the psychometric property of this measure in our Chinese American sample. The well-fitting models were built at both T1 and T2 ( $\chi^2$  (2, N= 213) = 0.67, p = .7144, CFI = 1.00, SRMR = .01, and RMSEA = .00, 90% CI [.00, .10] at T1;  $\chi^2$  (2, N= 163) = 0.31, p = .8587, CFI = 1.00, SRMR

= .01, and RMSEA = .00, 90% CI [.00, .08] at T2). All standardized factor loadings were significant and above .40 at T1 and T2, except for one item (i.e., "readily intervenes if there is a chance our child will fail at something."), for which the factor loading was .34 at T1. Although the factor loading of this item was below .40 at T1, its factor loading was above .40 (i.e., .53) at T2. Moreover, the metric equivalence over time was established for the construct of maternal intrusive overcontrol, suggesting that the factor loadings of this item were not different over time. The confirmatory factor analysis was used to assess the psychometric properties of the measure of maternal intrusive overcontrol and the models at T1 and T2 achieved good model fit. Thus, this item was kept to represent the construct." Moreover, the measure of intrusive overcontrol showed a good reliability ( $\omega = .72$  at T1 and  $\omega = .76$  at T2).

### Children's Reticence and Peer Exclusion

Teachers rated children's reticent behaviors in the peer context as well as peer exclusion by completing two subscales of the Teacher Behavior Rating Scale (TBRS; Hart & Robinson, 1996). The TBRS Scale includes a battery of subscales which assess child behaviors in school settings. Teachers rated the frequency of children's behavior on a 3-point Likert Scale (0 = *never*, 1= *sometimes*, 2 = *very often*) at both T1 and T2. The reticence subscale consisted of 8 items (e.g., "Stares at other children without interacting with them;" and "Wanders aimlessly around when outdoors or during free play." see Appendix K). The psychometric property of this measure was assessed by using the confirmatory factor analysis. The well-fitting models were built at both T1 and T2 ( $\chi^2$  (20, N= 187) = 58.80, p = .0000, CFI = .97, SRMR = .07, and RMSEA = .10, 90% CI [.07, .13] at T1;  $\chi^2$  (20, N= 150) = 46.30, p = .0007, CFI = .97, SRMR = .07, and RMSEA = .09, 90% CI [.06, .13] at T2). All standardized factor loadings were significant at T1 and T2, ranging from .62 to .89. In addition, the reticence construct showed a good reliability ( $\omega = .93$  at T1 and  $\omega = .93$  at T2).

The peer exclusion subscale includes 5 items (e.g., "Is told to go away by other children." see Appendix L). We conducted the confirmatory factor analysis to assess the psychometric property of this measure in our Chinese American sample. The well-fitting models were built at both T1 and T2 ( $\chi^2$  (5, N = 187) = 36.10, p = .000, CFI = .97, SRMR = .09, and RMSEA = .18, 90% CI [.13, .24] at T1;  $\chi^2$  (5, N = 150) = 22.94, p = .0003, CFI = .97, SRMR = .03, and RMSEA = .16, 90% CI [.09, .22] at T2). All standardized factor loadings were significant at T1 and T2, ranging from .66 to .94. Moreover, the measure of peer exclusion showed a good reliability ( $\omega$ = .93 at T1 and  $\omega$  = .93 at T2).

### Analytic Plan

We first examined the normality and outliers for each variable (Tabachnick & Fidell, 2007). Missing data were handled in Bayesian analysis. The missing data in Bayesian analysis was estimated as parameters, which performs better than the traditional deletion methods (Buhi et al., 2018; Yu et al., 2018). Confirmatory factor analysis in *Mplus 8* was used to assess the psychometric property of each measure in our Chinese American sample (Muthén & Muthén, 1998–2012). Measurement equivalence (i.e., metric invariance) of the variables was tested first to establish measurement invariance of the main constructs between the two time points (Yu et al., 2019).

A cross-lagged structural equation modeling (SEM) was built to examine the bidirectional effects over time between maternal intrusive overcontrol and child outcomes. In the SEM model, our focus was on the parent-driven paths from T1 parenting practices to T2 child outcomes, as well as on the child-driven paths from T1 child outcomes to T2 parenting. The

concurrent associations between parenting behaviors and child outcomes were tested at each time point. The paths from T1 parenting and child peer experiences to T2 parenting and child peer experiences were controlled for temporal stability. The Bayesian estimation was used in *Mplus 8* (Muthén & Muthén, 1998–2012), given its advantages over frequentist approaches, including addressing concerns about small sample sizes and better handling of non-normal parameters as it does not require normal distribution (van de Schoot et al., 2014). In Bayesian estimation, a wellfitting model is determined based on two criteria: (1) the posterior predictive p value (*ppp* value) is around .50 and (2) the 95% confidence interval for the difference between the observed and replicated  $\chi^2$  values encompasses zero (Gucciardi et al., 2016; Muthén & Asparouhov, 2012).

### Results

# **Preliminary Analysis**

The outliers were examined for each variable in the exploratory data analysis using visual inspection (i.e., Boxplot). Based on the outlier labeling rules, which are values more or less than 3 Interquartile Range (Hoaglin & Iglewicz, 1987), only one outlier out of 1356 data points (226 participants × 6 variables) was detected. The outlier was kept to reflect the original information and avoid data manipulation. The normality for each item was checked. Based on the criteria that data are considered normal when skewness is between -2 to +2 and kurtosis is between -7 to +7 (Byrne, 2010; Hair et al., 2010), only 2 out of 34 datasets were not normally distributed. The rate of missing data was 26%, with 1985 missing data points for the various items out of the total of 7684 scores (i.e., 226 participants × 34 items). The Little's missing completely at random test showed that the data were missing completely at random,  $\chi^2(503) = 554.43$ , p = .06 (Little, 1988; Little et al., 2014). The attrition rate was 28% for T2 (n = 216 at T1, n = 163 at T2). This attrition

occurred due to families moving out of the state of Maryland, the research team's inability to contact families successfully, or unavailability of families at the time of the assessment.

The measurement invariance over time was examined and the metric equivalence was established for each construct, suggesting that the factor loadings for each construct were not different over time. Specifically, an unconstrained model for each construct was first specified, with factor loadings being freely estimated. Then, a constrained model was specified with the factor loadings being constrained to be the same across two time points. The model fit for two nested models were assessed. The chi-square change ( $\Delta \chi^2$ ) test for the two nested models was further examined to assess the measurement invariance, with non-significant  $\Delta\chi^2$  showing model equivalence, suggesting that the factor loadings across two time points were not different. For the maternal intrusive overcontrol, both unconstrained and constrained models achieved acceptable model fit (unconstrained model:  $\chi^2$  (15, N = 217) = 20.55, p = .152, CFI = .99, SRMR = .03, and RMSEA = .04, 90% CI [.00, .08]; constrained model:  $\chi^2$  (19, N= 217) = 31.44, p = .036, CFI = .98, SRMR = .05, and RMSEA = .06, 90% CI [.01, .09]). The chi-square change ( $\Delta \chi^2$ ) test was not significant,  $\Delta \chi^2 (4, N=217) = 9.29$ , p = .054, suggesting that the factor loadings for the construct of maternal intrusive overcontrol over time were not different. Similarly, for child reticence, both unconstrained and constrained models achieved acceptable model fit (unconstrained model:  $\chi^2$  (103, N=210) = 141.29, p = .007, CFI = .97, SRMR = .08, and RMSEA = .04, 90% CI [.02, .06]; constrained model:  $\chi^2$  (111, N= 210) = 142.22, p = .024, CFI = .98, SRMR = .09, and RMSEA = .04, 90% CI [.01, .05]). The non-significant chi-square change  $(\Delta \chi^2)$  test,  $\Delta \chi^2 (8, N=210) = 8.25$ , p = .410, showed that the factor loadings for the construct of child reticence over time were similar. Finally, for peer exclusion, both the unconstrained and constrained models achieved acceptable model fit (unconstrained model:  $\chi^2$ 

(34, N=210) = 59.23, p = .005, CFI = .98, SRMR = .09, and RMSEA = .04, 90% CI [.00, .08];constrained model:  $\chi^2$  (39, N=210) = 56.43, p = .035, CFI = .98, SRMR = .09, and RMSEA= .05, 90% CI [.01, .07]). The chi-square change ( $\Delta \chi^2$ ) test was not significant,  $\Delta \chi^2$  (5, N=210) = 1.63, p = .898, demonstrating that the factor loadings for the construct of peer exclusion over time were not different.

The description and correlations for all latent variables and demographic constructs are presented in Table 1. Regarding the temporal stability of the three study constructs, maternal intrusive overcontrol at T1 was positively associated with intrusive overcontrol at T2 and children's reticence at T1 was positively correlated with reticence at T2, suggesting temporal stability over time for the parenting construct and children's reticence. However, the peer exclusion construct did not show stability over time as the correlation between T1 and T2 peer exclusion was not significant. It is possible that different teacher raters across two time points accounted for the instability of peer exclusion given that most children (i.e., 72%) had different teachers rating their behaviors across the two time points, compared to only 28% of the children who had the same teacher-raters across the two time points.

To explore if the different teacher reporters contributed to the lack of stability in children's peer exclusion across the two time points, the correlations between T1 and T2 peer exclusion were examined for children who had different teachers versus those who had the same teachers at the two timepoints, and a z-test was conducted to compare the potential differences between the two correlations. The correlations between T1 and T2 peer exclusion for children with different teachers over time was .03, p = .807, and .25, p = .183, for children with the same teachers. The z-test results revealed that the difference between these two correlations was not significant (z = 1.005, p = .315), suggesting that having different teacher reporters at the two

timepoints did not significantly contribute to the low stability in peer exclusion over time. Instead, relative to reticence, which is a more temperamentally-related construct, peer exclusion may be more dependent on the context, and thus, more variable over time.

In terms of concurrent correlations among study constructs, children's reticence at T1 was significantly associated with more peer exclusion at T1. Children's reticence at T2 was also significantly associated with more maternal intrusive overcontrol and more peer exclusion at T2. Moreover, regarding to the correlations among study structures over time, maternal intrusive overcontrol at T1 was significantly correlated with more children's reticence at T2.

With regard to the correlations between the four potential covariates and study variables, maternal age was significantly and positively associated with peer exclusion at T1. Child age was significantly and negatively correlated with less reticence at both T1 and T2. Finally, child birth order were significantly and positively associated with maternal intrusive overcontrol at T1. No other potential covariates were corrected with the study variables. Therefore, three variables (i.e., maternal age, child age, and birth order), which were significantly associated with the study variables, were first included as covariates in each model. Next, when the covariates did not predict any study variables in each model, the nonsignificant covariates were pruned out to avoid overcontrol. Eventually, child age and birth order were included in each final model as they significantly predicted study variables.

# **The SEM Bidirectional Models**

The basic model examining the bidirectional associations between overcontrolling parenting and children's functioning achieved good fit with a 95% confidence interval for the difference between the observed and replicated  $\chi^2$  values encompassing zero (-60.930, 158.614) and the posterior predictive *p* value (*ppp* value) of .18. Four separate SEM models were built to

examine four bidirectional relations between intrusive overcontrol parenting and children's functioning, with each model focusing on examining the moderating role of gender for each path, respectively. The temporal stability of each construct was accounted for and the concurrent associations among the three constructs (i.e., intrusive overcontrol, reticence, and peer exclusion) at each time point were included in each model. Standardized factor loadings of all three constructs (i.e., intrusive overcontrol, at T1 and T2 were significant in each model, ranging from .39 to .94.

# Parent Effects: Overcontrolling Parenting and Children's Reticence with Gender as a Moderator

The major interests of the first SEM model (Figure 1) were to examine the parent-driven effect of overcontrolling parenting on children's reticence over time and the moderating role of child gender in the longitudinal relations between maternal intrusive overcontrol and children's reticence. The results showed that maternal intrusive overcontrol at T1 significantly predicted more child reticence at T2 ( $\beta$  = .36, Posterior *SD* = .12, 95% CI [0.12, 0.59]) after controlling for the stability of child reticence ( $\beta$  = .14, Posterior *SD* = .10, 95% CI [-0.04, 0.36]). Child gender did not significantly moderate the path from maternal intrusive overcontrol at T1 to child reticence at T2 ( $\beta$  = .09, Posterior *SD* = .08, 95% CI [-0.25, 0.07]), suggesting that maternal intrusive overcontrol predicted more reticence among both boys and girls in equal strength. **Child Effects: Children's Reticence and Overcontrolling Parenting with Gender as a** 

# Moderator

The major interests of the second SEM model (Figure 2) were to examine the childdriven effect of children's reticence on overcontrolling parenting over time and the moderating role of child gender in the longitudinal relations between child reticence and maternal intrusive

overcontrol. The results demonstrated that children's reticence at T1 did not predict mothers' intrusive overcontrol parenting at T2 ( $\beta$  = .03, Posterior *SD* = .22, 95% CI [-0.44, 0.44]) after controlling for the stability of intrusive overcontrol ( $\beta$  = .89, Posterior *SD* = .06, 95% CI [0.75, 0.98]). Child gender did not significantly moderate the path from children's reticence at T1 to maternal overcontrol at T2 ( $\beta$  = -.16, Posterior *SD* = .08, 95% CI [-0.32, 0.00]), indicating that children's reticence did not impact maternal overcontrol at T2 similarly among boys and girls. **Parent Effects: Overcontrolling Parenting and Children's Peer Exclusion with Gender as a Moderator** 

The major interests of the third SEM model (Figure 3) were to examine parent-driven effects of overcontrolling parenting on children's peer exclusion over time and the moderating role of child gender in the longitudinal relations between intrusive maternal overcontrol and child peer exclusion. The results revealed that maternal intrusive overcontrol at T1 did not predict child peer exclusion at T2 ( $\beta$  = -.05, Posterior *SD* = .14, 95% CI [-0.34, 0.20]) after controlling for the stability of child peer exclusion ( $\beta$  = .22, Posterior *SD* = .11, 95% CI [0.00, 0.42]). However, child gender significantly moderated the path from maternal intrusive overcontrol to child peer exclusion at T2 ( $\beta$  = .30, Posterior *SD* = .08, 95% CI [0.13, 0.44]). Specifically, maternal intrusive overcontrol predicted more child peer exclusion at T2 among boys ( $\beta$  = .65, Posterior *SD* = .13, 95% CI [0.36, 0.88]), while intrusive overcontrol did not significantly predict peer exclusion among girls ( $\beta$  = -.14, Posterior *SD* = .15, 95% CI [-0.42, 0.18]).

# Child Effects: Children's Peer Exclusion and Overcontrolling Parenting and Gender as Moderator

The major interests of the fourth SEM model (Figure 4) were to examine the child-driven effect of children's peer exclusion on overcontrolling parenting over time and the moderating role of child gender in the longitudinal relations between child peer exclusion and maternal intrusive overcontrol. The results indicated that children's peer exclusion at T1 did not predict mothers' intrusive overcontrol parenting at T2 ( $\beta$  = .42, Posterior *SD* = .24, 95% CI [-0.06, 0.88]) after controlling for the stability of overcontrol ( $\beta$  = .88, Posterior *SD* = .06, 95% CI [0.74, 0.99]). Child gender did not significantly moderate the path from child peer exclusion at T1 to maternal overcontrol at T2 ( $\beta$  = -.16, Posterior *SD* = .09, 95% CI [-0.32, 0.01]), suggesting that children's peer exclusion did not impact mothers' overcontrol at T2 similarly among boys and girls.

### Discussion

This study aimed to clarify the directionality in the associations between Chinese American mothers' intrusive overcontrol and children's reticence and peer exclusion experience by examining their reciprocal associations using a short-term (six months apart) longitudinal design. We also examined gender differences in the bidirectional associations between maternal intrusive overcontrol and child reticence and peer exclusion. Overall, the findings provided evidence for parent-driven effects of maternal intrusive overcontrol, but not child-driven effects of children's reticence and peer exclusion on maternal intrusive overcontrol. Moreover, child gender was found to moderate the effects of intrusive parenting on Chinese American children's peer exclusion six months later.

# **Parent-Driven Effects**

### **Overcontrolling Parenting and Children's Reticence and Gender as Moderator**

Consistent with previous research (Guimond et al., 2012; Rubin et al., 2001), our findings showed that Chinese American mothers' intrusive overcontrol parenting led their children to display more reticent behaviors six months later in school settings. Moreover, the adverse effects of maternal overcontrolling parenting on reticence did not significantly differ between boys and girls. Our findings extended previous studies which tended to focus on children's display of reticence in laboratory settings (Guimond et al., 2012; Rubin et al., 2001) by providing evidence for the negative effects of overcontrolling parenting on children's reticence across various contexts. The detrimental effects of mothers' overcontrol on children's reticence might be due to the emotional and relational insecurities shaped by their mothers' intrusive parenting behaviors (Ainsworth et al., 2015; Bowlby, 1988; Chorpita & Barlow, 1998; Erickson et al., 1985; Hudson & Rapee, 2001; Rubin et al., 2009; Taylor & Alden, 2006). Children of overcontrolling parents may perceive the external circumstances to be out of their control and feel fearful, which can discourage them from engaging with others in peer contexts.

Even though maternal overcontrol has been found to be more normative in Chinese culture due to traditional Confucian-based beliefs that parents are fully responsible for disciplining, governing, and teaching their children right from wrong (Chao, 1994; Ho, 2008; Lin & Fu, 1990), the effects of such parenting on children's reticent behavior was consistent with that found in previous research on European-heritage samples (e.g., Guimond et al., 2012; Rubin et al., 2001). This consistency may be because such parenting similarly evokes emotional and relational insecurities in Chinese American children and preclude them from opportunities to

engage in social interactions, especially when residing in a Western context, where autonomy and assertiveness are highly valued (Markus & Kitayama, 1991).

### **Overcontrolling Parenting and Children's Peer Exclusion with Gender as a Moderator**

Supporting our hypothesis, the findings revealed that Chinese American mothers' intrusive overcontrol predicted more peer exclusion six months later only among boys. Higher levels of intrusive overcontrol parenting led boys to experience more peer exclusion perhaps because mothers' tendency to frequently intervene in their children's activities may promote their children's insecurity, encourage dependence on others, and overcompliance to others' demands (Levy, 1943; Rubin et al., 2002). Overprotective parenting may also decrease the opportunities that children have for self-directed play with peers and interfere with children's ability to practice social and problem-solving skills (Levy, 1943; Rubin et al., 2002; Rubin & Coplan, 2004). Being dependent, submissive, and less skilled in social interactions and problemsolving may be more detrimental for boys than girls, as these behaviors violate the gender norms of male assertiveness and self-assuredness (Rubin & Barstead, 2014).

As previous studies mainly focused on peer victimization in the form of peers' aggressive behaviors (e.g., Finnegan et al., 1998; Georgiou, 2008; Ladd & Ladd, 1998; Veenstra et al., 2005), it is important to also understand children's peer exclusion, which is characterized by non-aggressive behaviors, such as being ignored or avoided by peers and being told not to play with peers. Although it is more indirect than peer victimization, peer exclusion has also been found to be detrimental to children's development (Buhs & Ladd, 2001; Killen et al., 2008; Killen & Rutland; 2011) and, therefore, deserve research attention. Our findings regarding the contribution of maternal intrusive overcontrolling behaviors to boys' peer exclusion paves the

way for future studies to examine and understand potential mechanisms underlying the effects of mothers' intrusive overcontrol on boys' peer exclusion experiences.

# Different Role of Gender in Children's Reticence versus Peer Exclusion

When the moderating role of child gender was considered in the relations between overcontrolling parenting and children's reticence and peer exclusion, our study revealed a significant gender difference only for peer exclusion. When mothers used more intrusive overcontrol, only boys experienced more peer exclusion. In contrast, both boys and girls displayed more reticence when mothers engaged in more intrusive overcontrol. These findings may be due to the role of gender norm expectations in peer exclusion but not in reticence in the current study. Peer exclusion involves behaviors from peers targeted at the focal child. Therefore, peers may expect boys to be more assertive and independent than girls (Rubin & Barstead, 2014) and are more likely to reject and exclude boys who display over-reliance and dependence shaped by mothers' overcontrolling parenting. In contrast, the display of children's reticence may be less shared by gender norm expectations from others, and both boys and girls may be equally and adversely affected by mothers' intrusive overcontrol.

# Parent-Driven versus Child-Driven Effects

Overall, our findings shed light on the directionality of the associations between parenting and children's adjustment by revealing parent-driven over child-driven effects in the association between overprotective parenting and both children's reticence and peer exclusion. This finding is consistent with previous studies showing the parent-driven effects over childdriven effects among Chinese and Korean American families during the preschool-age period (Seo et al., 2021; Yu et al., 2019). Although bidirectional theory emphasizes the reciprocal influence between parents and children (Bell, 2017), their influence on each other may vary for specific behaviors and change across different developmental periods (Feng et al., 2007; Frick, Christian, & Wooton, 1999). The parent-driven over child-driven effects during the preschool period might be due to the key role of parents as the primary socializing agents of young children's development in the earlier years relative to later developmental stages (Eisenberg et al., 2005).

# **Child-Driven Effects**

# **Children's Reticence and Overcontrolling Parenting**

The findings of the present study did not reveal significant child-driven effect of children's reticence on mothers' overcontrolling parenting among both boys and girls, which countered previous research indicating that children's anxious solitude (Gazelle, 2020), low cardiac vagal tone, shyness, anxiety, and inhibition (Edwards et al., 2010; Rubin et al., 1999), were associated longitudinally with more controlling behaviors in mothers (Kennedy et al., 2004). Other studies also demonstrated that children's shyness, anxiety, and inhibition predicted more mothers' overprotective behaviors (Edwards et al., 2010; Rubin et al., 1999). However, other studies did not find child-driven effects of these related constructs on mothers' overprotective or overcontrolling parenting (Edwards, 2018; McShane & Hastings, 2009). At least three reasons for the non-significant child effect found here are plausible. First, other moderating factors, such as parental goals, may influence mothers' responses to children's display of reticence (Hastings & Rubin, 1999). For mothers who endorse high levels of parentcentered goals of establishing authority and attaining children's short-term compliance, children's exhibition of withdrawal behaviors may elicit their controlling parenting, with the goals of reducing children's devalued social behaviors and building authority by providing guidance regarding how to act in a socially acceptable manner. In contrast, mothers with low

levels of parent-centered goals may be less likely to use controlling parenting, which tends to damage children's emotional security, when their children display reticent behaviors reflecting their social anxiety. Third, due to Confucian-based cultural beliefs that withdrawn characteristics facilitate the maintenance of social order and interpersonal harmony, which are highly valued in Chinese culture (Chao, 1994), children's withdrawal may not be considered undesirable and therefore not elicit overprotective or intrusive behaviors in Chinese American mothers.

Future studies are warranted to further examine whether maternal goals and culture play a role in mothers' responses to children's display of reticence in a social context. Moreover, instead of demonstrating more intrusive overcontrolling behaviors in response to children's reticence, some mothers may engage in other parenting behaviors, such as showing more warmth and suggesting alternatives to build children's interpersonal skills and teaching them specific strategies to get along with others (Chen et al., 1998).

### Children's Peer Exclusion and Overcontrolling Parenting

Our findings revealed that preschoolers' peer exclusion did not directly predict mothers' overcontrolling parenting six months later among both boys and girls, which is consistent with previous findings among elementary school children (Gazelle & Cui, 2020). However, as past studies found that peer exclusion was indirectly associated with more maternal overcontrolling parenting through children's anxious solitude (Gazelle & Cui, 2020), the lack of direct relations between peer exclusion and overcontrolling parenting is perhaps due to potential underlying mediators that were not examined in the current study, such as children's anxiety and depressive symptoms. Children's experiences of peer exclusion may be associated with elevated social anxiety and depression (Epkins et al., 2011; Gazelle & Ladd, 2003; Gazelle & Rudolph, 2004)

which may, in turn, elicit more mothers' well-intended controlling behaviors aimed at reducing children's anxiety or depression.

Another possible explanation is that mothers did not respond to children's peer exclusion experiences as they may perceive such experiences to be less severe than peer victimization, where the child is the recipient of aggressive behaviors from peers (Georgiou, 2008; Ladd & Ladd, 1998; Veenstra et al., 2005), or children's engagement in bullying behaviors (Yu et al., 2019), which were found to evoke Chinese American mothers' engagement in guilt induction behaviors 6-months later. In addition, mothers may also be less aware of their children's peer exclusion experiences at school, given that such experiences may be more subtle and less likely to be shared with parents (Buhs & Ladd, 2001; Killen et al., 2008; Killen & Rutland, 2011). Thus, future research is needed to advance our understanding on the potential role of maternal perceptions regarding the severity of peer exclusion and maternal awareness of child experiences with peer exclusion in understanding their responses to children's peer exclusion experiences.

### No Gender Difference in Predicting Overcontrolling Parenting

When the moderating role of child gender was considered in the child-driven effects of children's reticence and peer exclusion on mothers' overcontrolling parenting, no significant gender differences were found. We had predicted that the evocative effects of children's behaviors on parenting practice would be stronger for Chinese American boys than girls due to Chinese parents' gender norm socialization of boys to be more assertive and independent because of their expected eventual contributions to the family's social and economic success (Chan et al., 2002; Chen & Tse, 2008). Inconsistent with our hypothesis, the non-significant gender differences in overcontrolling parenting may reflect Chinese American mothers' decreased preference for boys because of the growing emphasis on gender equality in

contemporary Chinese society (e.g., Zhao, 2017) and in the American context (e.g., Quffa, 2016).

# **Limitations and Future Directions**

Several limitations of the current study should be noted. First, the third dissertation study explored the bidirectional associations between maternal intrusive overcontrol and children's reticence as well as peer exclusion by using a short-term longitudinal design across two time points. However, the potential mechanism underlying the associations was not examined as it was not of major interest based on the bidirectional theoretical framework (Bell, 2017). However, there is some previous empirical evidence for children's anxious solitude serving as a mediator through which children's peer exclusion indirectly elicited more maternal overprotective behaviors (Gazelle & Cui, 2020). Thus, future studies should examine the underlying mediating mechanism of the associations by including three or more time points of assessment. A longitudinal design with three waves has been recommended as ideal for examinations of mediating models, which include three constructs (i.e., the cause, the mediator, and the effect). A design including three waves allows for each of the three constructs to be assessed at each time point, controlling for the previous levels of the medicator and the effect variables (Cole & Maxwell, 2003).

Second, this third dissertation study focused on the understudied group of Chinese American families. Future studies would be beneficial by exploring the bidirectional associations between parenting and children's adjustment problems among other Asian American groups (e.g., Korean American families) and ethnic minority groups to replicate our findings and test the generalizability of our findings to other Asian-heritage families in the United States (Tran & Birman, 2010). Third, our sample was comprised of well-educated and middle-class Chinese

immigrant mothers from one geographical region in the United States. These socioeconomic characteristics are representative of that particular region (Cheah et al., 2016), however, metaanalyses have demonstrated that socioeconomic status plays a role in the association between parenting and children's functioning (Paulussen-Hoogeboom et al., 2007), which is consistent with Crockenberg's (1986) contention that mothers from middle-SES and high-SES backgrounds are better able to overcome parenting challenges due to access to resources, compared to their lower-SES peers. Thus, we recommend that future studies examine these relations in more diverse samples of Chinese American parents with different socioeconomic characteristics and geographical regions to understand the potential role of those constructs in these associations and increase the generalizability of our findings. Fourth, these is evidence that culturally related factors, such as maternal acculturation or enculturation may interact with immigrant parenting practices (e.g., Yu et al., 2018). Therefore, future studies that examine the specific moderating role of culturally related factors in the bidirectional associations between Chinese American parents and children are warranted.

### **Conclusions and Implications**

Despite the above limitations, this third dissertation study contributed to our understanding of the directionality in the associations between Chinese American mothers' engagement in intrusive overcontrolling practices and their children's reticent behaviors and peer exclusion by using a short-term longitudinal design, while accounting for the stability of each characteristic and considered the role of child gender in these associations. Our findings suggest that parent-driven effects instead of child-driven effects in these families with young children. Practically, the findings can help inform culturally informed evidence-based programs attempting to prevent or reduce socially reticent behaviors and peer exclusion among Chinese

American in a Western context. Our results clearly indicate the unfavorable impact of Chinese American mothers' intrusive overcontrolling behaviors on their children's social skills and peer experiences in the American school setting, despite Chinese-heritage mothers' greater engagement in such practices compared to European American mothers (Wu et al., 2002). Therefore, parenting practitioners and educators should design culturally sensitive parenting education programs that can decrease Chinese immigrant mothers' engagement in intrusive overcontrolling parenting practice, in order to ultimately promote the positive social development of Chinese American children.

# **Chapter 5: Overall Conclusions and Implications**

Overall, the three dissertation studies identified key processes in, and thus increased our understanding of, Asian American parenting and children's development and adjustment. Current theoretical models of parenting do not adequately consider the unique experiences of Asian immigrant families in the United States. Together, the findings derived across the three studies broadened our theoretical understanding of developmental processes in Asian American families by identifying both individual (e.g., maternal cognitions and mental health) and contextual (experiences of racial discrimination) factors, on different types of parenting that have been found to be emphasized in East Asian cultures and young Asian American children's social and emotional development.

First, we examined different patterns in the socialization goals of Asian American mothers and potential factors that differentiated unique patterns in mothers' interdependenceoriented and independence-oriented socialization goals. We also uncovered the role of racial discrimination that Asian American mothers experience in undermining their socialization practices, specifically, by increasing their engagement in psychologically controlling parenting.

Importantly, underlying mechanisms (i.e., the mediating role of maternal depressive symptoms and psychological well-being) and moderating process (i.e., moderating role of maternal acculturation towards the mainstream American culture) linking racial discrimination and socialization practices were also revealed. Moreover, the contributions of maternal socialization goals and practices to Asian American children's positive adjustment (i.e., socio-emotional school readiness) and negative outcomes (i.e., reticent behaviors and peer exclusion) in the United States were explored across the three studies.

First, this dissertation project contributed to the current literature by providing a better understanding of factors of resilience that can promote the development of Asian American children (i.e., Chinese and Korean American children). As the self-determination theory posits, the basic psychological need for autonomy is considered essential to an individual's optimal development (Deci & Ryan, 1985; Ryan & Deci, 2000). The dissertation project provided empirical evidence for the application of self-determination theory in Asian American families and highlighted the importance of autonomy-supportive parenting in Asian American children's development by revealing the beneficial role of high autonomy-oriented parenting cognition in the first study, the contributors and the detrimental impact of intrusive aspect of parenting that stifles children's autonomy in the second and third study (i.e. psychologically controlling parenting).

This dissertation project also contributed to a more integrated and comprehensive understanding of the determinants of a culturally emphasized parenting practice, psychologically controlling parenting, in Chinese American families. Previous research has focused on the contributions of psychologically controlling parenting to children's development (e.g., Yu et al., 2019), but the antecedents of psychological control have been received less empirical attention

(Soenens & Vansteenkiste, 2010). Grolnick (2003) posited three different sources of pressure that may serve as the antecedents of psychologically controlling parenting: pressure from "above" (e.g., social-contextual factors), "within" (e.g., parents' characteristics), and "below" (e.g., child's characteristics and behaviors).

This dissertation project empirically tested and revealed the relative importance of each determinant through exploring the role of all three categories of pressure, including the sociocontextual factors (i.e., racial discrimination) and parental psychological status in the second paper (i.e., depressive symptoms), and child experience (i.e., children's experiences with peers) in the third paper. Barber et al. (2002) highlighted parental psychological functioning as the most powerful resource. In line with Barber's (2002) conjectures, the importance of maternal psychological functioning was revealed not only through the direct influence of psychological functioning (i.e., depressive symptoms) on psychologically controlling parenting, but also through the indirect role of psychological status serving as an underlying mechanism. The influence of child characteristics on psychologically controlling parenting was not revealed in the third paper, which further highlighted the importance of maternal psychological functioning in serving as an important determinant of psychologically controlling parenting in Chinese American families.

Moreover, the findings of this dissertation project provided evidence for the detrimental effects of racial discrimination, which is an important source of stress in ethnic-racial minority immigrant families. Thus, socio-contextual factors that are unique to ethnic-racial minority families should be considered when refining the theoretical models of parenting (e.g., Belsky's determinants of parenting model) and child development as they may interconnect with personal factors in complex ways to influence psychologically controlling parenting. Moreover,

contextual theoretical frameworks that guide empirical examinations of the development of ethnic minority children (e.g., García Coll et al., (1996) integrative framework) do center social position factors and the impact of racism, but mostly focus on racial-ethnic aspects of socialization. Our findings indicated that other aspects of parenting are also impacted by racism and racial discrimination experiences and should be considered in understanding the socialization experiences of ethnic-racial immigrant children.

This dissertation project extended our conceptual understanding of Asian American children's adjustment by focusing on their socio-emotional school readiness as well as peer relationships (i.e., reticence and peer exclusion) at school. Greater understanding on the socio-emotional development of Asian American children is especially important as previous research has tended to focus on the academic success of Asian Americans (Tran & Birman, 2010) due to the model minority stereotype (Chao, 1994; Lee et al., 2009). However, the sole focus on positive adjustment, in turn, further perpetuates the prevailing "model minority" stereotype (Chao, 1994; Lee et al., 2009). However, the academic realm, including in the social experiences of this understudied ethnic-racial minority group of children.

In addition to the theoretical contributions, the overall findings of this dissertation project have significant implications for the development and inform the development of more culturally sensitive and evidence-based policies and programs that: (1) understand the heterogeneity in parenting within Asian American families and their implications for children's adjustment; (2) acknowledge and address the contextual stressor of racial discrimination among Chinese American mothers and contributions to their mental health and parenting practices; and (3) raise awareness regarding Chinese American children's peer relationships at school and promote their adjustment by reducing maladaptive parenting.

First, the findings can inform parenting programs to consider important variations in the socialization goals of Asian American mothers in terms of how these mothers attempt to integrate goals that are valued by both their heritage and mainstream host cultural contexts. Autonomy-supportive parenting in Asian American families should be encouraged in parenting programs to promote their children's positive adjustment in the mainstream American context where autonomy and independence are highly valued (Markus & Kitayama, 1991). Moreover, programs that are designed to support Asian American mothers in their bicultural socialization efforts and connect home and school socialization goals could be highly beneficial for Asian American children.

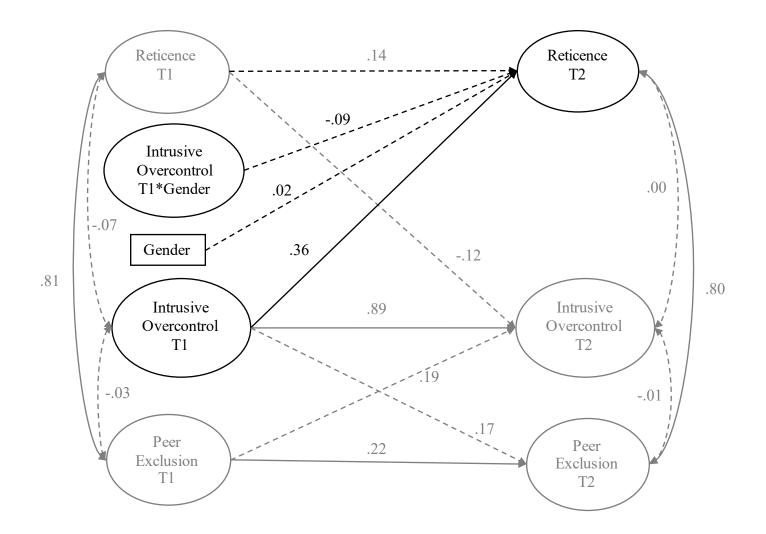
Second, programs working with Asian American families should also systematically consider the pressures from both "above" and "within" that contribute to parental psychologically controlling parenting. Thus, parenting programs should consider pressures from various aspects of the parents' lives, including those that are unique to Asian American and immigrant families, and their complex interconnections when attempting to reduce the use of maladaptive psychologically controlling parenting in Chinese American families.

Third, the knowledge regarding peer relationships among Chinese American children gained in this current dissertation can inform the designs of programs that can address the high levels of bullying and victimization experienced by Asian American children (Cooc & Gee, 2014), which has been a neglected topic. Moreover, efforts should be made to inform policies that can decrease racial discrimination experienced by Chinese American mothers and to increase resources to address the mental and socio-emotional health needs of Asian American families particularly during the heightened anti-Asian context during the COVID-19 pandemic and beyond.

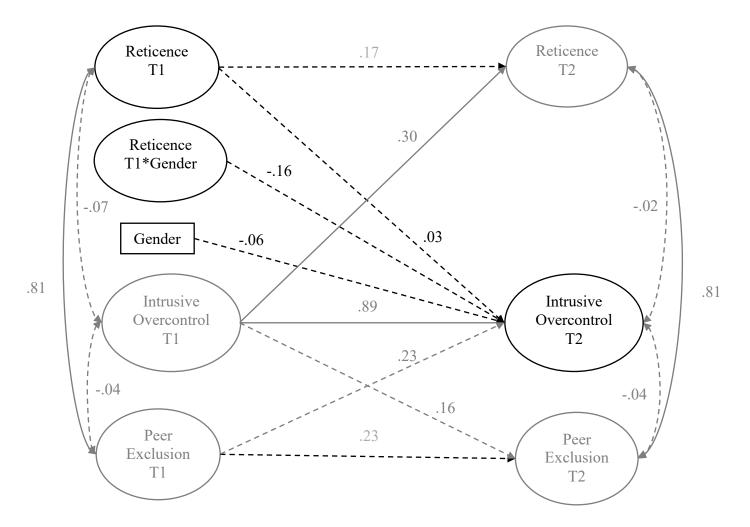
Variable	1	2	3	4	5	6	7	8	9	10	11	М	SD
1. Intrusive overcontrol T1	_											2.20	.61
2. Intrusive overcontrol T2	.92***	_										2.24	.64
3. Reticence T1	09	07	_									.36	.40
4. Reticence T2	.26*	.27*	.28*	_								.32	.37
5. Peer exclusion T1	07	02	.79***	.09	_							.27	.37
6. Peer exclusion T2	.18	.22	.19	.78***	.16	_						.22	.33
7. Child age	.14	.17	21*	30***	12	17	_					4.34	1.13
8. Child gender	.22*	.15	.09	.17	.15	.07	01	_				.54	.50
9. Birth order	.26**	02	.11	04	.10	05	.13	.30**	_			1.55	.71
10. Maternal age	.14	.04	.15	09	.18*	01	.34***	.24**	.52***	_		37.65	4.38
11. Maternal education	.04	01	.01	.13	.09	.16	.02	06	06	.15	_	6.57	.70

Table 1. Descriptive statistics and correlations and for all latent variables and demographic constructs

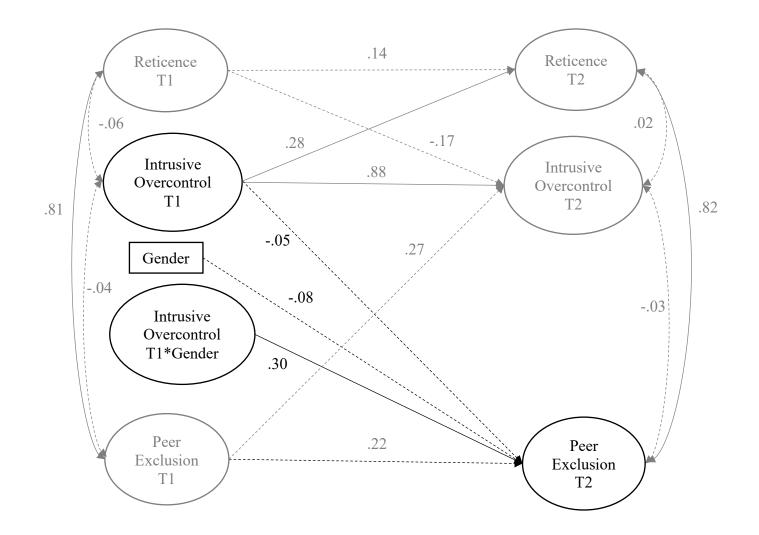
*Note: T1* Time1; *T2* Time2; \**p* < .05; \*\**p* < .01; \*\*\**p* < .001.



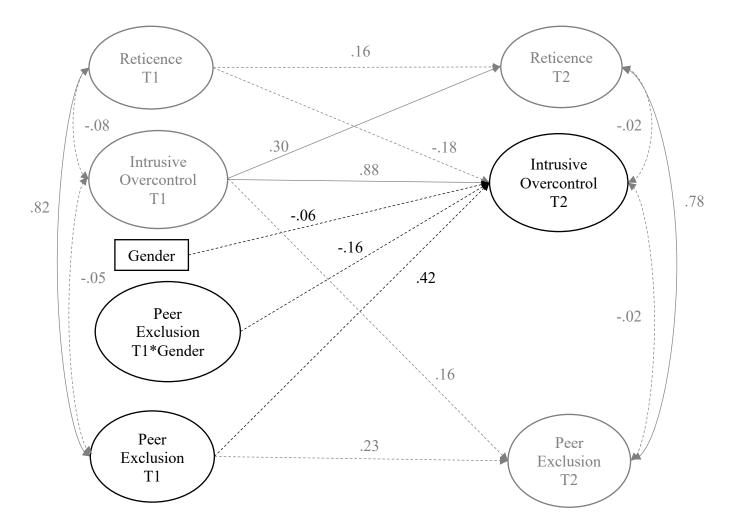
*Figure 1.* The Final Parent-Driven Effect Model from Maternal Overcontrol to Children's Reticence. Standardized coefficients were reported. Dash lines indicated non-significant relations. The significance was based on 95% credibility interval (CI). Solid lines represented significant relations. Child age and birth order were included as covariates in the final model.



*Figure 2.* The Final Child-Driven Effect Model from Children's Reticence to Maternal Overcontrol. Standardized coefficients were reported. Dash lines indicated non-significant relations. Solid lines represented significant relations. The significance was based on 95% credibility interval (CI). Child age and birth order were included as covariates in the final model.



*Figure 3.* The Final Parent-Driven Effect Model from Maternal Overcontrol to Peer Exclusion. Standardized coefficients were reported. Dash lines indicated non-significant relations. Solid lines represented significant relations. The significance was based on 95% credibility interval (CI). Child age and birth order were included as covariates in the final model.



*Figure 4.* The Final Child-Driven Effect Model from Peer Exclusion to Maternal Overcontrol. Standardized coefficients were reported. Dash lines indicated non-significant relations. Solid lines represented significant relations. The significance was based on 95% credibility interval (CI). Child age and birth order were included as covariates in the final model

# **Appendix A: Family Demographics Measure**

This information will assist us in describing the sample of families in this study. All information is strictly confidential and will be reported in group form only.

Person completing this questionnaire: Mother [] Father []

# PART I: MY CHILD'S FAMILY

1. What is your marital status?

- 1. Single
- 2. Married
- 3. Married, separated
- 4. Divorced
- 5. Remarried
- 6. Widowed
- 7. In a relationship

2. How long have you been in the U.S.? \_\_\_\_\_year(s) and \_\_\_\_\_month(s)

3. Which of these ethnic groups do you consider yourself to be a member of? (Circle the one that applies best)

Chinese Asian Chinese-American Asian-American American

4. What is your country of origin? \_\_\_\_\_

1.China

2. Taiwan

3. Hong Kong

4. Other Asian country

5. Other

5. For your household, please list each person who lives there on a regular basis, including yourself, and provide the following

information for each.

Name	Relation to Child	Date of Birth	Sex	Education	Highest
			(M or F)	(*Use 7-point	Academic
				scale below)	Degree
					Received
1.					
2.					
3.					
4.					

5.				

\*Education Scale: Please assign the number of the highest level of education that the person has completed:

- 1. Less than 7th grade
- 2. 7th, 8th, or 9th grade
- 3. 10th or 11th grade
- 4. High school graduate or GED
- 5. Partial college (at least 1 year completed); or has completed specialized training
- 6. Standard college or university graduate (BA, BS)
- 7. Graduate/professional degree (MA, MS, MSW, PhD, MD, LLB, JD)

# PART II: MY CHILD (CHILD IN THE STUDY)

1. Child's name: Date of birth:

2. Gender of the child: Male [ ] Female [ ]

# Appendix B: Asian Values Scale–Revised

**INSTRUCTIONS:** Use the scale below to indicate the extent to which you agree with the value expressed in each statement.

1 = Strongly Disagree

2 = Disagree

## 3 = Agree

#### 4 = Strongly Agree

- 1. One should not deviate from familial and social norms.
- 2. Children should not place their parents in retirement homes.
- 3. One need not focus all energies on one's studies.
- 4. One should be discouraged from talking about one's accomplishments.
- 5. Younger persons should be able to confront their elders.
- 6. When one receives a gift, one should reciprocate with a gift of equal or greater value.
- 7. One need not achieve academically in order to make one's parents proud.
- 8. One need not minimize or depreciate one's own achievements.
- 9. One should consider the needs of others before considering one's own needs.
- 10. Educational and career achievements need not be one's top priority.
- 11. One should think about one's group before oneself.
- 12. One should be able to question a person in an authority position.
- 13. Modesty is an important quality for a person.
- 14. One's achievements should be viewed as family's achievements.

- 15. One should avoid bringing displeasure to one's ancestors.
- 16. One should have sufficient inner resources to resolve emotional problems.
- 17. The worst thing one can do is to bring disgrace to one's family reputation.
- 18. One need not remain reserved and tranquil.
- 19. One should be humble and modest.
- 20. Family's reputation is not the primary social concern.
- 21. One need not be able to resolve psychological problems on one's own.
- 22. Occupational failure does not bring shame to the family.
  - 23. One need not follow the role expectations (gender, family hierarchy) of one's family.
- 24. One should not make waves.
- 25. One need not control one's expression of emotions.

# **Appendix C: Socialization Goals Interview**

# GENERAL INSTRUCTIONS FOR INTERVIEWERS Interviewer training and skill are paramount. The SGI is always tape recorded as an individual interview.

## Questions 1-4:

1) If parent has trouble thinking of a child to describe, invite her to use her own child as an example of qualities she particularly

likes or doesn't like.

2) If parent says she is reluctant to "judge" or "label" children, emphasize that all children have both good and bad qualities--we're just trying to better understand what parents from differing cultural groups perceive as desirable or undesirable.

3) Be flexible about age/gender of children described; sometimes parents will ask if they can do a "composite" and present good/bad qualities from several children they know. This is fine, as long as they provide information relevant to the question.4) If parent says she does not want to "put qualities" on the child, or force them to be anything but what they are, ask her if she could describe what qualities she sees her child developing that she really likes.

#### SGI

#### Interview to be audiotaped

In this part of the study, we're looking at parents' views about children, what they like and what they don't like. I'm going to ask you a couple questions about what you'd like for your own child(ren).

1) Okay, first, I'd like you to think about your own child(ren). Most parents, when they have a child, have some idea about what sorts of **qualities** they would like them to possess--what kind of person they'd like them to grow up to be. When you think about your own child, what sorts of **qualities** would you really like him/her to possess as he/she grows older? Please tell me three **qualities** you would like him/her to possess as he/she grows older.

#### If parent seems confused by question, the following prompts can be used:

- What kinds of personality traits would you like them to possess, or what ways would you like them to behave?
- It can be either personality traits, or behaviors--whatever you'd like to see him/her grow to possess.

#### If parent's responses need expansion (if you think that their response is not clear), the following prompts can be used:

- Could you tell me more about what you mean by \_\_\_\_\_?
- Could you give me an example?
- What else?
- Anything else you can think of?

1b. Ok, so the 3 qualities you discussed are \_\_\_\_\_, \_\_\_\_, and \_\_\_\_\_. Now, can you tell me which of these three qualities is the <u>most</u> important to you, which is the <u>second</u>, and which is the <u>third</u> most important?

2) Okay, great. Now I'd like you to think again about your own child(ren). Again, most parents when they have a baby have some idea about what sorts of qualities they would really <u>not</u> want their child(ren) to possess. When you think about your own child(ren) growing up, what are some of the **qualities** or behaviors you'd really <u>not</u> want to see him/her come to possess as he/she grows older? Please tell me three **qualities** you would not want to see him/her to possess as he/she grows older.

If parent seems confused by question, the following prompts can be used:

- What kinds of personality traits would you not like them to possess, or what ways would you not want them to behave?
- It can be either personality traits or behaviors-- whatever you wouldn't like to see him/her grow to possess.

If parent's responses need expansion (if you think that their response is not clear), the following prompts can be used:

• Could you tell me more about what you mean by \_\_\_\_\_?

- Could you give me an example?
- What else?
- Anything else you can think of?

2b. Ok, so the 3 qualities you discussed are \_\_\_\_\_, \_\_\_\_, and \_\_\_\_\_. Now, can you tell me which of these three qualities is the <u>most</u> important to you, which is the <u>second</u>, and which is the <u>third</u> most important?

## Socialization Goals Interview Coding

## A Self-Maximization (Development of self/lack of self-maximization) (A higher-order code with 4 subcodes)

## AWB: Emotional and physical well-being and integration

- Shy, secure, insecure, trusting in sense of being optimistic that things will work out, healthy, happy, self-confident, easygoing, able to communicate problems
- Comfortable with own feelings, playful, sense of humor, able to discuss feelings, to like the way you look (e.g., not starve yourself to death), be physically attractive strong emotionally, extrovert, not care about the appearance, outgoing, active with others, grown up healthy, health, living in through happiness, confidence, healthy thoughts, bright child, who ask for help when needed, negative thoughts, affirmative, enjoy life, rounded personality, introverted, live well, positive eyes among things, be sick, ease, laid back personality, shaky, knowing how to express himself well, cooperate with people well,

not be too sensitive, express her opinions or thoughts well, positive thoughts, expressing that anger through action, doubting, negative mind, scared, hopeless, bravery (no elaboration), good or positive personality/attitude/characteristics

#### APP: Development of personal and economic potential

- Curious, develop talents/cognitive development of skills you would use in the work place, enjoy learning, fulfill potential, develop personal goals, well-rounded, creative, speak German/Turkish well (gebildet/kültürlü), intelligent, talented (e.g., be good in math), not be a slow learner, be a smart kid, studious, be ahead in comparison to other children of the same age (Frühentwickler), competitive in positive sense, have/pursue a goal in life, adventurous, open to new experiences, finding internal fulfillment in one's work
- Finish/drop out of school, get a job, do better than parents, ambitious, motivated, successful in a material sense, get a good education in order to get a job that will allow a better economic position
- Being organized in the sense of a quality/skill that makes one more efficient in one's work habits
- Smart, very active person, not too smart, who are not of cunning, competition with other American children, education as much as he/she can, sense of competition, well off in education, strong will, more determined, not to give up easily, successful, person who doesn't try, try or give up, inability to say "OK" instead of "No", studying hard to become academically successful, person who can be a part of the culture and walk the culture's ways (culturally and socially savvy), outgoing and bright, a nice foundation in the society with people, well known in the world, enjoy that field, doing things

right, while taking his time, a great musical talent, better than us (parent), to be someone who can achieve whatever they want, someone who doesn't give up, brave (in the context of not afraid of challenges), study well, talent in lots of areas, something in particular that the child is good at, being involved, confident, influential, get a good enough job, wisdom, a great leadership, not be distracted too easily, not too powerful, intelligent, ambition, courage to go through hardships, giving up easily

#### **EDU: Academic success**

• Just focus on academics, e.g., have a good education, not dropping out of school, do well in school, studious, be good in math

#### **APS: Psychological development**

- Independent, self-sufficient (survive on his/her own), self-reliant, adaptable, flexible, make good decisions, assertive, stand up for self, defend self, (don't) try to please everyone
- Well-adjusted to bicultural situation
- Skills of everyday living that everyone has to have to get along in life, to manage own affairs
- Fit in well within the American society, independence, don't want her to a follower, strong leader, not a leader, child who can show what the child wants, speak both English and Korean, don't forgive themselves for any mistake they make. They get mad at themselves. She wants to be perfect, being swept away, strong characteristics of leadership, socially outgoing,

dependent, passive, not being doubtful about things, too passive, wise, independence, he does not have any elasticity, he would not yield

• Survive on his own = self-sufficient

# C Self-Control (Internal control of negative impulses towards greed, egocentrism, and aggression, control of negative excess of individualism as described in A)

- Materialistic, selfish, stingy, greedy, unwilling to share with others
- Think you are better than others, arrogant, self-centered, spoiled, bossy, competitive in negative sense, egocentric
- Hit, get into fights, physical cruelty, aggression
- Vindictive, jealous, hateful, mean, insult others, finger-pointing at others
- Accept limits, tolerate frustration, hot-tempered, whiny, emotional stability, patient, upset about not getting your own way, stubborn, touchy, bitchy, crabby ("zickig, grosskotzig")
- Materialistic, no crying outside, screaming really loudly, do not harm others, fighting amongst their friends, unable to show what the child wants, irritated and whines a lot, confounds me from knowing what to do, not being self-centered, violent attitudes be patient, waits for her turn while saying please, whines, big ego, pride, greedy, little cocky, looks down at her brother, she knows that she is better than him, no lies, do not lie, not truthful person, self-centered, stubborn, self-absorbed, when someone hurts his pride then he gets extremely mad suddenly, patience, being violent, hating others, hurting other

people's feelings, hitting others, hateful, outgoing personality, strong self-thoughts, he only cares about himself and not think about others, not being harmful to others, patient, not being selfish, having bad temper, hitting and fighting over little things, not being violent, mean, physiologically weird, have to be better than others, calm, unstable personality, negativity, princess syndrome, hating others

• Manipulated (lying to get what you want)

#### D Decency (Personal standards of behavior) (A higher-order code with 3 subcodes)

## DI: Avoid illicit behavior

- Drugs, smoking, alcohol
- Delinquency (criminal activities, stealing, destroy public property)
- Sexual misconduct, being a pervert, sexual harassment, sexual looseness
- Gangs, finding the right kind of people as friends/hang out with the wrong kind of people
- Discos, seedy nightlife
- Stealing or murdering, get into trouble, bad habits, stealing, being crazy about boys or chasing up to boys

## **DPR:** Personal integrity

• Honest, differentiate between right and wrong, lying, hardworking, be a good person in moral sense, responsible for own affairs, e.g., dealing with money/balancing check book,/cleaning up after oneself, being a respectable person (e.g., not to be

trashy, live in filth and squalor, attend to personal hygiene), have good values, (don't) give in to peer pressure (e.g., to own brand-name clothes), serious deviation from parents' political or religious values (e.g., being a racist, being a fundamentalist, marrying significant others. or being friends w/so. from another religious or ethnic group), someone you can depend on, trustworthy, deception

- Respect other people's opinions, tolerant, prejudiced, be a good citizen, be a humanitarian, altruistic (e.g., give money to worthy causes, engage in civil disobedience to right social injustices), care about the environment, respect the rights of women
- Organized, very responsible, lazy person, make a strange girlfriend, lie, go through puberty without any trouble, do not lie, honesty, faithfulness, dishonesty, laziness, lying, responsible citizens, innocent, humility, unproductive, responsible and straight minded person, healthy thoughts and actions, solid, pure mind, following bad actions, person who is able to correct the problem, a person who is happy after seeing something wrong, truthful, tricks others behind their backs, responsible for what he has done, be ethical, good conscience, ignore the peer pressure, faithful, disciplined strength of character, if he did something wrong, he should admit it quickly and try to fix that, racist, learn to be in other's shoes (which is more of a moral value, similar to being fair), fair, sincere

#### **DREG: Religious values**

- Good Christian, upright faith and religious belief, deny or defy against church, having good faith, man of faith, not faithful, Godly man, obedient to whatever God's doing in his life, ungodly man, disobedient to God, involvement in church, Godly qualities, religious, think of God first, keeping our belief and live life according to that, believer of God, being faithful. As a Christian, I want her to have strong faith, know who the Lord is, return honor to the Lord, role model that someone could actually follow, learn more about God, lives the life that makes him happy, religious, live by her faith, a strong faith, strong catholic background, spiritual, unspiritual, a lot about God and live with the thought that he is his child
- Know/behave according to religious rules/values, go to church, believe in god

#### L Lovingness (Interpersonal warmth, primarily dyadic or within family) (A higher-order code with 2 subcodes)

#### LW: Warm (general)

- Warm, kind, caring, compassionate, understanding, loving, affectionate, gentle, have warm relationships with others, trusting in the sense of openness to others
- Share with others, be generous, kind
- Friendly, sociable, outgoing
- Sensitive/insensitive
- Sweet natures, giving, very nurturing, always kind, nice, filled with love, willing to help others, show her feelings, skin ship, have many friends and not be lonely, generosity, get all the attention, being a person who could help others, helpful to

others, a very caring person, very loving person, people feel comfortable, being kind, socialize with people so she likes people, love, a little cold, kind of blunt, friendly, and where he goes he is welcomed, care for others, understand other, not only in the outside but also in the inside, someone who can take good care of others, help others, understand others, understand the struggles the person might have, heart that doesn't care about others, being kind, leaving friends behind, receive love from others, kind, get along well with others, loved by others, to love others, think other than self, being kind, gentle personality, polite person who is nice to everyone, not to ignore people who are in need, greet people with complete love, caring, gentle, thoughtful person, compassioned person, helping others who are in worse situation, kind personality, think about others, have empathy for others (care for others in a way that you feel for them when they experience something unfortunate), people relationships, learn to share with others

## LFAM: Close, loving relationships with family

• Have warm, close, trusting relationships with other family members, feel like you can tell your parents anything, have a warm, loving relationship with spouse, your children, siblings

W Proper Demeanor (Appropriate behavior in the context of being part of or getting along with a larger group) (A higherorder code with 3 subcodes)

## WR: Respectful/well brought up

• Good manners, polite behavior, behave appropriately, disciplined, calm, considerate, not use inappropriate/bad language

- Cooperate with authority, obedient, not rebellious
- Does as requested, listen, obey, respect, help older people
- Make a good/ bad impression on people
- Be able to get along with others, accepted by others, adapt to a group, not rejected by the group
- Get along well with other children, have harmonious relationships with others, able to be part of a group, ability to reach mutual agreement with others, agreeable, well-liked by others, cleaning up in the sense of being helpful, being messy in a way that makes it difficult for others
- Know/behave according to the formal rules and rituals of hospitality
- Become a person who is loved and respected by others, respected due to her talents/ good behavior or her good position in society
- Be respected by others due to good behavior/knowledge/good education
- Perform helpful acts towards others
- Polite, rudeness, respect for people, loudness, if an adult says "no" the child doesn't do it, honorific form to talk to adults, not to bother others in the public, being rude, being annoying and without manner toward adults, have manners, acting impolitely, say "thank you" when necessary, respecting the elders, courteous, respecting others, courtesy, being polite,

respect the people around you, no problems with friends, acquiring some skills whatever skills she got she should be there for the people who needs that skill as a hold and support, respect the elders, upright

## WRF: Role obligations within family

- Perform role obligations within the nuclear or extended family
- Be a good daughter/son/mother/ father/ parent/ wife/ husband, attentive, be helpful with chores around the house, wife obey husband, husband protect wife/help other family members
- Protect family honor by observing rules of chastity
- Act according to gender roles
- Children respect/obey parents, parents provide appropriate supervision/structure/guidance for children
- Stick together as a family, live in proximity to family of origin, visit each other frequently
- Should try to understand parents
- Take care of each other, have grandchildren
- Take care of siblings, defend siblings, mutual support
- Preserve family honor, obedient to my husband and myself

# WCUL: Cultural obligations or roles

• Know/behave according to cultural rules/values, to forget/ always remember the cultural heritage

• Learn or remember the Korean language or identity

## Appendix D: Social Skills Questionnaire – Sociability

## **Directions**

This questionnaire is designed to measure how often a child exhibits different types of prosocial/conformance behaviors. Understanding the development of social skills is important for promoting the educational and psychological well-being of students. Therefore, your careful response to each item is requested.

Reflecting on your experience with children in this age group, read each item in this questionnaire and think about the child's present behavior relative to others you know or have known. Decide <u>how often</u> the child doses the things described. If you are not sure about a particular item use your best judgment based on your knowledge of the child's personality.

If the child <u>never</u> does this behavior, fill in the line with a 0 in it.

If the child sometimes does this behavior, fill in the line with a 1 in it.

If the child very often does this behavior, fill in the line with a 2 in it.

#### HOW OFTEN?

0=Never

1=Sometimes

2=Very Often

- 2. Peers accept this child easily into ongoing peer activities.
- 3. Produces correct school work.
  - 6. Offers to share extra snack.
- 8. Finishes class assignments within time limit.
- 10. Puts work material or school property away.
- \_\_\_\_11. Likes to talk with peers.
- 12. Offers to share materials (e.g., pencils, erasers) when used in a task.
- 13. Will try to help someone who has been hurt.
  - 16. Offers to help other children who are having difficulty with a task in the classroom.
- 17. Gets along in a pretend/ dramatic play with peers.
- 18. Comforts a child who is crying or upset.
- \_\_\_\_\_19. Is efficient in carrying out daily tasks (e.g., cleanup).
- 20. Makes new friends easily.
- \_\_\_\_\_23. Attends to your instructions.
- 25. Praises the work of less capable children.
  - \_\_\_\_26. Laughs and smiles easily.

28. Has many friends.

29. Peers enjoy talking with him/her.

\_30. Helps other children who are feeling sick.

34. Shows sympathy to someone who has made a mistake.

35. Other children like to be with this child.

## **Appendix E: Asian American Perceived Racial Discrimination Scale**

**Directions:** The following statements are general racial situations that <u>you personally may have encountered</u>. Consider how often each situation occurred to you and then how stressful these situations were to you. Read each situation and answer the questions using the following rating scales.

Note: Again, the term "*Asians*" is used to include all Asians living in the U.S. including immigrants, U.S. born, and adoptees. How often does this type of situation happen to you?

- 1 =Almost Never
- 2 =Once in a while
- 3 =Sometimes
- 4 = Often or frequently
- 5 = Almost always

1. In America, I am treated differently because I'm Asian.	12345
2. In America, I am viewed with suspicion because I'm Asian.	12345
3. In America, I am expected to excel in academics because I'm Asian.	12345
4. In America, I find it difficult to date some people because I'm Asian.	12345
5. In America, I am called names such as, "chink, gook, etc." because I'm Asian.	12345
6. In America, I am told "you speak English so well" because I'm Asian.	12345
7. In America, I am overlooked because I'm Asian.	12345
8. In America, I have been physically assaulted because I'm Asian.	12345
9. In America, I am made fun of because I'm Asian.	12345
10. In America, I am faced with barriers in society because I'm Asian.	12345

# **Appendix F: Beck Depression Inventory—II**

**Instructions**: This questionnaire consists of 21 groups of statements. Please read each group of statements carefully, and then pick out the **one statement** in each group that best describes the way you have been feeling during the past **two weeks**, **including today**. Circle the number beside the statement you have picked. If several statements in the group seem to apply equally well, circle the highest number for that group. Be sure that you do not choose more than one statement for any group, including Item 16 (Changes in Sleeping Pattern) or Item 18 (Changes in Appetite).

# 1. Sadness

- 0 I do not feel sad.
- 1 I feel sad much of the time.
- 2 I am sad all the time.
- 3 I am so sad or unhappy that I can't stand it.

# 2. Pessimism

- 0 I am not discouraged about my future.
- 1 I feel more discouraged about my future than I used to be.
- 2 I do not expect things to work out for me.
- 3 I feel my future is hopeless and will only get worse.

# 3. Past Failure

- 0 I do not feel like a failure.
- 1 I have failed more than I should have.
- 2 As I look back, I see a lot of failures.
- 3 I feel I am a total failure as a person.
- 4. Loss of Pleasure

- 0 I get as much pleasure as I ever did from the things I enjoy.
- 1 I don't enjoy things as much as I used to.
- 2 I get very little pleasure from the things I used to enjoy.
- 3 I can't get any pleasure from the things I used to enjoy.
- 5. Guilty Feelings
  - 0 I don't feel particularly guilty.
  - 1 I feel guilty over many things I have done or should have done.
  - 2 I feel quite guilty most of the time.
  - 3 I feel guilty all of the time.

## 6. Punishment Feelings

- 0 I don't feel I am being punished.
- 1 I feel I may be punished.
- 2 I expect to be punished.
- 3 I feel I am being punished.
- 7. Self-Dislike
  - 0 I feel the same about myself as ever.

- 1 I have lost confidence in myself.
- 2 I am disappointed in myself.
- 3 I dislike myself.
- 8. Self-Criticalness
  - 0 I don't criticize or blame myself more than usual.
  - 1 I am more critical of myself than I used to be.
  - 2 I criticize myself for all of my faults.
  - 3 I blame myself for everything bad that happens.
- 9. Suicidal Thoughts or Wishes
  - 0 I don't have any thoughts of killing myself.
  - 1 I have thoughts of killing myself, but I would not carry them out.
  - 2 I would like to kill myself.
  - 3 I would kill myself if I had the chance.

# 10. Crying

- 0 I don't cry anymore than I used to.
- 1 I cry more than I used to.

- 2 I cry over every little thing.
- 3 I feel like crying, but I can't.

## 11. Agitation

- 0 I am no more restless or wound up than usual.
- 1 I feel more restless or wound up than usual.
- 2 I am so restless or agitated that it's hard to stay still.
- 3 I am so restless or agitated that I have to keep moving or doing something.

# 12. Loss of Interest

- 0 I have not lost interest in other people or activities.
- 1 I am less interested in other people or things than before.
- 2 I have lost most of my interest in other people or things.
- 3 It's hard to get interested in anything.

# 13. Indecisiveness

- 0 I make decisions about as well as ever.
- 1 I find it more difficult to make decisions than usual.
- 2 I have much greater difficulty in making decisions than I used to.

3 I have trouble making decisions

## 14. Worthlessness

- 0 I do not feel I am worthless.
- 1 I don't consider myself as worthwhile and useful as I used to.
- 2 I feel more worthless as compared to other people.
- 3 I feel utterly worthless.

# 15. Loss of Energy

- 0 I have as much energy as ever.
- 1 I have less energy than I used to have.
- 2 I don't have enough energy to do very much.
- 3 I don't have enough energy to do anything.

# 16. Changes in Sleeping Pattern

- 0 I have not experienced any change in my sleeping pattern
- 1a I sleep somewhat more than usual
- 1b I sleep somewhat less than usual
- 2a I sleep a lot more than usual.

2b I sleep a lot less than usual.

3a I sleep most of the day.

3b I wake up 1-2 hours early and can't get back to sleep.

# 17. Irritability

- 0 I am no more irritable than usual.
- 1 I am more irritable than usual.
- 2 I am much more irritable than usual.
- 3 I am irritable all the time.

# 18. Changes in Appetite

- 0 I have not experienced any change in my appetite.
- 1a My appetite is somewhat less than usual.
- 1b My appetite is somewhat greater than usual.
- 2a My appetite is much less than before.
- 2b My appetite is much greater than usual.
- 3a I have no appetite at all.
- 3b I crave food all the time.

## 19. Concentration Difficulty

- 0 I can concentrate as well as ever.
- 1 I can't concentrate as well as usual.
- 2 It's hard to keep my mind on anything for very long.
- 3 I find I can't concentrate on anything.

#### 20. Tiredness or Fatigue

- 0 I am no more tired or fatigued than usual.
- 1 I get more tired or fatigued more easily than usual.
- 2 I am too tired or fatigued to do a lot of the things I used to do.
- 3 I am too tired or fatigued to do most of the things I used to do.

# 21. Loss of Interest in Sex

- 0 I have not noticed any recent changes in my interest in sex.
- 1 I am less interested in sex than I used to be.
- 2 I am much less interested in sex now.
- 3 I have lost interest in sex completely.

## Appendix G: Psychological Well-Being Scale

The following statements describe different ways that people may think about their life. Please rate how much you agree with each of the following statements using this scale:

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

\_\_\_\_1. I judge myself by what I think is important, not by what others think is important.

- 2. I am quite good at mastering the many responsibilities of my daily life.
- \_\_\_\_3. I have given up trying to make big improvements or changes in my life.
- \_\_\_4. I have not experienced many warm and trusting relationships with others.
- 5. I sometimes feel that I've done all there is to do in life.
- 6. In many ways, I feel disappointed about my achievements in life.
- \_\_\_\_\_7. I have confidence in my own opinions, even if they are contrary to the general consensus.
- 8. The demands of everyday life often get me down.
- 9. For me, life has been a continuous process of learning, changing, and growth.
- 10. People would describe me as a giving person, willing to share my time with others.
- 11. Some people wander aimlessly through life, but I am not one of them.

\_12. I like most aspects of my personality.

13. I tend to be influenced by people with strong opinions.

14. In general, I feel I am in charge of the situation in which I live.

15. I think it is important to have new experiences that challenge how you think about yourself and your world.

16. Maintaining close relationships has been difficult and frustrating for me.

17. I live life one day at a time and don't really think about the future.

18. When I look at the story of my life, I am pleased with how things have turned out.

#### **Appendix H: Cultural and Social Acculturation Scale**

In this questionnaire, we want to know about your experiences living in America. Please circle only one answer which best describes you in each question.

1. When you feel happy or proud, how often do you share this with your Non-Chinese friends?

Almost Never Once a month Twice a month Once a week More than once a week

3. When you feel sad or bad, how often do you share this with your Non-Chinese friends?

Almost Never Once a month Twice a month Once a week More than once a week

5. How often do you spend time with your Non-Chinese friends?

Almost Never Once a month Twice a month Once a week More than once a week 7. How well do you <u>speak</u> in English?

Extremely poor	Poor	Average	Good	Extremely well	
8. How well do y	ou <u>read</u> in English?				
Extremely poor	Poor	Average	Good	Extremely well	
9. How well do y	ou <u>write</u> in English?				
Extremely poor	Poor	Average	Good	Extremely well	
13. How often do	you read English nove	ls or magazines	(西方圖書和雜誌)?		
Almost never C	Once or twice a month	Once a week	2 to 4 times a week	Almost Everyday	
17. How often do you watch TV in English?					
Not at all	A little	Somewhat	A lot	Very much	
	A little you listen to Western i	Somewhat		Very much	
18. How often do		Somewhat	卷)?		
18. How often do Almost never C	you listen to Western 1	Somewhat music (西方音왥 Once a week	巻)?		
18. How often do Almost never C	you listen to Western i Once or twice a month	Somewhat music (西方音왥 Once a week	巻)?		
<ul><li>18. How often do</li><li>Almost never C</li><li>20. Do you like W</li><li>Not at all</li></ul>	o you listen to Western i Once or twice a month Vestern food (西方食品	Somewhat music (西方音樂 Once a week d)? Neutral	巻)? 2 to 4 times a week A lot	Almost Everyday Very much	

## **Appendix I: Psychological Control Measure**

Direction: COMPARED WITH PARENTS THAT YOU KNOW, rate how often you exhibit this behavior with your child.

#### **I EXHIBIT BEHAVIOR:**

1 = Never

2 = Once In Awhile

3 = About Half of the Time

4 = Very Often

5 = Always

- 4. I will avoid looking at my child when my child has disappointed me.
- 6. I let my child know when he/she has disappointed me.
- 8. I tell my child he/she is not as good as I was growing up.
- 10. I let my child know when I am angry with him/her.
- \_\_\_\_\_ 12. I make my child aware of how much I sacrifice or do for him/her.
- \_\_\_\_\_ 13. I ignore my child when he/she tries to get attention.
- 14. If my child has hurt my feelings, I stop talking to my child until my child pleases me again.
- \_\_\_\_\_ 16. I say, if you really care for me, you would not do things that cause me to worry.
- \_\_\_\_\_ 18. I am less friendly with my child if my child does not see things my way.

- 20. I tell my child of all the things I have done for him/her.
- \_\_\_\_\_ 22. I act disappointed when my child misbehaves.
- \_\_\_\_\_ 24. I tell my child that he/she should be ashamed when he/she misbehaves.
- \_\_\_\_\_ 25. I tell my child that I get embarrassed when he/she does not meet my expectations.
- \_\_\_\_\_ 26. I make my child feel guilty when my child does not meet our expectations.
- \_\_\_\_\_ 27. I inform my child that punishment will find him/her when misbehavior occurs.
- \_\_\_\_\_ 31. I don't pay attention when my child is talking to me.
- \_\_\_\_\_ 35. I let my child know how disappointed I am when he/she misbehaves.
- 37. I tell my child he/she is not as good as other children.

#### Appendix J: Maternal Intrusive Overcontrol Subscale of the Psychological Control and Overprotective/Intrusive Measure

Direction: COMPARED WITH PARENTS THAT YOU KNOW, rate how often you exhibit this behavior with your child.

#### **I EXHIBIT BEHAVIOR:**

1 = Never

- 2 = Once In Awhile
- 3 = About Half of the Time
  - 4 =Very Often
    - 5 = Always

21. Tries to control much of what our child does

51. Readily intervenes if there is a chance that our child will fail at something

53. Tends to be over-protective with our child

63. Tends to be overly involved in child's activities

# Appendix K: Adapted Reticence Subscale from the Teacher Behavior Rating Scale

This questionnaire is designed to measure how often a child exhibits different types of withdrawn/solitary behaviors.

Understanding the development of social skills is important for promoting the educational and psychological well-being of students. Therefore, your careful response to each item is requested.

Reflecting on your experience with children in this age group, read each item in this questionnaire and think about the child's present behavior relative to others you know or have known. Decide <u>how often</u> the child does the things described. If you are not sure about a particular item use your best judgment based on your knowledge of the child's personality.

If the child <u>never</u> does this behavior, fill in the line with a 0 in it.

If the child sometimes does this behavior, fill in the line with a 1 in it.

If the child very often does this behavior, fill in the line with a 2 in it.

#### HOW OFTEN?

0=Never

# 1=Sometimes

## 2=Very Often

- 2. Wanders aimlessly around when outdoors or during free play.
- 3. Is off tasked and preoccupied.
- 12. Appears to be doing nothing.
- 16. Stares at other children without interacting with them.
- 27. Watches other children without joining.
- 29. Waits and hovers around other children.
- 40. Is unoccupied even when there is plenty to do.
- 42. Does not listen to what others say.

# Appendix L: Adapted Peer Exclusion Subscale from the Teacher Behavior Rating Scale

## Directions

This questionnaire is designed to measure how often a child exhibits different types of withdrawn/solitary behaviors.

Understanding the development of social skills is important for promoting the educational and psychological well-being of students.

Therefore, your careful response to each item is requested.

Reflecting on your experience with children in this age group, read each item in this questionnaire and think about the child's present behavior relative to others you know or have known. Decide <u>how often</u> the child does the things described. If you are not sure about a particular item use your best judgment based on your knowledge of the child's personality.

If the child <u>never</u> does this behavior, fill in the line with a 0 in it.

If the child sometimes does this behavior, fill in the line with a 1 in it.

If the child very often does this behavior, fill in the line with a 2 in it.

## HOW OFTEN?

0=Never

1=Sometimes

2=Very Often

1. Other children seem unwilling to play with the child

8. Is ignored by others

23. Other children exclude him/her

34. Other children tell him/her that he/she cannot play with them

39. Is told to go away by other children

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#### Supplement 1

Heterogeneity in Asian Immigrant Mothers' Socialization Goals and Associations with Preschoolers' Socioemotional School Readiness

#### Abstract

Maternal socialization goals play an important role in preschoolers' socioemotional school readiness, which is essential for later adjustment and academic achievement in formal schooling. Asian immigrant mothers may endorse both independence-oriented socialization goals that are consistent with the host American culture and interdependence-oriented goals stemming from their heritage Asian cultures. This study investigated underlying classes in mothers' socialization goals and examined potential differences in children's socioemotional school readiness (prosocial behaviors, sociability, and on-task behaviors) between the different classes. The sample consisted of 193 Chinese and Korean immigrant mothers ( $M_{age} = 36.72$ ,  $SD_{age} = 4.21$ , 50% Chinese) and preschoolers ( $M_{age} = 4.25$ ,  $SD_{age} = 0.96$ ; 51% boys). Mothers were interviewed regarding their socialization goals and teachers rated preschoolers' socioemotional school readiness. Two different patterns of Asian immigrant mothers' socialization goals were identified. Most mothers (86%) highly emphasized autonomy-oriented and relatedness-oriented goals (class 1), whereas 14% mothers endorsed relatedness-oriented goals at high level but emphasized autonomy-oriented goals at low levels (class 2). Moreover, children of mothers in class 1 were rated by teachers to be more sociable and on-task, compared to children with mothers in class 2. This study provided evidence for the heterogeneity in Asian immigrant mothers' socialization goals and can inform the development of cultural-specific parenting programs that aim to facilitate Asian immigrant preschoolers' socioemotional school readiness.

*Keywords*: Asian immigrant mothers, socialization goals, prosocial behaviors, sociability, ontask behaviors

# Introduction

Preschoolers' socioemotional school readiness skills, such as their engagement in prosocial, sociable, and on-task behaviors, deserve research attention due to their essential role in children's later positive adjustment and achievement outcomes in formal schooling. Specifically, children's prosocial behaviors, like sharing and showing sympathy to others, strongly predict their positive peer relationships and academic achievement even in adolescence (Caprara, Barbaranelli, Pastorelli, Bandura, & Zimbardo, 2000). Sociability refers to children's initiation of interpersonal behaviors, engagement in ongoing peer activities, and ease in making new friends. The lack of social interaction with peers is associated with more maladjustment and poorer academic achievement (Bohlin, Bengtsgard, & Andersson, 2000; Hall, Welsh, Bierman, & Nix, 2016). In addition, children's on-task behaviors, which include behaviors that are adaptive for children's learning such as compliance with teachers' instructions and finishing class assignments within time limits have been found to predict their math and reading skills at the end of elementary school (Mahar et al., 2006; McClelland, Acock & Morrison, 2006). Therefore, children's socioemotional school readiness may promote their school success through their engagement in ongoing learning activities, and positive interpersonal relationships with peers and teachers and (McClelland, Morrison, & Holmes, 2000). Given the critical role that socioemotional school readiness skills play in children's academic achievement and school success, it is important to understand potential contributors to these skills; specifically, we examined the role of mothers' socialization efforts.

Maternal long-term socialization goals refer to the developmental outcomes that mothers hope their children obtain when they grow up (Cheah & Rubin, 2003). Mothers' socialization goals play an important role in guiding their parenting practices (e.g., Li, Costanzo, & Putallaz, 2010). For instance, Chinese mothers who rated academic achievement as an important socialization goal were more likely to involve themselves in children's academic learning (Pearson & Rao, 2003). Given their critical role in guiding mothers' child-rearing behaviors, maternal socialization goals were expected to have important effects on children's development.

The psychological interdependence family model proposes the coexistence of socialization values that support both autonomy and relatedness in children, where the emphasis of autonomy in children does not mean the encouragement of separateness or distancing children from others (Kağıtçıbaşı, 2005). Indeed, relatedness with others may serve as a pathway towards obtaining autonomy, while autonomy may promote children's relatedness to individuals in their social networks and families (Tamis-LeMonda et al., 2008). The psychological interdependence family model might be particularly relevant for Asian American families who come from more interdependence-oriented cultures and reside in independence-oriented American context. Asian American mothers have been proposed to simultaneously endorse independence-oriented goals (e.g., being self-confident) that are promoted in the mainstream American context to facilitate their children's adaptation, as well as interdependence-oriented goals (e.g., establishing harmonious relationships) that are consistent with their heritage collectivistic culture (Tamis-LeMonda et al., 2008). However, it remains unknown whether there are different groups among Asian immigrant mothers who endorse different patterns of these socialization goals.

These different patterns of socialization goals might have differential impact on children's adjustment. For example, mothers who value both autonomy and relatedness with

others might socialize their children differently from mothers who expect their children to have harmonious relationships with others but not emphasize children's independence. Hence, studies are needed to identify the underlying heterogeneity in the socialization goals of Asian immigrant mothers by including both independence-oriented goals (i.e., self-maximization and self-control) and more traditionally interdependence-oriented goals (i.e., proper demeanor, decency, and lovingness).

Mother's self-maximization goals refer to their expectations that children will be independent, self-confident, and develop their personal potential (Harwood et al., 1996). Mothers in cultures that promote more independence and individuality (e.g., Western cultures) tend to emphasize self-maximization goals (Harwood et al., 1996). Mothers' expectations that children should control negative impulses toward aggression and egocentrism are labeled selfcontrol goals. As self-control goals focus on controlling emotions and desires in public settings, which reflect values of interpersonal harmony, these goals tend to be emphasized by mothers in more interdependent cultural contexts, such as the Chinese culture (Luo, Tamis-LeMonda, & Song, 2013). On the other hand, self-control is also found to be emphasized by mothers living in independent cultural contexts like Germany, as the ability to control negative impulses reflects individual autonomy, consistent with cultural values of independence (Durgel, Leyendecker, Yagmurlu, & Harwood, 2009).

Proper demeanor goals refer to parents' expectations that children will be respectful and obedient. Proper demeanor has been found to be especially valued in more interdependent and hierarchical cultural contexts (e.g., Puerto Rico; Leyendecker, Lamb, Harwood, & Schölmerich, 2002). These goals can also be traced to filial piety ethics in Confucian-based cultures such as China and Korea that emphasize parents' authority and child obedience (Lew, Choi, & Wang,

2011). Another goal emphasized within more interdependence-oriented cultures is decency, which refers to children's ability to meet basic societal expectations regarding moral or ethical conduct (e.g., avoiding drug) and promote personal integrity (e.g., being honest) (Harwood et al., 1996). Finally, the goals of lovingness are characterized as interdependence-oriented goals, which refer to children's ability to have emotionally warm relationships with others and be helpful to others. Governed by Confucian based values that emphasize connections with others and interpersonal harmony, Asian mothers may endorse such goals (Luo et al., 2013).

Although the theoretical model proposed the coexistence of independence-oriented and interdependence-oriented developmental goals (Tamis-LeMonda et al., 2008), previous studies have tended to focus on one or two dimensions of socialization goals (e.g., Keller et al., 2006). However, researchers have recommended that variables should not be understood in isolation from other components (Magnusson, 2003). This more comprehensive and person-centered approach may be especially important for understanding the socialization goals of Asian immigrant mothers who tend to come from more interdependence-oriented heritage cultures but reside in the United States, a more independence-oriented context.

Despite the diversity between immigrants of Chinese and Korean ethnic backgrounds in the United States (Zhou & Kim, 2006), these two immigrant groups share some similarities in terms of their heritage cultural values and reasons for immigration. For example, Chinese and Korean immigrants in the United States have a shared East Asian ancestry and close geographical origins. They also tend to hold Asian values that stem from Confucian ideologies, including a collectivistic orientation, conformity to norms, emotional self-control, family recognition through achievement, filial piety and humility (Cheah & Leung, 2011; Kim, Yang,

Atkinson, Wolfe, & Hong, 2001). In addition, Chinese and Korean immigrants tend to migrate for educational opportunities and occupational success (Cheah et al., 2011).

The overall aim of the current study was to examine the long-term socialization goals of Asian immigrant mothers using a person-centered approach, the correlates of such goals, and the associations between mothers' goals and child outcomes. Specifically, the first aim was to determine if underlying groups based on all five socialization goals (i.e., self-maximization, selfcontrol, proper demeanor, decency, and lovingness) could be identified among Asian immigrant mothers with each identified group representing a unique pattern of socialization goals. In the second aim, we examined whether the classification of different classes was related to cultural (i.e. mothers' ethnicity (Chinese versus Korean) and their psychological adherence towards Asian cultural values) and sociodemographic factors (mothers' educational level and age, and their children's age and gender). Despite the similarities between Chinese and Korean ethnic groups and their shared experiences in the United States under the larger "Asian American" umbrella, we responded to calls for examinations of potential heterogeneity within Asian American subgroups by directly assessing whether mothers' ethnicity was associated with the different patterns in mothers' socialization goals revealed (e.g., Tseng et al., 2016). Adherence to cultural values found to be characteristic of Asian cultures, such as collectivism and filial piety may also influence Asian immigrant mothers' beliefs about child development (Kim, Atkinson, & Umemoto, 2001). Thus, we explored whether the patterns of mothers' socialization goals would be associated with their maintenance of Asian cultural values.

With respect to demographic characteristics, maternal age has been proposed to be associated with mothers' beliefs about child development (Rowe, Pan & Ayoub, 2005) but is more commonly covaried rather than examined directly (see Bornstein, Putnick, Suwalsky, &

Gini, 2006, for an exception). Therefore, little is known about its role in parenting beliefs. We also examined the effect of maternal educational level in the identification of different classes in mothers' socialization goals given that mothers' educational levels have been found to be related to their individual dimensions of socialization goals (e.g., Suizzo & Cheng, 2007). Finally, mothers' endorsement of socialization goals has been found to vary across child gender, with mothers of boys emphasizing decency goals such as avoiding illicit behaviors, and mothers of girls valuing traits such as their role as a mother (Leyendecker et al., 2002; Ramirez, Oshin, & Milan, 2017). Moreover, mothers of older children tend to emphasize their children's educational achievement (Dizon-Ross, 2019). Thus, the role of child gender and age in identifying different classes was explored.

The third aim of our study was to investigate the associations between different patterns of maternal socialization goals and preschoolers' socioemotional school readiness (i.e., prosocial, sociability and on-task behaviors) as independently rated by teachers, over and above the effects of demographic and cultural variables (i.e., mothers' ethnicity, psychological adherence towards Asian cultures, educational level, and age, and their children's age and gender). Although there is consensus that mothers' socialization goals shape children's childrearing experiences, most studies on maternal goals do not assess associated child outcomes, which have limited our understanding of the potential impact of these goals on children's development.

The use of person-centered approach (i.e., Latent Class Analysis) precluded our ability to propose directional hypotheses regarding the number of classes that could be identified among Asian immigrant mothers (Williams & Kibowski, 2016), and consequently how the cultural and demographic variables might be related to the resulting classes. Therefore, our aims were exploratory.

### Method

# **Participants**

The participants comprised 96 first-generation Chinese and 97 Korean immigrant mothers with their preschool-aged children residing in the Baltimore-Washington, D.C. corridor in the United States. Chinese (M = 10.09 years, SD = 5.86) and Korean immigrant mothers (M=12.25 years, SD = 9.48) did not differ on their length of stay in the United States, t(179) = 1.84, p = .068. Chinese ( $M_{age} = 4.33$ ,  $SD_{age} = 0.82$ ; 54% boys) and Korean ( $M_{age} = 4.18$ ,  $SD_{age} = 1.08$ ; 48% boys) immigrant children did not differ on age, t(183) = -1.08, p = .284, and gender,  $\chi^2(1, N$ = 184) = .55, p = .459. Chinese immigrant mothers ( $M_{age} = 37.60$  years,  $SD_{age} = 4.38$ ) were significantly older than Korean immigrant mothers ( $M_{age} = 35.87$  years,  $SD_{age} = 3.89$ ), t(178) = -2.81, p = .006. Mothers were well-educated with Chinese immigrant mothers having higher educational levels than their Korean counterparts,  $\chi^2(3, N = 180) = 50.37$ , p = .000. Specifically, more Chinese immigrant mothers had a graduate or professional degree (Chinese: 67.4%; Korean: 18.2%), whereas more Korean immigrant mothers had a high school diploma (Chinese: 2.2%; Korean: 10.2%), a partial college degree (Chinese: 3.3%; Korean: 26.1%) or a bachelor's degree (Chinese: 27.2%; Korean: 45.5%).

### Procedure

Families were recruited from preschools, libraries, churches, and supermarkets. Mothers provided signed informed consent for their participation in the study. Bilingual research assistants conducted the interviews and administered the demographic questionnaires with mothers during the home visits in their preferred language (i.e., Chinese, Korean, and/or English). The interview took about 30 minutes. During the home visits, mothers provided their child's daycare and preschool teachers' contact information. With mothers' written permission,

we contacted teachers and asked them to complete a rating of children's behaviors at school. Mothers were compensated with \$40 for their time.

#### Measures

All measures originally available in English were translated into Chinese and Korean and back-translated into English by bilingual researchers (Peña, 2007).

**Family demographics**. Mothers reported their ethnicity, date of birth, country of origin, education, and their children's date of birth and gender.

Maternal long-term socialization goals. A semi-structured Socialization Goals Interview was used to capture mothers' socialization goals in their preferred language (e.g., "What are some of the qualities and/or behaviors that you would like to see your child grow to possess? For example, children's honesty, independence, or being obedient.") (Harwood et al., 1996). Using the Socialization Goals of Coding Scheme, five socialization goals were coded: Self-maximization, with four subcodes including emotional and physical well-being, development of personal potential, academic success and psychological development (e.g., "selfconfident" and "competitive in positive sense"); *Self-Control* (e.g., "tolerate frustration"); *Proper Demeanor*, with three subcodes including respectful or well brought up, role obligations within family, and cultural obligations (e.g., "be obedient"); Decency, with three subcodes including avoid illicit behavior, personal integrity, and religious values (e.g., "avoid sexual misconduct"); Lovingness, with two subcodes including warm and close and loving relationships with family (e.g., "share with others") (Harwood, 1992). For each socialization goal, mothers were given a score of 1 if their responses included any of the subcodes within the socialization goal; otherwise, mothers received a score of 0 for that socialization goal. Cohen's Kappa was .80 in the present study.

**Children's socioemotional school readiness.** Children's socioemotional school readiness was measured with the sociability subscale of the Social Skills Questionnaire (SSQ-S; Hart & Robinson, 1996). Teachers used a 3-point Likert Scale ranging from 0 (never) to 2 (*very often*) to rate children on three subscales: prosocial behavior (8 items; e.g., "help other children who are having difficulty";  $\alpha = .91$ ); sociability (8 items; e.g., "peers accept this child easily into ongoing activities";  $\alpha = .87$ ); and on-task behavior (5 items; e.g., "attends to your instructions";  $\alpha = .84$ ).

Asian cultural values. Mothers' adherence to Asian cultural values was assessed by the Asian Values Scale-Revised (AVS-R), which contains 25 items (e.g., "The worst thing is to bring disgrace to one's family reputation",  $\alpha = .76$ ), with a scale of 1 (*Strongly Disagree*) to 4 (*Strongly Agree*) (Kim et al., 2004).

#### **Data Analyses**

Latent class analysis with categorical latent class indicators (i.e., five long-term socialization goals) was conducted in M*plus 7* to identify underlying subgroups of Asian immigrant mothers (Muthén & Muthén, 1998-2012). The rate of missing data for teacher report was 11%. The criteria assessing the model fit included likelihood ratio fit statistics such as the Akaike information criterion (AIC), the sample size adjusted Bayesian information criterion (SaBIC). Classification quality was evaluated using the Entropy (E) value, with values close to one showing clear classifications. The parametric bootstrapped likelihood ratio test (BLRT) was used to assess improvement in class solutions, which was more consistent than the Lo-Mendell-Robin (LMR) test (Nylund, Asparouhov, & Muthén, 2007). Mothers' ethnicity, psychological adherence towards Asian cultures, educational levels, age, children's age and gender were included as auxiliary variables to examine their roles in the identification of classes. Next, these variables were controlled for as covariates when the differences in children's prosocial behaviors, sociability, and on-task behaviors between the two classes were assessed. The associations between classes of mothers' socialization goals and children's socioemotional school readiness were examined using linear regression analysis.

#### Results

The percentages of mothers' endorsement of the five socialization goals and the correlations between the potential covariates and mothers' socialization goals and child outcomes are displayed in Table 1. One central question in latent class analysis is to select the number of classes, defined as *extraction* of classes (Dziak, Lanza, & Tan, 2014). In order to avoid underextraction of classes due to samples sizes that are too small, it is necessary to conduct a power analysis to determine the required sample size *N* to have sufficient statistical power in detecting underlying classes (Nylund, Asparouhov, & Muthén, 2007; Yang, 2006). As recommended by Dziak and colleagues (2014) the method of the estimation of the appropriate sample size for the Bootstrap Likelihood Ratio test was used. Given the sample size of the current study (N = 193), which is larger than the required *N* for two-class solution (112) and smaller than the required *N* for three-class solution (500), we tested for one to three-classes.

#### Patterns of Asian Immigrant Mothers' Socialization Goals

The model fit indices for one to three-class solutions were reported in Table 2. When comparing two-class to one-class solutions, the two-class solution had much lower AIC (1041.67) and SaBIC (1042.72) than the one-class (AIC = 1057.32, SaBIC = 1057.79), suggesting that the two-class was a better solution than the one-class. Additionally, the BLRT indicated that the two-class performed significantly better than the one-class (p = .000). The

entropy value was the highest for the two-class solution, indicating a clear classification of two classes.

When comparing a three-class to the two-class solution, the AIC (1042.93) and SaBIC (1044.55) of the three-class were higher than the two-class, indicating worse fit in the three-class solution. The BLRT also indicated that three-class was not significantly better than the two-class (p = .118). Thus, the two-class was retained as the most optimal solution.

The majority of mothers (86%) were classified into class 1 (see Figure 1). The highest conditional item probability within class 1 was self-maximization (1.00), suggesting that all mothers who were categorized into class 1 endorsed self-maximization goals. In addition, mothers who were classified into class 1 had a moderate probability of endorsing lovingness (.63) and decency (.49) and a low probability of endorsing proper demeanor (.27) and self-control (.15). Thus, class 1 was labelled as high autonomy-high relatedness-oriented.

In contrast, 14% of mothers were classified into class 2. These mothers had a high probability of endorsing lovingness (.96) and decency goals (.88), and a low probability of emphasizing self-maximization (.09), self-control (.21) and proper demeanor (.29). Thus, class 2 was labelled as low autonomy-high relatedness-oriented.

The examination of auxiliary variables indicated that mothers' ethnicity (Chinese versus Korean), Asian cultural values, education, and their children's age and gender was not related to their classification in the two classes. However, Asian immigrant mothers who were older were more likely to be classified in the low autonomy-high relatedness-oriented class compared to younger mothers (p = .027).

Relations between Patterns of Mothers' Socialization Goals and Preschoolers' Socioemotional School Readiness After identifying the two-class solution, hierarchical regression analyses in SPSS 22 was used to examine potential differences in children's prosocial behaviors, sociability, and on-task behaviors between the two classes. Missing data was handled using the listwise deletion method only using cases that were valid on all variables. We first entered all covariates into the model  $(R^2 = .10, p = .001)$ , then entered mother's latent classes (class 1 versus class 2) ( $\Delta R^2 = .04, p$  = .008). After controlling for covariates (mothers' ethnicity, psychological adherence towards Asian cultures, educational levels, and age, children's age and gender), mothers' latent classes were significantly associated with children's on-task behaviors ( $\beta = -.21, p = .008$ ). Children whose mothers were classified into class 1 were more on-task than children with mothers who were categorized in class 2.

Similarly, for children's sociability, we first entered covariates ( $R^2 = .08$ , p = .060), then entered mothers' latent classes ( $\Delta R^2 = .06$ , p = .001). After controlling covariates (mothers' ethnicity, psychological adherence towards Asian cultures, educational levels, and age, children's age and gender), mother's latent classes were significantly related to children's sociability ( $\beta = -.26$ , p = .001), indicating that children whose mothers were classified into class 1 were more likely to be sociable than those whose mothers were categorized into class 2. Finally, in terms of children's prosocial behaviors, all covariates (mothers' ethnicity, psychological adherence towards Asian cultures, educational levels, and age, children's age and gender) were first entered ( $R^2 = .08$ , p = .040). After all covariates were controlled ( $\Delta R^2 = .01$ , p= .257), there was no significant differences in children's prosocial behaviors between mothers in the two classes ( $\beta = -.09$ , p = .257).

# Discussion

Based on the assumption of the coexistence of both independence-oriented and interdependence-orientations among Asian immigrant mothers, the present study aimed to identify the heterogeneity in the socialization goals among Asian immigrant mothers (Tamis-LeMonda et al., 2008). We revealed two different groups of mothers with specific patterns of long-term socialization goals for their preschool-aged children. Moreover, the role of mothers' ethnicity, psychological adherence towards Asian cultures, educational levels, and age, and their children's age and gender in the identification of the different classes were examined. We further investigated the relations between these patterns of mothers' socialization goals and their preschoolers' socioemotional school readiness in the United States.

Most of the mothers in our sample were classified into the high autonomy-high relatedness-oriented class, in which mothers emphasized both the maximization of their children's personal potentials and the children's maintenance of their relatedness with others. This pattern supports the psychological interdependence family model, where socialization values of autonomy coexists with those of relatedness (Kağıtçıbaşı, 2005). These firstgeneration Asian immigrant mothers in the United States may not view relatedness as oppositional to their child's achievement of autonomy, which is highly valued in the mainstream American context. In fact, relatedness with others may be perceived to be a pathway towards obtaining autonomy, while autonomy may serve to promote children's relatedness to individuals in their social networks and families (Tamis-LeMonda et al., 2008).

Asian immigrant mothers' unique experiences should also be considered in interpreting these findings. Contemporary Asian mothers who migrate to the United States to pursue educational and life opportunities may be more likely to be independent, competitive, and committed to developing their own personal potentials and self-sufficiency (Zhou & Lee, 2013).

As such, these mothers may emphasize self-maximization for their children due to their perceptions of the advantages of developing personal potentials and being self-confident and independent in the new cultural context. Moreover, material interdependence and psychological interdependence are distinguished in the psychological interdependence family model (Kağıtçıbaşı, 2005). Although the increasing economic affluence in families may lead to a decrease in parental expectation of material interdependence from children, psychological interdependence and connectedness, which are ingrained in their heritage collectivistic cultural values appear to continue to be adaptive and valued by Asian immigrant mothers.

A much smaller percentage of mothers were classified in the low autonomy-high relatedness class, which may represent the more traditional interdependence family (Kağıtçıbaşı, 2005). Asian immigrant mothers in this class endorsed less independence in their children, while emphasizing qualities that facilitate interdependence among individuals such as maintaining harmonious relationships and characteristics that center on having strong moral principles and guidelines, including children's decency and avoiding illicit behaviors. These qualities are consistent previous research on the socialization goals of families with the interdependence family model (e.g., Leyendecker, et al., 2002). Unlike this previous research, however, neither class of mothers emphasized high proper demeanor goals such as obedience to authority. Thus, our findings counter the stereotypical portrayal of Chinese and Korean American mothers as highly motivated to socialize child obedience (Chau, 2011) and instead support more recent findings that across 90 nations, obedience was found to be considered less adaptive and less popular in countries with greater wealth and higher percentages of urban populations, including the United States (Park & Lau, 2016). Our findings might reflect Asian immigrant mothers'

awareness of the undervaluing of strict child obedience in the United States and desires to adapt their parenting (Cheah, Leung, & Zhou, 2013).

Somewhat more surprising was that neither class of mothers placed a high emphasis on self-control. However, self-control goals may need to be more contextualized. For example, self-control, or more specifically the lack thereof, was more prominent in mothers' socialization goals when they were asked to describe undesirable child qualities, which was not the emphasis of our current study (Harwood et.al, 1996).

Importantly, the two different patterns of maternal socialization goals (i.e., high autonomy-high relatedness-oriented versus low autonomy-high relatedness-oriented class) were not related to most of the cultural and demographic characteristics that we examined, specifically, mothers' ethnicity (Chinese versus Korean), psychological adherence towards Asian cultural values, educational level, or their children's age and gender. Only mothers' age was associated with the classification of the two classes, with younger mothers more likely to be classified in the high autonomy-high relatedness-oriented class. This finding empirical supports Rowe et al. (2005)'s proposed hypothesis that younger mothers' beliefs about child development may be different from older mothers. Moreover, an examination of adults' perspectives on children's autonomy in parent-child conflict also found that younger adults were more likely to support children's autonomy, perhaps because that they were closer in age to the children and could more easily identify with them children (Bohrnstedt, Freeman, & Smith, 1981).

Our findings on the lack of distinction between Korean and Chinese immigrant mothers in our sample with regarding the classification of their socialization goals is another significant contribution. As noted previously, Chinese and Korean mothers in the United States have a shared East Asian ancestry with Confucian ideologies and close geographical origins and tend to

have migrated to the U.S. for educational opportunities and professional success (Cheah et al., 2011; Kim et al., 2001). Despite their unique sociocultural context and experiences within the United States, these shared experiences may be more important for explaining similarities in the classification of mothers' long-term socialization goals for their young children. Our findings also showed that the two different patterns of maternal socialization goals were not related to mothers' adherence towards Asian values perhaps because that both classes in our sample emphasized high or moderate levels of relatedness with others or families members, which tend to be consistent with Asian cultural values.

We also did not find associations between mothers' educational levels and the classification of different patterns of socialization goals, perhaps because previous study focused on mothers' individual socialization goals, whereas we examined the patterns of mothers' socialization goals (Suizzo et al., 2007). Also, the Asian immigrant mothers in our sample tended to be a well-educated as a whole with limited variability. Child age was also not related to the different patterns of maternal socialization goals, perhaps because of the limited age range of our sample of preschool-aged children.

Regarding the associations between the two patterns of maternal socialization goals and children's socioemotional school readiness, our findings that Asian American children whose mothers held both high autonomy-oriented and high relatedness-oriented goals had better socioemotional school readiness provided empircal evidence for the adaptive meaning of the psychological interdependence family model. Kağıtçıbaşı (2005) proposed that the model of psychological interdependence likely represents a heathy universal, as it better recognizes and satisfies the basic human needs for autonomy and relatedness. Specifically, Asian American mothers who emphasized both self-confidence and being helpful to others, for example, had

children who were more likely to be accepted by their peers and make new friends easily. These mothers' emphasis on developing both autonomous functioning and relatedness with others may foster children's social skills, as children who feel volitional may be more proactive in initiating social interactions and maintaining positive relationships (Bosacki, 2015).

Moreover, children whose mothers emphasized high autonomy-oriented goals and placed high emphasis on relatedness-oriented goals were also more efficient at carrying out daily tasks and attending to teachers' instructions than children whose mothers endorsed high relatednessbut low autonomy-oriented socialization goals. Mothers who emphasized self-maximization goals have been found to be more likely to encourage children's independent behaviors in their childrearing practices (Schulze, Harwood, & Schoelmerich, 2001). Similarly, Asian immigrant mothers who emphasized the importance of their children's independence may be more likely to engage in parenting practices that support their children's engagement in autonomous and taskoriented behaviors in school (Joussemet, Koestner, Lekes, & Houlfort, 2004).

Asian immigrant children's engagement in prosocial behaviors, including sharing and helping others, were not significantly different between the two classes of mothers. This finding may reflect the similar valuing of prosocial behaviors for preschool-age children among mothers across different cultural contexts (Park & Cheah, 2005).

### Limitations

Several limitations of the current study need to be noted. Our utilization of crosssectional data precluded our ability to make causal inferences regarding the direction of relations between mothers' socialization goals and preschoolers' social-emotional school readiness. Longitudinal studies are needed to capture how mothers' socialization goals and children's socioemotional school readiness may influence each other over time. Moreover, although we did

not find that ethnicity was related to the classes, the small sample size of each ethnic group did not allow us to conduct LCA separately within each ethnic group. However, future research should directly examine whether there are different patterns of socialization goals among Chinese versus Korean immigrant mothers, respectively.

Another limitation was that the number of Asian immigrant mothers who were classified into the low autonomy-high relatedness-oriented class was relatively small, which should be considered when explaining the differences in children's socioemotional school readiness between two classes. Also, even though children's age was not related to the classification of mothers into different groups, mothers' long-term socialization goals for their children should be considered based on children's developmental stage. Our study focused on mothers with preschool-aged children. In contrast, mothers of school-aged children may emphasize academic and socio-emotional challenges. As such, mothers' long-term socialization goals may change with child age, which deserves examination in future studies. Moreover, our sample comprised well-educated Asian immigrant mothers within one geographical region in the United States. Thus, the findings' generalizability to other samples with different socioeconomic characteristics or residing in other regions of the United States is limited. Finally, our sample focused only on mothers' socialization goals. Given the important role that fathers play in children's socioemotional development, Asian immigrant fathers' socialization goals and the potential divergence between fathers' and mothers' goals deserve more attention in future research (e.g., Kim & Kim, 2017).

Despite these limitations, the current study identified the underlying heterogeneity of socialization goals among Asian American mothers. More importantly, the present study revealed links between these socialization goals and Asian immigrant children's school readiness

skills. Based on these findings, future research can further investigate whether different patterns of socialization goals among Asian immigrant mothers lead to different parenting practices, or other potential mediating pathways that contribute to their children's developmental outcomes. Our findings were also important because they provided additional evidence for the adaptiveness of bicultural socialization goal pattern in Asian immigrant children's socioemotional school readiness (Nguyen & Benet-Martínez, 2013). Asian immigrant mothers' emphasis on socialization goals that were consistent with social expectations for children held by the broader host cultures as well as goals of relatedness valued by their heritage Asian culture that may be supported in the home context appeared to contribute to their children's greater sociability and behaviors that promote children's functioning in the learning context.

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Table 1

Table 1The Descriptive Statis	tics and	Correla	ations ar	nong Va	ariables									
Variables	1.	2.	3.	4.	5.	6.	7.	8.	9.	10.	11.	12.	13.	14.
1. Self-maximization	-													
2. Self-control	06	-												
3. Proper demeanor	01	10	-											
4. Decency	25**	.02	.10	-										
5. Lovingness	23**	.08	05	.03	-									
6. Prosocial Behaviors	.14	06	11	11	09	-								
7. Sociability	.24**	.02	10	12	13	.58**	-							
8. On-task Behaviors	.23**	.03	05	<b>-</b> .17*	11	.44**	.60**	-						
9. Child Age	.08	08	.12	07	10	.09	.22**	.21**	-					
10. Child Gender	.11	.01	02	<b>-</b> .18 <sup>*</sup>	.10	.16*	.07	.06	10	-				
11. Maternal Age	<b>-</b> .19 <sup>*</sup>	05	.13	.16*	.07	12	.02	08	.31**	20**	-			
12. Maternal Ethnicity	03	03	.08	.13	09	.00	.11	.19*	.08	05	.21**	-		
13. Maternal Education	10	02	.01	.17*	.04	.15	.10	.04	01	05	.18*	.49**	-	
14. Asian Values	.07	.16*	.07	.05	01	.02	03	07	.07	01	10	22**	04	-
%	88%	16%	28%	53%	67%									
M	1					9.80	12.81	8.25	4.25	1.49	36.72	1.50	6.17	64.02

*Note.* Child Gender coded (1 = male, 2 = female); Maternal Ethnicity coded (1 = Korean, 2 = Chinese); \*p < .05; \*\*p < .01.

SD

# Table 2

# Model Fit Indices for Class Solutions

Model fit indices	One class	Two classes	Three classes
Akaike information criterion	1057.32	1041.67	1042.93
Sample size adjusted Bayesian information criterion	1057.79	1042.72	1044.55
Entropy	N/A	0.92	0.75
Parametric bootstrapped likelihood ratio test	N/A	<i>p</i> = .000	<i>p</i> = .118
Latent class size	C1 = 193	C1 = 169	C1 = 143
		C2 = 24	C2 = 23
			C3 = 27

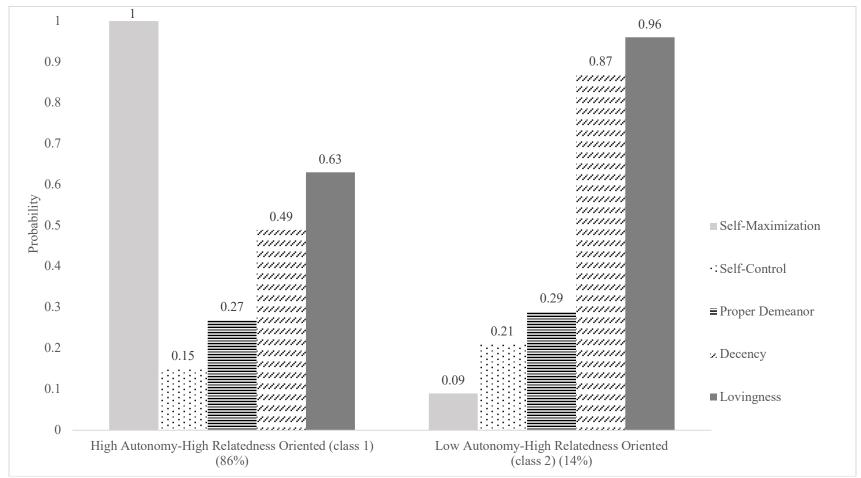


Figure 1. The 2-class solution

## Supplement 2

# Racial Discrimination and Chinese American Mothers' Psychologically Controlling Parenting Practices: A Moderated Mediation Analysis

Asian Americans' struggle against racism tends to be invisible due to the "model minority" stereotype, which portrays them as having succeeded in dealing with racial bias and achieved socioeconomic success due to their diligence and cultural valuing of education (Yip et al., 2021). However, experiences of chronic racial discrimination, defined as unequal treatment, denigration and devaluation based on one's race, has been well documented (Goto et al., 2002; Yip et al., 2021) and found to be more strongly associated with Asian American's socioemotional distress and negative mental and physical health outcomes compared to other racial-ethnic minority groups (Benner & Wang, 2018; Carter et al., 2019). These experiences can also undermine racial-ethnic minority children's psychological adjustment (Cheah et al., 2020; Slopen et al., 2019) and socioemotional development (Bécares et al., 2015), because stressful discriminatory experiences impair parents' capacity to engage in effective parenting practices (Anderson et al., 2015; Brody et al., 2008; Murry et al., 2008).

Most existing research focuses on whether discriminatory experiences impact parental racial socialization practices (e.g., Hughes, 2003), which involve parents' efforts to instill an awareness of racial discrimination in their children (e.g., Hughes et al., 2006). However, parental experiences with racial discrimination could also lead them to engage in more coercive parenting practices (Park, 2001). These negative experiences may facilitate less effective parenting through diminished psychological functioning. Given the adversity associated with parents' exposure to racial discrimination, the identification of potential protective factors that can buffer this harmful impact has significant implications for understanding resilience processes in the face of

discrimination (Neblett et al., 2012). Acculturation towards the mainstream American culture (AMC) has been proposed to be one protective factor, but empirical findings are limited and inconclusive. Some studies have demonstrated a protective role of AMC (Delgado et al., 2011), including for Asian Americans (Deng et al., 2010) while others have either indicated no effect or suggested that AMC magnifies the adverse impact of racial discrimination (Alamilla et al., 2010; Anhalt et al., 2020; Uman<sup>a</sup>-Taylor & Updegraff, 2007).

In an effort to clarify this literature, the primary aim of the current study was to examine the link between experiences of racial discrimination and coercive parenting by considering the mediating role of maternal psychological functioning and exploring how behavioral acculturation may moderate the association between racial discrimination and mental health. The specific roles of both positive and negative psychological functioning and parental psychological control as a form of coercive parenting has yet to be examined in this regard. Specifically, the current study examined: (a) the associations between Chinese American mothers' experiences with racial discrimination and their psychologically controlling parenting; (b) the mediating roles of mothers' depressive symptoms and positive psychological well-being in these associations; and (c) the moderating role of mothers' behavioral AMC in the associations between racial discrimination and maternal psychological functioning.

### **Racial Discrimination and Parenting Practices**

García Coll et al.'s (1996) integrative model on the development of racial-ethnic minority children emphasizes the key role of contextual sources of stressors stemming from racial discrimination and prejudice. Racial discrimination functions as a specific sociocultural source of stress that may shape ethnic-racial minority parents' parenting practices. However, few empirical studies focus on the associations between racial-ethnic minority parents' experiences with racial

discrimination and their engagement in non-racial-ethnic socialization practices (Brody et al., 2008; Murry et al., 2008, Park, 2001). Anderson et al. (2015) found that African American parents who experienced high levels of racial discrimination tended to use more undesirable parenting practices (i.e., laxness and over-reactivity) than parents with low levels of racial discrimination. Belsky's (1984) parenting process model posits that contextual sources of stress can play a role either by directly impacting parenting or by indirectly doing so through its effects on parental psychological functioning. Although the stressors stemming from daily parenting hassles were found to contribute to more psychologically controlling parenting among Asian American mothers (Cheah et al., 2016), little is known regarding the impact of Chinese American mothers' exposure to racial discrimination on their psychologically controlling parential parenting, which have important implications for Chinese American children's developmental outcomes (Yu et al., 2019).

Psychologically controlling parenting is conceptualized as a coercive multidimensional construct that emphasizes the constraining, invalidating, or manipulating of children's psychological and emotional experiences (Barber, 1996). Chinese and Chinese-American mothers tend to engage in three sub-dimensions of psychologically controlling parenting practices (e.g., Fung & Lau, 2012; Ho, 1986; Yu et al., 2015; 2019). Accordingly, this study focused on love withdrawal which is described as a "love-oriented" method of child rearing that undermines children's feelings of parental acceptance by temporarily withdrawing love and attention or threatening to do so unless children comply with parental or societal demands (e.g., Wu et al., 2002). Parent-oriented guilt induction includes elements of effortful inductive reasoning regarding consequences that are designed to help children better attune to parent's thoughts and feelings (e.g., telling children that their actions cause others to worry) by evoking

guilt laden emotions (e.g., Fung & Lau, 2012; Yu et al., 2019). Finally, shaming contains elements of humiliation and losing face and induces inferior feelings as parent's draw children's attention to how much they fall short of referent group norms and expectations in comparison to other individuals (e.g., classmates, siblings). (e.g., Chao & Tseng, 2002; Fung, 1999; Losoncz & Tyson, 2007; Yu et al., 2015).

Although these three sub-dimensions have been found to undermine psychosocial adjustment in children from Western cultures (Nelson et al., 2013), their implications for young Chinese American children's adjustment appear to vary by the specific sub-dimensions and child outcomes (Cheah et al., 2019; Yu et al., 2019). For example, Chinese American mothers' use of love withdrawal predicted more aggressive behavior, whereas guilt induction reduced aggressive behavior in children over time (Yu et al., 2019). In contrast to love withdrawal, which undermines the parent-child relationship by fostering insecurities that can translate into aggressive child actions (e.g., Nelson et al., 2006), stimulating a reasonable amount of guilt associated with misbehavior may serve to reduce child conduct problems by increasing empathy in children (e.g., Kochanska, 1993). Similarly, mothers' engagement in love withdrawal was also been found to be more strongly related to Chinese children's depressive symptoms compared to the use of guilt induction and shaming practices (Cheah et al., 2019). Accordingly, given potential variations across these three sub-dimensions of psychologically controlling parenting and their distinct implications for children's development, we examined the contributors to each separate dimension among Chinese American mothers. We sought to identify unique contributions of parental experiences of racial discrimination, as well as the potential underlying mediating mechanisms of parental psychological functioning, on their engagement in each subdimension of psychological control.

## **Racial Discrimination and Negative and Positive Psychological Functioning**

A strong link between racial discrimination and depressive symptoms has been consistently found across diverse racial-ethnic groups (Priest et al., 2013), including Asian Americans (Lee & Ahn, 2011). Racial discrimination may separate ethnic-racial minority groups from the mainstream society by limiting their access to social and emotional resources, which may evoke depressive symptoms (García Coll et al., 1996). Distinct from the absence of psychopathology, psychological well-being is reflective of the presence of positive properties including having confidence in environment mastery, a clear purpose in life, sustainable personal growth, positive relationships, autonomy and self-acceptance (Ryff et al., 2006). Possessing these characteristics may not inherently indicate the absence of mental health problems, such as depressive symptoms (Keyes, 2002). Empirical evidence for the relation between racial discrimination and positive psychological functioning remains inconclusive, where negative associations, positive associations, and even non-significant associations have been found in meta-analyses, although there appears to be slightly more support for negative associations (Paradies, 2006; Priest et al., 2013). Together, these findings suggest that racial discrimination may differentially impact negative versus positive psychological functioning, which should be examined separately.

# Psychological Adjustment as a Mediator Between Racial Discrimination and Parenting

Parents' psychological functioning may shape their parenting practices (Lovejoy et al., 2000). Specifically, mothers with high levels of depressive symptoms may engage in coercive parenting practices due to emotional or cognitive impairment resulting from depression (Dix & Meunier, 2009). This increased tendency to use coercive practices may be due to these mothers' greater negative appraisals about their children and orientation of attention towards their own

needs to reduce the distress caused by their depressive symptoms (Dix et al., 2004; Henderson & Jennings, 2003; Pomerantz & Dong, 2006; Salmela-Aro et al., 2001; Tenzer et al., 2006).

Few studies have examined the mediating role of parental psychological functioning in the association between racial discrimination and parenting practices, despite Belsky's (1984) proposition that parental psychological functioning may serve as an underlying mechanism linking contextual stressors and parenting practices. As to psychological dysfunction, increased depressive symptoms and stress-related health problems stemming from racial discrimination has been shown to mediate African American mothers' use of less competence-promoting parenting practices (Brody et al., 2008). Chung and Lim (2016) also found that maternal depression served as an underlying mediating mechanism through which general discrimination was associated with Korean immigrant mothers' engagement in higher levels of permissive and authoritarian parenting behaviors. However, to our knowledge, no previous study has examined the simultaneous mediating role of positive psychological well-being in the relation between racial discrimination and parenting practices, which could clarify with greater specificity how these processes work together (Bornstein, 2017).

#### Acculturation Towards the Mainstream American Culture as a Moderator

Although racial discrimination may be detrimental to their psychological functioning, this relation may be moderated by Chinese American mothers' AMC. AMC is characterized by immigrants' behavioral participation in the mainstream American culture across different domains of life, including establishing a friendship network with Americans and predominantly using English (Berry, 2005, 2009). On the one hand, behavioral participation in American culture may increase ethnic minority individuals' exposure to racial-ethnic discrimination and exacerbate their effects (Uman<sup>a</sup>-Taylor & Updegraff, 2007). Conversely, greater positive social

relationships and interactions with non-Chinese American friends may buffer Chinese American mothers against the negative impact of racial discrimination by facilitating intergroup support, providing mothers with a sense of security to develop and use active coping strategies to deal with discriminatory experiences (Clark et al., 1999; Harrell, 2000), and, therefore, make them less vulnerable to these adverse influences.

Chinese American mothers' engagement in the mainstream American culture may also provide them with resources and opportunities to gain knowledge about the historical context of racial discrimination in the United States (Harrell, 2000), including the "perpetual foreigner" stereotype, where Asian Americans are viewed as the "other" and prevented from integrating into mainstream American society (Lee et al., 2009). Such understanding may promote the attribution of race-related discriminatory experiences to external factors such as systemic and institutional racism, and decrease the internalization of these negative experiences, leading to depressive symptoms and poorer psychological well-being (Zadeh et al., 2008). As preliminary evidence for this assumption, AMC was found to protect Chinese American adolescents from the adverse influences of discriminatory experiences (Deng et al., 2010). Accordingly, we further examined the moderating role of Chinese American mothers' behavioral AMC in the associations between their experiences of racial discrimination and psychological functioning (i.e., depressive symptoms and positive psychological well-being), and the subsequent relationship with parenting.

### The Current Study

To summarize, the present study had three aims. The first specific aim was to investigate whether Chinese American mothers' experiences with racial discrimination was related to three specific sub-dimensions of psychologically controlling parenting (i.e., love withdrawal, parent-

oriented guilt induction, and shaming). We expected that racial discrimination would be positively associated with mothers' use of love withdrawal and shaming practices, but the association with parent-oriented guilt induction is less clear given its positive association with Chinese American children's outcomes (Yu et al., 2018; 2019).

The second aim was to examine two underlying mechanisms (i.e., depressive symptoms and psychological well-being) that might explain the link between racial discrimination and the three sub-dimensions of psychologically controlling parenting. We expected that maternal depressive symptoms would mediate the relations between mothers' racial discrimination and their parenting practices. However, the mediating effects of maternal psychological well-being is exploratory due to the lack of previous empirical research on the relations among racial discrimination, positive psychological well-being and parenting practices.

Third, this study examined the moderating role of Chinese American mothers' AMC in the above mediation model, specifically in the association between racial discrimination and their depressive symptoms and psychological well-being. Given the limited and inconsistent previous research, the specific buffering or exacerbating role of acculturation in these associations were also exploratory in the current study.

Finally, because mothers' age and educational level, as well as children's age and gender have been found to be associated with their parenting behaviors (Mcfadden & Tamis-Lemonda, 2013; Yu et al., 2019), they were considered as potential covariates.

### Method

#### **Participants**

The participants comprised first-generation Chinese immigrant mothers (N = 226,  $M_{age} = 37.65$  years,  $SD_{age} = 4.39$  years) and their preschool-aged children ( $M_{age} = 4.40$  years,  $SD_{age} =$ 

1.13 years; 53% boys). Most mothers were married (i.e., 98% married, 1% married but separated, and 1% remarried or widowed) and highly educated, with 94% of mothers reporting at least a bachelor's degree, 4% a partial college degree and 2% a high school diploma as their highest level of education. Mothers had lived in the United States for 10 years on average ( $SD_{year}$  = 5.46 years; range = 0.25 to 35 years).

## Procedures

Participants were recruited from Chinese schools, supermarkets, churches, and daycare centers throughout the Baltimore-Washington, D.C. corridor. Trained bilingual research assistants visited mothers at their homes to collect data using mothers' preferred language (traditional Chinese, simplified Chinese, and English). Participants received \$40 after each home visit to compensate their time for participating in the study. Written informed consent was obtained from mothers before data collection commenced. Ethical approval for the study was obtained from the University Institutional Review Board [# blinded].

## Measures

All the measures used in the current study were previously demonstrated to be valid and reliable in Chinese American samples. Higher scores indicated higher levels of each construct.

**Family demographics.** Mothers reported on the following demographic information: Chinese American mothers' age, education level, marital status, length of time living in the United States, children's age, and gender.

**Racial discrimination.** Mothers' experiences with racial discrimination were measured using the Asian American Perceived Racial Discrimination Scale (Yoo & Lee, 2005), which was developed to measure the racial discrimination experiences specific to Asian Americans. Mothers reported on how often each described situation happens on a 5-point Likert-type scale

ranging from 1 (*almost never*) to 5 (*almost always*). A total of 10 items were averaged to create the mean score, with higher score representing higher levels of perceived racial discrimination. Sample items include, "In America, I am overlooked because I'm Asian." This measure's reliability in the current study was  $\alpha = .81$ .

**Depressive symptoms.** Maternal depressive symptoms were assessed using the Beck Depression Inventory—II (Beck et al., 1996). Mothers rated the severity of their depressive symptoms during the past two weeks on a 4-point Likert-type scale (e.g., 0 = I do not feel sad to 3 = I am so sad or unhappy that I can't stand it). A mean score was calculated across the 21 items. This measure's reliability in the present study was  $\alpha = .88$ .

**Psychological well-being.** The Psychological Well-Being Scale with 18 items (Ryff & Keyes, 1995) was administered to measure mothers' psychological well-being across six domains, including environmental mastery, having a purpose in life, self-acceptance, positive relationships, autonomy, and personal growth. Mothers indicated their degree of agreement with each item on a 7-point scale ranging from 1 (*strongly disagree*) to 7 (*strongly agree*). Mean scores were calculated. A sample item is, "I judge myself by what I think is important, not by what others think is important." This measure's reliability in the current study was  $\alpha = .80$ .

Acculturation towards the mainstream American culture. The Cultural and Social Acculturation Scale (CSAS; Chen & Lee, 1996) was used to assess mothers' AMC across three domains (language proficiency, social relationships and living styles/media use). Mothers rated the degree of their language proficiency (e.g., "How well do you speak in English?") and the frequency of their behaviors (e.g., "How often do you listen to Western music?" and "When you feel happy or proud, how often do you share this with your Non-Chinese friends?") on a 5-point scale (e.g., ranging from 1 = extremely poor to 5 = extremely well or from 1 = almost never to 5 = extremely well or from 1 = almost never to 5 = extremely well

*more than once a week*). The mean score across all items was calculated. The reliability in present study was  $\alpha = .73$ .

**Psychologically controlling parenting.** Mothers' endorsement of three psychologically controlling parenting practices (love withdrawal, guilt induction, and shaming) were assessed using 18 items adapted from the Psychological Control Measure (Yu et al., 2015). Mothers rated the frequency of their behaviors on a 5-point Likert-type scale ranging from 1 (*never*) to 5 (*always*). Love withdrawal included 5 items ( $\alpha = .57$ ; e.g., "I will avoid looking at my child when my child has disappointed me."). Parent-oriented guilt induction was comprised of 5 items ( $\alpha = .78$ ; e.g., "I make my child aware of how much I sacrifice or do for him/her."). Shaming included 8 items ( $\alpha = .78$ ; e.g., "I tell my child he/she is not as good as other children."). The mean score for each dimension of psychologically controlling parenting was calculated.

## **Data Analyses**

Missing data was addressed using the full-information maximum likelihood estimation procedure (Enders, 2013; Yu et al., 2016). Correlations between the potential covariates (i.e., mothers' age, education level, children's age and gender) and the study variables were examined to decide which covariate would be included in the the following analyses. Two separate moderated mediation models with depressive symptoms or psychological well-being as the mediator were analyzed using maximum likelihood (ML) estimation in *Mplus* version 8.0 (Muthen & Muthen, 1998–2017). We used comparative fit index (CFI), standardized root mean square residual (SRMR), and root mean square error of approximation (RMSEA) to evaluate the model fit, with CFI > 0.95, SRMR < 0.08, and RMSEA < 0.06 indicating good model fit (Hu & Bentler, 1999), as well as CFI > 0.90, SRMR < 0.10, and RMSEA < 0.08 showing that the model is acceptable (Hooper et al., 2008). The conditional indirect effects were tested by using a bias-

corrected bootstrapping procedure which resampled 1, 000 random samples to generate 95% confidence intervals (CIs) (Preacher et al., 2007).

## Results

## **Preliminary Analyses**

There were 141 randomly missing data points for the various measures out of the total of 2260 scores (226 participants  $\times$  10 variables). Chinese American mothers' age, education level, and children's age were significantly correlated with the study variables and were included as covariates in the proposed moderated-mediation models. Children's gender was not included in the final models as a covariate given that it was not significantly associated with any study variables (see Table 1).

Chinese American mothers' racial discrimination was significantly and positively correlated with their love withdrawal, guilt induction, and shaming practices. Moreover, racial discrimination was significantly and positively correlated with depressive symptoms, which were significantly and positively correlated with love withdrawal, guilt induction and shaming practices. However, racial discrimination was not significantly correlated with maternal psychological well-being, which was significantly and inversely correlated with love withdrawal and guilt induction, but not shaming practices. AMC was significantly and negatively correlated with depressive symptoms and significantly and positively related with psychological wellbeing. The correlation between racial discrimination and acculturation was not significant.

## **Depressive Symptoms as a Mediator**

The moderated mediation model, from racial discrimination to three sub-dimensions of parenting practices (i.e., love withdrawal, parent-oriented guilt induction and shaming) through maternal depressive symptoms in the context of AMC (see Figure 1), achieved good model fit,  $\chi^2$ 

(9, N=226) = 9.62, p = .382, CFI = 1.00, SRMR = .03, and RMSEA = .02, 90% CI [.00, .08]. When explaining depressive symptoms ( $R^2 = .20$ ), the main effects of racial discrimination (b = 0.12, SE = 0.04, p < .01) and AMC (b = -0.14, SE = 0.04, p < .001) were significant. More importantly, the interaction between racial discrimination and AMC was significant, b = -0.15, SE = 0.07, p < .05. Higher levels of depressive symptom were, in turn, related to mothers' use of more love withdrawal (b = 0.30, SE = 0.12, p < .05,  $R^2 = .12$ ), guilt induction (b = 0.50, SE = 0.15, p < .01,  $R^2 = .19$ ) and shaming practices, b = 0.39, SE = 0.13, p < .01,  $R^2 = .12$ . Examination of the interaction revealed that at low and mean levels of AMC, racial discrimination was positively associated with depressive symptoms ( $b_{low} = 0.21$ , p < .001;  $b_{mean} = 0.12$ , p < .01), whereas this relation was not significant at high levels of AMC ( $b_{high} = 0.03$ , p = .586) (see Figure 3).

Regarding the conditional indirect effects, the results showed that at low and mean levels of AMC, the indirect effects of racial discrimination on love withdrawal ( $ab_{low} = 0.06$ , SE = 0.03, 95% CI [0.02, 0.16];  $ab_{mean} = 0.04$ , SE = 0.02, 95% CI [0.01, 0.09]), guilt induction ( $ab_{low} =$ 0.11, SE = 0.05, 95% CI [0.03, 0.22];  $ab_{mean} = 0.06$ , SE = 0.03, 95% CI [0.02, 0.12]), and shaming ( $ab_{low} = 0.08$ , SE = 0.04, 95% CI [0.02, 0.19];  $ab_{mean} = 0.05$ , SE = 0.02, 95% CI [0.01, 0.11]) practices through maternal depressive symptoms were significant. In contrast, the indirect effects of racial discrimination on love withdrawal ( $ab_{high} = 0.01$ , SE = 0.02, 95% CI [-0.02, 0.06]), guilt induction ( $ab_{high} = 0.02$ , SE = 0.03, 95% CI [-0.03, 0.08]), and shaming ( $ab_{high} =$ 0.01, SE = 0.02, 95% CI [-0.02, 0.07]) through maternal depressive symptoms were not significant at high levels of maternal AMC. In terms of the direct relations, higher levels of racial discrimination were associated with mothers' greater use of love withdrawal (b = 0.19, SE = 0.05, p < .001), guilt induction (b = 0.18, SE = 0.08, p < .05), and shaming practices (b = 0.18, SE = 0.08, p < .05).

#### **Psychological Well-being as a Mediator**

The moderated mediation model, from racial discrimination to the three sub-dimensions of parenting practices (love withdrawal, parent-oriented guilt induction and shaming) through maternal psychological well-being in the context of AMC also achieved good model fit,  $\chi^2$  (10, N=226) = 6.79, p = .745, CFI = 1.00, SRMR = .03, and RMSEA = .00, 90% CI [.00, .05] (see Figure 2). When explaining maternal psychological well-being ( $R^2 = .18$ ), the main effect of racial discrimination was not significant, b = -0.16, SE = 0.08, p = .057. There was a significant main effect of AMC (b = 0.44, SE = 0.06, p < .001), whereas the interaction between racial discrimination and AMC was not significant (b = 0.01, SE = 0.11, p = .940). Maternal psychological well-being was, in turn, significantly associated with greater use of love withdrawal practices (b = -0.27, SE = 0.05, p < .001), but not significantly associated with guilt induction (b = -0.13, SE = 0.09, p = .134) and shaming practices (b = -0.02, SE = 0.08, p = .783).

Moreover, the indirect effects of racial discrimination on love withdrawal (ab = 0.04, SE = 0.02, p = .074), guilt induction (ab = 0.02, SE = 0.02, p = .280), and shaming (ab = 0.004, SE = 0.01, p = .807) practices through maternal psychological well-being were not significant. In terms of the direct relations, higher levels of racial discrimination were significantly related to mothers' greater use of love withdrawal (b = 0.19, SE = 0.05, p < .001), guilt induction (b = 0.21, SE = 0.09, p < .05), and shaming practices (b = 0.22, SE = 0.08, p < .01).

#### Discussion

The current study aimed to increase our understanding of the impact of Chinese American mothers' racial discrimination on specific sub-dimensions of their psychologically controlling parenting. We also explored potential underlying mechanisms, specifically, mothers' psychological functioning and the moderating role of mothers' behavioral AMC. Overall, our findings suggested that maternal experiences of racial discrimination were associated with all three sub-dimensions of psychologically controlling parenting, love withdrawal, guilt induction, and shaming practices. Moreover, maternal depressive symptoms but not psychological well-being mediated the link between racial discrimination and love withdrawal, guilt induction, and shaming parenting practices. Importantly, we revealed heterogeneity in the impact of racial discrimination experiences on Chinese American mothers' mental health and parenting by exploring the moderating role of their behavioral AMC.

### **Racial Discrimination and Parenting**

The importance of Chinese American mothers' experiences with racial discrimination was emphasized by our findings indicating that this contextual stressor was associated with their greater engagement in all three sub-dimensions of psychological control. When Chinese American mothers perceived higher levels of racial discrimination, they were more likely to withdraw love from their children, employ parent-oriented guilt induction tactics, and engage in shaming practices. These results are consistent with previous research demonstrating the associations between parental racial discrimination and a greater use of other forms of undesirable parenting practices (i.e., laxness and over-reactivity) (Anderson et al., 2015).

By examining the contextual stressor of racial discrimination and specifying its associations with parenting practices, our findings provided empirical support for the integrative model, which emphasizes the essential role of racial discrimination and other variables of social positioning in understanding the development of racial-ethnic minority families in the United States (García Coll et al., 1996). Our findings demonstrated that the variations in psychologically

controlling parenting among Chinese American mothers were accounted for by the specific contextual stressor of mothers' experiences with racial discrimination, which supports the specificity principle in examining the determinants of parenting behaviors (Bornstein, 2017).

## The Mediating Roles of Depressive Symptoms and Psychological Well-being

We further examined potential mediating mechanisms that might explain the association between racial discrimination and parenting. In support of our hypothesis, maternal depressive symptoms were found to underlie the associations between experiences of racial discrimination and all three sub-dimensions of psychological control. Exposure to racial discrimination may elicit magnified physiological stress responses and trigger amplified psychological stress responses, such as anger and frustration. These physiological and psychological stress responses can increase mothers' risk for depression (Clark et al., 1999). Additionally, racial discrimination may isolate ethnic minority groups from the mainstream American society and limit their access to social and emotional resources. As illustrated in this study, the social and psychological disconnection or segregation created by exposure to racial discrimination appeared to also contribute to Chinese American mothers' risk for developing depressive symptoms. In turn, maternal depressive symptoms were related to greater tendencies to withdraw love from their children, induce guilt-laden feelings, and use degrading shaming practices with their children.

Furthermore, we found that the psychological well-being of Chinese American mothers did not mediate the association between racial discrimination and mothers' engagement in the three sub-dimensions of psychologically controlling parenting. Chinese American mothers' experiences with racial discrimination were not associated with their decreased sense of selfdetermination and mastery in managing the environment, feelings of fulfillment in continued personal development, possession of a sense of purposefulness in life, and good relationships

with others and positive self-evaluation (Ryff & Singer, 1996). These aspects of wellness might be more vulnerable among younger individuals as compared to adult Chinese American mothers (Eilans et al., 2018), whose psychological well-being might be accounted for by other life experiences, such as positive marital status (e.g., Waite et al., 2009) and social support (e.g., Seo et al., 2018). These findings provided empirical evidence for the need to examine the distinct role of psychological dysfunction versus positive psychological functioning in transmitting the influences of racial discrimination to parenting practices.

Our findings also supported the importance of examining the specific sub-dimensions of psychologically controlling parenting by demonstrating their distinct associations with maternal psychological well-being. Specifically, greater maternal psychological well-being was associated with less use of maternal love withdrawal but was unrelated to engagement in parent-oriented guilt induction and shaming practices, perhaps because different sub-dimensions of psychologically controlling parenting tend to have different goals (Fung & Lau, 2012). Chinese American mothers with greater psychological resources may reduce the use of love withdrawal, which tends to have mother-centered goals of manipulating parental acceptance to increase compliance with their demands (e.g., Yu et al., 2015; 2019). However, Chinese American mothers' engagement in psychologically controlling parent-oriented guilt induction and shaming tactics may not be related to their psychological well-being because such practices may be more influenced by child-oriented aims of motivating children to be sensitive to the perceptions of others, adhere to group dependent norms, and avoid behaviors that would bring shame or disgrace upon themselves and others within their cultural context (Chao & Tseng, 2002; Fung, 1999; Nelson et al., 2013).

## The Moderating Role of Acculturation Towards the Mainstream American Culture

Our findings further revealed the protective role of Chinese American mothers' behavioral AMC in the discrimination-depressive symptom link. Specifically, for Chinese American mothers with less behavioral involvement in the mainstream American culture, their experiences of racial discrimination were associated with more depressive symptoms, which in turn, led them to engage in more coercive levels of love withdrawal, parent-oriented guilt induction and shaming practices, perhaps amplifying Chinese cultural parenting practice norms (Yu et al., 2015). In contrast, the discrimination-depressive symptom link was nonsignificant for mothers who were more engaged in the mainstream American culture. This finding is consistent with previous findings, where a stronger Western cultural orientation protected Chinese American adolescents against the adverse consequences of perceived discrimination (Deng et al., 2010; Lee, 2003).

The protective role of greater mainstream American acculturation among Chinese American mothers might also be explained by more highly acculturated mothers' access to and use of strategies and social resources in response to discriminatory experiences, reducing their risks for developing depressive symptoms. When racial-ethnic minorities have greater positive relationships with host group members and adoption of mainstream American behavioral norms, they tend to use more active problem-oriented coping strategies (Kosic, 2004), which have been found to effectively reduce the deleterious implications of discrimination. These stressmitigating effects of active problem-focused coping were also found to be greater among more highly acculturated immigrants (Noh & Kaspar, 2003).

Another plausible explanation is that mothers with different levels of AMC may vary in the way by which they attribute the causes of the racism-related experiences (Harrell, 2000). Specifically, Chinese American mothers' greater behavioral involvement in mainstream

American society may facilitate their acquisition of knowledge on the historical context and institutional causes of racial discrimination, thus decreasing their tendencies to internalize and self-blame compared to mothers with less participation in the mainstream American culture. Moreover, although Chinese American mothers' behavioral AMC was positively correlated with their reported psychological well-being, behavioral AMC did not moderate the associations between their experiences of racial discrimination and their psychological well-being. This association may be moderated by psychological aspects of acculturation including mothers' ethnic-racial identity (e.g., Vu et al., 2019).

# **Limitations and Future Directions**

Several limitations of the present study should be considered. First, the use of crosssectional data allowed for hypothesis development and exploration but precluded causal inferences and directionality regarding the relations between parental experiences with discrimination, psychological functioning, and their parenting practices. However, our proposed moderated mediation models were drawn from well-founded theoretical frameworks (Belsky, 1984; García Coll et al., 1996; Neblett et al., 2012). Cross-sectional mediation analyses can inform possible causal mechanisms when there are solid theories, which describes the directionality and provides interpretation regarding the temporal process (Shrout, 2011). Thus, our analyses are still meaningful and can be used to guide needed future longitudinal studies testing the relations between parents' experienced racial discrimination, psychological adjustment, and their parenting over time.

Second, we relied on mothers' self-report for all constructs. Mothers-reported parenting may reflect their beliefs and perceptions rather than actual parenting practices when interacting with their children in real situations. Future work incorporating spousal reports (e.g., Porter et al.,

2005) and observational measurement of parenting is warranted to obtain a more objective assessment and understanding of parenting constructs and decrease issues resulting from common method variance.

Third, our sample was comprised of well-educated and middle-class Chinese immigrant mothers from one geographical region in the U.S., which was representative of that particular region (Cheah et al., 2016). However, the generalizability of our findings to Chinese American samples with different socioeconomic status backgrounds residing in other regions of the U.S. may be limited. We recommend that future studies examine the relations in nationally representative Chinese American parents with different socioeconomic characteristics to enhance the generalizability of our findings.

## **Implications and Conclusions**

Overall, our findings revealed the importance of incorporating the contextual stressor of perceived racial discrimination in parenting determinant models for racial-ethnic minority families, which can inform the development of parenting intervention programs and policies to extend consideration to stressors stemming from the sociocultural context when working to improve mental health and decrease maladaptive parenting practices among racial-ethnic minority groups (Kotchick & Forehand, 2002). These experiences were both directly and indirectly associated with psychologically controlling parenting through maternal depressive symptoms. In addition, the differential mediating roles of negative versus positive psychological functioning were identified, illustrating the need to examine specific and nuanced processes in understanding the role of psychological adjustment. Finally, the identification of immigrant mothers' AMC as a protective factor that mitigated the harmful impact of racial discrimination

on parenting behaviors further advances our understanding regarding resilience among racialethnic minority families in the context of adversity.

Our findings also suggest that practitioners should be cognizant of parents' exposure to racial discrimination as a potential key area in parenting prevention and intervention programs with racial-ethnic minority families. Given that negative psychological adjustment served as a potential underlying mechanism transmitting the adverse effects of racial discrimination, targeting the decrease of negative psychological symptoms may be a constructive way to reduce coercive parenting practices for Chinese American mothers. Our findings also suggest that intervention programs could benefit from working on cultivating Chinese American mothers' awareness of behavioral engagement in the mainstream American culture as "the racism-resistant armor" (Harrell, 2000) in providing sources and opportunities for Chinese American parents' participation in the mainstream American culture. Support for their engagement in and access to various resources in the mainstream American context may help alleviate some of the adverse impact of racial discrimination on mothers' psychological health and ultimately on their coercive parenting behaviors.

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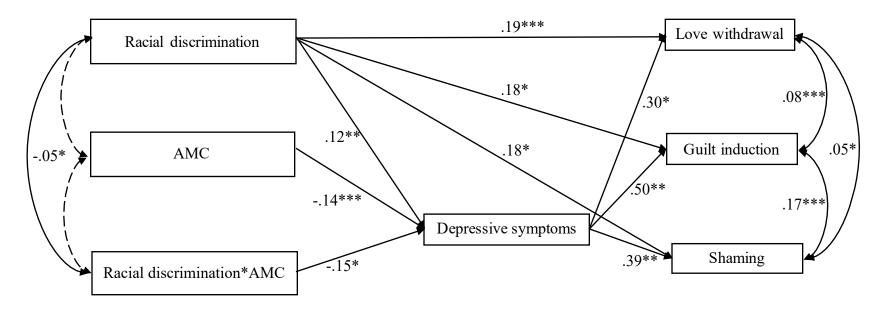
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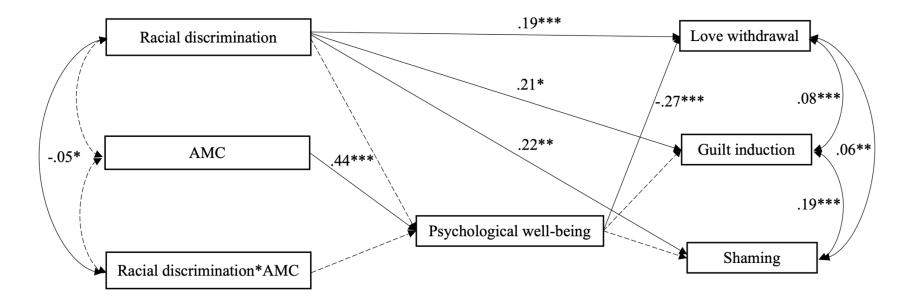
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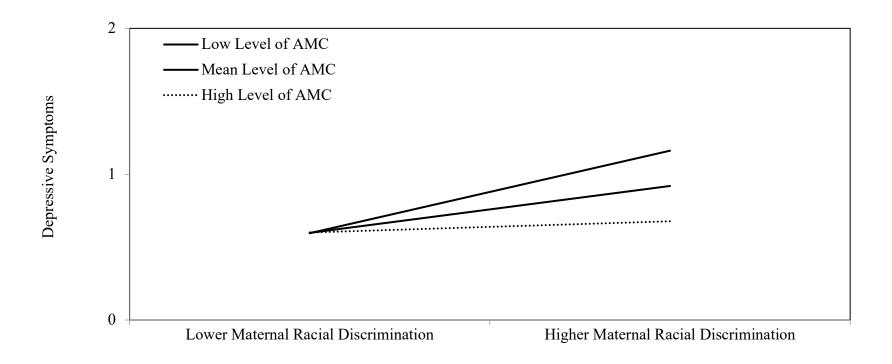
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*Figure 1*. The moderated mediation model with maternal depressive symptoms as mediator and AMC as moderator. Significant unstandardized coefficients were reported. Dash lines indicate non-significant relations. Maternal age, educational levels, and length of staying in the U.S. were controlled as covariates when significant correlating with interested variables. For clarity of presentation, the direct paths from AMC and the interactive variable to love withdrawal, guilt induction, and shaming were not presented. *AMC* Acculturation Towards the Mainstream Culture. \* p < .05. \*\* p < .01. \*\*\*p < .001



*Figure 2*. The moderated mediation model with maternal psychological well-being as mediator and AMC as moderator. Significant unstandardized coefficients were reported. Dash lines indicate non-significant relations. Maternal age, educational levels, and length of staying in the U.S. were controlled as covariates when significant correlating with interested variables. For clarity of presentation, the direct paths from AMC and the interactive variable to love withdrawal, guilt induction, and shaming were not presented. *AMC* Acculturation Towards the Mainstream Culture. \* p < .05. \*\* p < .01. \*\*\*p < .001



*Figure 3.* Maternal acculturation towards the mainstream American culture significantly moderated the association between racial discrimination and maternal depressive symptoms. *AMC* Acculturation Towards the Mainstream American Culture

Table 1

Correlations and I	Descriptiv	ve Statisti	ics for all	Main Vai	riables							
Variable	1	2	3	4	5	6	7	8	9	10	М	SD
1. RD	_										1.93	.56
2. DS	.24**	_									.29	.30
3. PWB	12	41**	_								5.22	.63
4. AMC	.06	28**	.40**	_							3.05	.60
5. LW	.29**	.23**	33**	.04	_						1.65	.44
6. GI	.25**	.28**	14*	.02	.41**	_					1.87	.65
7. Shaming	.25**	.21**	01	.12	.28**	.56**	_				2.69	.62
8. Maternal age	.04	14*	.10	.16*	.03	.12	.12	_			37.65	4.39
9. ME	.01	18*	.14*	.37**	01	18**	.00	.15*	_		6.57	.70
10. Child age	.02	09	03	01	.09	.15*	.04	.29**	.01		4.40	1.13
11. Child gender	.07	.09	01	03	01	.04	07	19**	.05	03	1.47	.50

*RD* Racial discrimination *DS* Depressive symptoms *AMC* Acculturation Towards the Mainstream Culture *PWB* Psychological Well-being *LW* Love Withdrawal *GI* Guilt Induction *ME* Maternal education \*p < .05; \*\*p < .01