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Parental Contributions to Perfectionism, Depressive Symptoms, and Perceived Social Support in Asian American Adolescents: Investigation, Intervention, and Evaluation

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by

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Abstract

Parental Contributions to Perfectionism, Depressive Symptoms, and Perceived Social Support in Asian American Adolescents: Investigation, Intervention, and Evaluation

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The purpose of the study is to examine the influence of parental contributions to perfectionism on depressive symptoms for Asian American adolescents and whether perceived parental support and/or social support may buffer/moderate the relationship. Perceived support from parents and peers may serve as protective factors from experiencing distress associated with the high pressures experienced by Asian Americans to succeed academically and be perfect in school. Asian American adolescents will fill out self-report measures for dimensions of perfectionism, depressive symptoms, and perceived parental and social support. Multiple regressions will be used to test the hypothesis of this study. Implications for the proposed study suggested the development of an intervention to help cultivate coping skills related to parent-driven stress for Asian American adolescents.

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CHAPTER 1: INTRODUCTION

Perfectionism is a multidimensional construct that is often characterized as the setting of excessively high personal standards and being overly critical about one's own performance. (Frost et al., 1990; Hamachek, 1978; Hewitt and Flett, 1991b). Most conceptualizations of perfectionism trace the origins of perfectionistic tendencies to childhood and parent-child interactions (Hamachek, 1978; Flett, Hewitt, Oliver, & Macdonald, 2002). Developmental models of perfectionism share common beliefs that perfectionistic children are a result of exposure to certain types of family and parental influences such as having controlling parents with high expectations, having harsh and strict parents, or having perfectionistic parents (Flett et al.., 2002).

Perfectionism has been shown to be important individual difference predictors of many negative psychological adjustment indicators including suicidal ideations (Hewitt, Flett, & Turnbull-Donovan, 1992), anxiety (Alden, Bieling, & Wallace, 1994), obsessive-compulsive symptoms (Rheaume, Freeston, Dugas, Letarte, & Ladouceur, 1995), and eating disorders (Garner, Olmstead, & Polivy, 1983). Most notably, many studies have established the association between perfectionism and depression in college, adult, clinical, (Chang, 2000; Chang & Rand, 2000; Frost et al., 1990; Hewitt & Flett, 1991b), and even children and adolescent samples (Hewitt, Caelian, Flett, Sherry, Collins, & Flynn, 2002; Rice, Leever, Noggle, & Lapsley, 2007).

Perfectionism is a relevant construct to examine in Asian American populations because Asian Americans have been characterized as a group with excessive perfectionistic tendencies (Yee, 1992) and as having extreme concerns about meeting

parental expectations (Peng & Wright, 1994). Consistent with developmental models of perfectionism, Asian Americans who feel their parents have set standards they cannot meet are exposed to shame or humiliation and may develop perfectionistic tendencies that are associated with maladjustments such as depression (Flett & Hewitt, 2002). The parental influences of perfectionism (parent-driven perfectionism) may be a relevant concern among Asian Americans who are tied to a strong cultural focus on meeting family expectations for achievement and success (Chao & Tseng, 2002; Fuligni & Tseng, 1991; Sue & Okazki, 1990). Accordingly, Asian Americans have been found to consistently report higher scores on different perfectionism scales and maladjustment indicators such as depression when compared to Caucasian Americans, (Chang, 1998; Castro & Rice, 2003) suggesting that Asian Americans may be more vulnerable to experiencing the negative effects of perfectionism.

Although research has examined the association between perfectionism and depression as well as the potential cultural explanations that may explain the association between the two variables, no research exists to examine similar associations for Asian American *adolescents.* Since Asian parents emphasize the importance of educational success and educational expectations to their children at a young age (Mau, 1997), parental contributions to perfectionism and depression may be particularly relevant for Asian American adolescents who are still in school.

Depression in children and adolescents affects many aspects of functioning including school, family, and peer functioning (Lewinsohn & Essau, 2002) and are at risk for school dropout, substance abuse, and are at risk for youth suicide (Birmaher,

Arbelaez, & Brent, 2002). Research on the prevalence of depression among Asian American adolescents provides mix results. While some researchers have found no difference in symptom levels between Asian American and Caucasian students (Chen & Stevenson, 1995; Fletcher & Steinberger, 1994), other researchers have found Asian Americans to report higher levels of depressive symptoms compared to peers (Lorenzo et al., 2000; Austin & Chorpita, 2004). However, Uba (1994) suggest that "generational status aside, Asian Americans has a rate of psychopathology equal to or higher than that of European Americans" (Uba, 1994, p. 195). Given the association between parent-driven perfectionism and depressive symptoms in Asian American college samples, and the prevalence of depression among Asian American adolescents, further research is needed to understand the association between parent-driven perfectionism and depressive symptoms in Asian American adolescents.

Perceived social support from parents and peers may play an important role in the degree in which Asian American adolescents experience depressive symptoms associated with parent-driven perfectionism. Perceived support is the belief that helping behaviors such as assistance or care will occur when needed (Cohen, 1992). Support from parents and friends are associated with greater psychosocial outcomes (Feldman, Robenstein, & Rubin, 1988; McFarlane, Bellissimo, & Norman, 1995) and have been empirically supported as being potential protective factors against the effect of negative stressors and depressive symptoms among adolescents of different ethnicities (Becker & Luthar, 2002; Luthar, Cicchetti, & Becker, 2000). Although no research exists examining the relations between perceived social support, parent-driven perfectionism, and depression, it is

reasonable to hypothesize that perceived social support may also buffer against the negative effects of parent-driven perfectionism on depressive symptoms.

In summary, the proposed study will examine the influence of parent-driven perfectionism, perceived parental support, and perceived peer support on depressive symptoms as well as examine whether perceived parental and/or peer support will buffer against the negative effect of parent-driven perfectionism on depressive symptoms in Asian American adolescents. Specifically, this study will analyze self-reports of parent-driven perfectionism, perceived parental support, perceived peer support, and depressive symptoms of 13-18 year old Asian American adolescents enrolled in a public high school. It is hoped that this study will lead to a better understanding about the relational and cultural context of perfectionistic beliefs and tendencies among Asian American adolescents and will better help clinicians understand the influence of cultural expectations and family pressures on Asian American adolescents' mental health experiences. If there are significant differences in depressive symptoms attributable to levels of parent-driven perfectionism and perceived social support, the findings of this study has implications for interventions that will help cultivate coping skills related to parent-driven stress within Asian American adolescents.

CHAPTER 2: INTEGRATIVE ANALYSIS

PERFECTIONISM

Perfectionism is a multidimensional construct that has received much attention in recent psychological literature (Chang, 2000; Frost, Marten, Lahart, & Rosenblate, 1990; Hewitt and Flett, 1991). While there is debate regarding the precise definition of perfectionism, most researchers agree that the setting of excessively high personal standards and performance is an important feature that separates perfectionists from non-perfectionists (Burns, 1980; Hamachek, 1978). Theorists such as Hamachek (1978) and Burns (1980) have provided the most widely accepted theoretical conceptualizations of perfectionism.

Hamachek (1978) conceptualized perfectionists as consisting of two subtypes: normal perfectionists and neurotic perfectionists. While normal perfectionists are those who set high standards and expectations of the self, they also accept the fact that their standards might not always be met. On the other hand, neurotic perfectionists are those who also set high standards but allow little room for flexibility when those standards are not met. Neurotic perfectionists often feel like nothing is ever done well enough and incorporate a sense of high critical evaluation of the self when expected results are not consistent with the standards they have set. In addition to being overly critical and evaluative about their own performances, perfectionists are also overly concerned with making mistakes in their performances (Hamachek, 1978; Burns, 1980). Hamachek (1978) describes neurotic perfectionists as so overly worried about making mistakes that the goal of their performance is based on the fear of failing rather than the need for

achievement. Burns (1980) emphasized that any slight deviation from the standard set by perfectionists will be interpreted as flaws and subsequent failures. Perfectionists tend to use "all-or-none" thinking in that only total success or total failures exists as outcomes. Finally, perfectionists are also thought to be highly organized, exacting, and have necessities for order in their everyday lives (Burns, 1980).

Overall, early conceptualizations of perfectionism described perfectionists as having tendencies to set and strive to attain unrealistically high standards, to be overly critical about self-evaluations, and to engage in all or none thinking whereby the only outcomes that exist are either total failure or total success (Burns, 1980; Hamachek, 1978). Understanding the early conceptualization of perfectionism, has led other researchers to better understand the multidimensional nature of perfectionism.

Perfectionism as a Multidimensional Construct

Two popular conceptualizations of the multidimensional nature of perfectionism are used within research. Research on perfectionism has generally focused on trait dimensions of perfectionism. Hewitt and Flett (1991b) describe three dimensions of perfectionism distinguishing the source and direction of the perfectionistic behavior while Frost and his colleagues (1990) describe six dimensions of perfectionism based on different characteristics and aspects of perfectionism. Hewitt and Flett (1991b) propose that perfectionism has both personal and interpersonal components and that distinguishing features among the dimensions involve either whom the perfectionistic expectations derive from (i.e. Self or others) or to whom the perfectionistic behaviors are directed (i.e. Toward self or other). First, self-oriented perfectionism refers to the

tendency for individuals to set high and unrealistic standards for themselves and to be overly critical of themselves when they do not meet the standards. Important facets of self-oriented perfectionism include strong motivations for the self to be perfect, to maintain unrealistic self-expectations in the face of failure, to make stringent self evaluations that focus on one's flaws, and to generalize unrealistic expectations and evaluations across domains. Other-oriented perfectionism is an interpersonal dimension of perfectionism marked by the tendency to set high and unrealistic expectations for others. Important aspects of other-oriented perfectionism include having strong motivations for others to be perfect, setting unrealistic expectations and stringent evaluations of others. Socially-prescribed perfectionism is another interpersonal dimension marked by the tendency for individuals to believe that other people hold high and unrealistic expectations of them to be perfect. These individuals often feel that they can never meet the expectations set by others. This dimension of perfectionism is also self-related in the sense that it involves concern with one's own lack of perfection.

Frost and his colleagues (1990) describe six dimensions of perfectionism based on different characteristics and aspects of perfectionism. According to this conceptualization, four dimensions of perfectionism are directed at the self including: Concern over Mistakes, Doubts about Actions, High Personal Standards, and Organization. In addition, two other dimensions reflect the perceived presence of parental demands on the self: High Parental Expectation and Parental Criticism. Accordingly, each camp of researchers created two separate measures of perfectionism based on their

conceptualizations, which share the same name, the Multidimensional Perfectionism Scale (Frost et al., 1990; Hewitt & Flett, 1990, 1991a, 1991b).

Adaptive versus Maladaptive Perfectionism

Another conceptualization of perfectionism maintains that the construct is comprised of a variety of interrelated traits, some of which are generally adaptive/positive and others of which are maladaptive/negative (Johnson and Slaney, 1996; Terry-Short, Owens, Slade, & Dewey, 1995). This conceptualization is consistent with Hamachek's (1978) distinction between "normal" (i.e. adaptive) and "neurotic" (i.e. maladaptive perfectionism) in which adaptive perfectionism involves the setting of high goal/standards while retaining the ability to be satisfied with one's performance, whereas maladaptive forms of perfectionism involve the setting of inflexible and/or unattainably high standards and the inability to take pleasure in one's performance (Enns & Cox, 2002). Understanding adaptive versus maladaptive forms of perfectionism is especially important when considering the different outcomes related to the two forms of perfectionism because where adaptive perfectionism is associated with positive outcomes such as life satisfaction, maladaptive perfectionism is associated with negative maladjustment outcomes such as depression (Enns & Cox, 1999; Frost, Heimberg, Holt, Mattia & Neubauer, 1993). Consistent with this view, Frost et al. (1993) used Frost et al.'s (1990) MPS subscales and found that subscales associated with adaptive perfectionism were positively related to positive affect and life satisfaction but unrelated to depressive symptoms and negative affect. Alternatively, they found that maladaptive perfectionism was positively related to depressive symptoms and negative affect.

Models of the Development of Perfectionism

Theorists have hypothesized about the origins and explicating factors that may contribute to the development of perfectionism. Flett, Hewitt, Oliver, and McDonald (2002) have labeled those developmental models of perfectionism as (1) the social expectations model, (2) the social learning model, and (3) the social reaction model. Each developmental model of perfectionism share common beliefs that perfectionistic children are a result of exposure to certain type of family environment and parental influences. Additionally, incorporating the existing models of perfectionism, Flett et al. (2002) propose a preliminary integrated model of the development of perfectionism.

First, the social expectations model theorizes that perfectionists grew up in households where love and approval were conditionally based on levels of performance and whether they met their parents' expectations (Flett et al., 2002). Failure to perform and do what was requested resulted in parents withholding love and affection. From a young age, perfectionists feel their parents have set standards they cannot meet and are exposed to conditions of contingent self-worth. The social expectations model focuses on the notion that children must meet the excessively high parental expectations or else experience a sense of helplessness and hopelessness as a result of their inability to meet the standards imposed upon them.

The social learning model of perfectionism based on Bandura's (1986) Social Learning Theory, asserts that through imitation, children with perfectionistic parents will also be perfectionistic (Flett et al., 2002). The possible role of social learning in developing perfectionistic tendencies was first demonstrated by Bandura and his

colleague found that children who were exposed to adult models who rewarded themselves only after meeting highly set standards also rewarded themselves only after they met high standards as well. On the other hand, children who were exposed to adult models who rewarded themselves for meeting lower standards imitated the same pattern of self-reward (Bandura & Kupers, 1964). Additionally, research on perfectionism has indirectly tested social learning theory by examining levels of perfectionism in parents and their children and found that perfectionism in children is associated with parental perfectionism (Vieth & Trull, 1999; Flynn, Hewitt, Flett, and Caelian; 2001). In examining the link between 41 female college women and their mothers, Frost and his colleagues found that perfectionism in mothers was associated with perfectionism in daughters (Frost, Lahart, Rosenblate, 1991).

This social reaction model of perfectionism is similar to social reaction style theories that posit the ways in which individuals think, behave, and perceive other people such as parents in their social situations are a result of their responses to their social environments (Eronen, Nurmi, & Salmela-Aro, 1997). The social reaction model of perfectionism asserts that children who grew up in harsh environments and were exposed to psychological maltreatment including love withdrawal and exposure to shame or a chaotic family environment develop perfectionistic tendencies as coping mechanisms. Children faced with harsh family circumstances become perfectionistic as an escape or attempt to minimize abuse or to reduce shame or humiliation (Flett et al., 2002). While a substantial overlap exists between the social expectation and the social reaction model, the two should be viewed separately because the social reaction model focuses on

elements of harshness and punitive tendencies from environments and the social expectation model focuses on high parental expectations and control. Frost et al.'s (1991) study also found evidence consistent with the social reaction model in that maternal harshness as rated by mothers and daughters were associated with perfectionism in daughters suggesting that daughters developed perfectionistic tendencies as a way of dealing with their parents' harshness. Numerous studies have also confirmed the association between certain parenting styles, perfectionism, and poor child outcomes using Baumrind's (1971) classification of parenting styles including authoritarian parenting (controlling and harsh), permissive parenting (noninvolved and neglectful), and authoritative parenting (control but with reason) (Flett, Hewitt, & Singer, 1995; Macdonald, Martin, Flett, and Hewitt; 1995). Studies with university students found that socially prescribed perfectionism was associated with reported exposure to authoritarian parenting and that low family satisfaction was associated with the absence of authoritative parenting and the presence of authoritarian parenting, (Flett, Hewitt, & Singer, 1995; Macdonald, Martin, Flett, and Hewitt; 1995) suggesting that students with harsh parents developed perfectionistic tendencies to combat the harsh parenting.

Finally, in integrating the existing developmental models of perfectionism, Flett et al. (2002) propose that at least three different categories of factors all exert perfectionistic pressure on children including parental factors, environmental/cultural factors, and individual factors. The model acknowledges that while parental factors play a role, it is also important to take into the account the role of children's environment, society, and

cultural factors that promote perfectionism, as well as child characteristics such as temperament and personality, that may also influence the development of perfectionism.

Perfectionism and Maladjustment

As previously mentioned, perfectionism is an important construct to understand because dimensions of perfectionism have been shown to be important individual difference predictors of many negative psychological adjustment indicators. Perfectionism has been shown to be predictors of depression (Frost et al., 1990; Hewitt & Flett, 1991b), suicidal ideations (Hewitt, Flett, & Turnbull-Donovan, 1992), anxiety (Alden, Bieling, & Wallace, 1994), obsessive-compulsive symptoms (Rheaume, Freeston, Dugas, Letarte, & Ladouceur, 1995), and eating disorders (Garner, Olmstead, & Polivy, 1983) in college and adult populations.

Particularly, many studies have established the link between different dimensions of perfectionism and depression among a variety of populations including adolescent, college, adult, and clinical samples (Chang, 2000; Chang & Rand, 2000; Hewitt & Flett, 1991b; Frost et al, 1990; Rice, Leever, Noggle, & Lapsley, 2007). Using Frost et al.'s (1990) measures of perfectionism, three studies of undergraduate students reported associations between four of six dimensions of perfectionism and self reported depression (Frost et al., 1990; Frost, Heimberg, Holt, Mattia, & Neubauer, 1993). In each study, scores on *Doubts about Action*s (*r*=.31 to .55) and *Concerns over Mistakes (r*=.28 to .52) showed the strongest associations with depressive symptoms and scores on *Parental Expectations* (*r*=.28 to .41) *and Parental Criticism* (*r*=.25 to.39) showed moderate associations with depressive symptoms. Also, several studies have reported correlations

between the Hewitt and Flett's (1990) socially prescribed perfectionism and depressive symptoms (r =0.22 to 0.52) in undergraduate student samples (Flett et al., 1995; Frost et al., 1993; Saddler & Buckland, 1995; Saddler & Sacks, 1993). It is speculated that feelings of worthlessness and harsh criticism are often associated with not meeting one's ideal expectations and likely lead to negative emotional states or conditions such as depression (Hewitt & Flett, 1991b). In a similar vein, negative emotional states such as depression are also expected to occur when individuals fail to meet high expectations set by others as in the case of the socially prescribed dimension of perfectionism.

Dimensions of perfectionism are thought to be associated with depression and other psychopathologies through its association with and influence on stress through at least three stress processes including: (1) stress generation, (2) stress anticipation, and (3) stress perpetuation, (Hewitt & Flett, 2002). First, perfectionists are susceptible to adjustment problems because their personality orientation is associated with increased exposure to stress due to their unrealistic approach to life that creates vulnerabilities in experiencing depression (Monroe & Simons, 1991). In other words, perfectionists often take an active role in creating or generating stress for themselves due to their tendency to strictly evaluate themselves and others, their focus on negative aspects of performance, as well as their tendency to experience little satisfaction with their performance (Monroe & Simons, 1991). One study reported that self-oriented and socially prescribed perfectionists were more dissatisfied with their performance than non perfectionistic people, which may generate additional stress for perfectionistic individuals (Mor, Day, Flett, & Hewitt, 1995). Additionally, Ferrari and Mautz (1997) have shown that all three

dimensions of Hewitt and Flett's (1991b) conceptualization of perfectionism are associated with high cognitive rigidity suggesting that perfectionists' lack of flexibility and unwillingness to change goals and lower expectations could undermine their ability to cope effectively with change, which in turn may create stress and problematic situations (Hewitt & Flett, 2002). Similarly, socially prescribed perfectionism may contribute to conflict and creation of stress because socially prescribed perfectionists are extremely sensitive to criticism and are likely to overreact to feedback from other individuals (Hewitt & Flett, 1991b).

Dimensions of perfectionism are also associated with depression due to perfectionists' tendency to anticipate stress, failure, and negative emotions in the future (Hewitt & Flett, 2002). Numerous studies have found that socially prescribed perfectionism has been linked with persistent worry and fear of failure about the future (Flett, Hewitt, Blankstein, & Mosher, 1995; Forest et al., 1990) that can be viewed as forms of pessimism or hopelessness. In psychological literature, hopelessness over future events is seen as central components in several theories of depression (Beck, 1967; Abramson, Metalsky, & Alloy, 1989). If perfectionists perceive negative stressful events as certain to occur and they are unable to avoid those negative events, then it is likely that those individuals will experience hopelessness and related symptoms of hopelessness depression (Abramson et al., 1989). Additionally, socially prescribed perfectionists not only anticipate the possibility of stressful events but also anticipate that such events will occur, making perceived certainty of such events especially stressful, thus leading to depressed states (Hewitt & Flett, 2002).

A third stress mechanism in perfectionism is stress perpetuation in that perfectionists tend to activate maladaptive tendencies such as ruminative orientation that maintain and prolong stressful episodes (Hewitt & Flett, 2002). A recent study by Flett and Hewitt (2000) found evidence that socially prescribed and self oriented perfectionists have ruminative response orientations described in the work of Nolan-Hoeksema (1991), marked by over thinking and focusing on negative events that contribute and maintain pathological states such as depression. During stressful situations, rather than engage in task-focused attempts to assuage distress or distract themselves, perfectionists with ruminative orientation tend to focus cognitively on their experience of distress, which may contribute to and maintain depression (Flett & Hewitt, 2002).

Perfectionism and Asian American Adolescents

When trying to understand and explain health, illness, and psychological issues, it is important to understand individuals' cultures because culture serves as the background against which all aspects of individuals' lives are interpreted and from which their actions take meaning (Angel & Williams; Yoder, 1997). Without the acknowledgement of the impact of culture in individuals' perception, researchers make the risk of misinterpreting or misdiagnosing illnesses due to ethnocentric biases. Accordingly, in diverse contexts, such as in the United States, whose ethnic minority population constitutes almost 30% of the total US population (US census Bureau, 2000), it is important to consider the cultural factors that may influence the development and experience of perfectionism in ethnic populations.

The term "Asian American" refers to people having origins in any of the original peoples of the Far East, Southeast Asia, or the Indian subcontinent (I.e. Cambodia, China, Taiwan, Korea, Japan, Malaysia, Philippines, Thailand, and Vietnam) who currently live in the United States. Asian Americans represent one of the fastest growing minority groups in the United States and constitute the second largest ethnic minority group in the United States comprising an estimate of 4.2% of the population (United States Census Bureau, 2000).

Perfectionism is a particularly relevant construct to examine in Asian American populations because Asian Americans have been characterized as a group with excessive perfectionistic tendencies (Yee, 1992) and as having extreme concerns about meeting parental expectations (Peng & Wright, 1994). Studying perfectionism among Asian Americans may be particularly relevant due to the role of parents in this collectivist culture, especially given the importance of parental influences on the development of perfectionistic tendencies (Hamachek, 1978). In Asian cultures, parents have strong influences on their children by placing high expectations and high emphasis on educational achievement, which may be obtained through hard work, discipline, and obedience to family expectations (Chao, 1994; Mau, 1995; Mau 1997). The behavior of children reflect on the reputation and honor of the entire family where failure to meet obligations may be considered shameful (Peng & Wright, 1994). However, investigators have also noted that high levels of parental control and expectations in Asian families are marked not only by high expectations and tendencies toward criticism, but also by parental involvement, love, and concern (Chao, 1994). As a result, consistent with

previous conceptualization of perfectionism, Asian Americans may develop into normal perfectionist who have high standards and expectations due to their parents' influences or may develop into neurotic perfectionists with tendencies of critical self-evaluations for not meeting parental expectations (Hamachek, 1978). Also, consistent with social expectation and social reaction developmental theories of perfectionism, Asian Americans who feel their parents have set standards they cannot meet or are exposed to shame or humiliation when not meeting cultural or parental expectations, may develop perfectionistic tendencies that may be associated with maladjustments such as depression.

Existing studies that have examined ethnic differences in the experience of perfectionism and associated indicators of distress have focused solely on Asian American college students. These studies have found that Asian Americans consistently reported higher scores on different perfectionism scales and maladjustment indicators when compared to Caucasian Americans, (Chang, 1998; Castro & Rice, 2003) suggesting that Asian Americans may be more vulnerable to experiencing the negative effects of perfectionism. The results from some of these key studies are summarized below.

Using Frost et al.'s (1990) conceptualization of perfectionism, Chang's (1998) study of 89 self-identified Asian American and 96 Caucasian college students from a large Northeastern university found that Asian American students reported significantly more *Doubts about actions*, greater *Concerns about mistakes*, greater *Parental expectations*, and perceived more *Parental Criticism* compared to Caucasian college students. Consistent with the developmental models of perfectionism, Asian Americans may report higher on certain dimensions of perfectionism due to impact of parental

influences and expectations on their lives (Hewitt & Flett, 2002). Chang (1998) also found that Asian Americans reported more hopelessness, more suicidal ideation, and negative self-evaluations than Caucasian students, which are factors known to be associated with depression and other pathological outcomes (Abramson et al.,1989; Beck, 1967). In another study examining the ethnic differences in the experience of perfectionism and emotional distress among Asian Americans, African Americans, and Caucasians, Castro and Rice (2003) reported that Asian American college students scored significantly higher than the other racial/ethnic groups on 3 of 6 perfectionism subscales (*Worry about Mistakes, Doubts about Actions, and Parental Criticism*) and that perfectionism explained a significant amount of variance in depressive symptoms for Asian Americans. These results suggest that Asian Americans may be more prone to experiencing depressive symptoms given their higher reported scores on various perfectionism subscales associated with depressive symptoms. This study also found that Asian Americans reported higher parental expectations than the other peer groups suggesting that parental contributions to perfectionism or parent-driven perfectionism may be particularly salient for Asian Americans.

Cultural Contributors to Perfectionism

As previously discussed, perfectionism is thought to have origins in parental socialization characterized by high expectations and criticism (Hewitt & Flett, 2002), an association also established in Asian American samples (Kawamura, Frost & Harmatz, 2002). In their study, Kawamura et al. (2002) found that higher ratings of parental harshness in Asian American college students were associated with higher levels of

maladaptive perfectionism suggesting that Asian American's perceived harsh and strict parenting style may contribute to experiences of perfectionism and depressive symptoms. Additionally, Yoon and Lau (2008) suggest that the ethnic differences in perfectionism and distress may be due to the collective cultural orientation of Asians and their focus on interdependent values such as meeting parental expectations. According to Markus and Kitayama (1991), individuals from collectivist cultures tend to view themselves as members of groups such as families, work units, nations, and usually place group needs above the needs of the individual (Markus & Kitayama, 1991). Individuals from Asian and collectivist cultures tend to also value interdependence through a focus on the importance of relationships with others, obligations towards others, and a tendency to define the self in terms of their relationships with others (Markus & Kitayama, 1991). From a culture that places high emphasis and importance on educational success and achievement as well as family obligations (Chao, 1994; Mau, 1995; Mau 1997), the parental influences of perfectionism may be a relevant concern among Asian American students tied to a strong cultural focus on meeting family expectations for scholastic achievement (Chao & Tseng, 2002; Fuligni & Tseng, 1991; Sue & Okazki, 1990; Tseng, 2004). For example, in 140 Asian American college students, Yoon and Lau (2008) utilized Frost et al.'s (1990) measure of perfectionism and found that combined scores of the subscales of parental expectations and parent criticism predicted depressive symptoms, highlighting the effect of parental contributions to perfectionism on depressive symptoms in Asian Americans.

Although research has examined the association between perfectionism and depression as well as the potential cultural explanations that may explain the association between the two variables, no research exists to examine similar associations for Asian American *adolescents.* It is unclear whether similar associations between parental influences on perfectionism and depression apply to Asian American adolescents. Since Asian parents emphasize the importance of educational success and educational expectations to their children at a young age (Mau, 1997), parental contributions to perfectionism and associated adjustment indicators may be particularly relevant for Asian American adolescents who are still in school. Exploratory research is needed to examine the parental contributions of perfectionism for Asian American *adolescents* as well as the potential effects of the parental contributions of perfectionism on adjustment indicators such as depression for Asian American *adolescents.* Given the established association between perfectionism and depression (Castro & Rice, 2003; Frost et al, 1990; Hewitt & Flett, 1991), the next section will provide a review of the literature on depression in children and adolescence and how cognitive theories of depression relate to perfectionism.

DEPRESSION IN CHILDREN AND ADOLESCENTS

Childhood depression is believed to affect approximately 28% of children and adolescents (Lewinsohn & Clark, 1999). Comparisons of current and past prevalence rates indicate that the incidence of depression is on the rise, particularly in children and adolescents (Lewinsohn & Essau, 2002). Depression in youth affects many aspects of functioning including school, family, and peer functioning. (Lewinsohn & Essau, 2002).

Depressed adolescents are at risk for school dropout, substance abuse, and youth suicide (Birmaher, Arbelaez, & Brent, 2002). Depression during youth may create lasting detrimental effects for adulthood including the reoccurrence of a depressive disorder, dysfunctional interpersonal relationships, and low life satisfaction (Hammen & Rudolph, 2003; Rao, Ryan, Birmaher, Williamson, & Kaufman, 1995). Additionally, adolescents who suffer from depression are less likely to complete college, more susceptible to participate in criminal activities, and experience more stressful life events in adulthood (Lewinsohn, Rohde, Klein, & Seeley, 1999). As a result, early identification of children and adolescents experiencing depressive symptoms could have positive implications for the prevention of the development of major depressive disorder.

Before adolescence, there is no difference in the prevalence of depression in girls and boys. However, starting in adolescence, depression occurs more often in adolescent girls than adolescent boys (Hankin , Abramson, Moffitt, Silva, McGee & Angell,1998; Lewinsohn et al, 1999). The difference in rates of depression in girls and boys becomes apparent from the age range of 13 to 15 (Hammen & Rudolph, 2003). From late adolescence into adulthood, females are more likely to be depressed than males as well as experience more severe depression (Stark, Sander, Yancy, Bronik, Hoke, 2000). Accordingly, gender and age differences, should be taken into account when researching *depression.*

Asian American Adolescents and Depression

Though some research has examined the Asian American adult experiences of depression, there are fewer studies that have examined the experience and prevalence of

depression among Asian American adolescents. Empirically based studies on Asian American adolescents is incomplete because most studies place more emphasis on academic functioning and less emphasis on emotional and behavioral functioning (Uba, 1994). The studies that have consistently shown Asian American students outperforming other groups of students in academic achievement and other educational outcomes (Mau, 1995; Peng & Hill, 1995) have contributed to labeling Asian American adolescents as "model minorities" who are smart, problem-free, and well-adjusted (Lee, 1996). Asian American adolescents are often seen as quiet and hardworking, thus often viewed by teachers as not having any psychological or social difficulties (Gee, Spencer, Chen & Takeuchi, 2007). On the contrary, research suggests that Asian American youth experience much psychological and social adjustment difficulties including anxiety and depressive symptoms (Lorenzo et al., 2000; Choi, Meininger & Roberts, 2006).

Within existing research, research on depressive symptoms among Asian American adolescents reveals mix results. While some researchers have found no difference in symptom levels between Asian American and Caucasian students (Chen & Stevenson, 1995; Fletcher & Steinberger, 1994), other researchers have found Asian Americans to report higher levels of depressive symptoms compared to peers (Lorenzo et al., 2000; Austin & Chorpita, 2004). Greenberger and Chen (1998) suggest that different measures in psychological well-being and whether researchers took into account generational status of Asian Americans contribute to the mix results. For example, although Chiu, Feldman, and Rosenthal (1992) found no difference between Chinese American high school students who were immigrants and their European American

classmates on a measure of emotional distress, they found significantly more distress among Chinese American youths who had been born in the United States than among their European American. In another study, Abe and Zane (1990) found that foreign-born Asian American college students reported more depressive symptoms than their U.S-born Asian American or European American counterparts. Despite these mix results, Uba (1994) tentatively concludes that “generational status aside, "the available research suggests that Asian Americans have a rate of psychopathology equal to or higher than that of European Americans" (p. 195).

Several explanations for this pervasiveness of depressive symptoms among Asian Americans have been examined through cultural factors. First, distressed parent-child relationships are found to be associated with depressive symptoms for Asian American adolescents (Greenberger & Chen, 1996). Immigrant adolescents who acculturate or adapt and assimilate to the cultural worldview of their new environment faster than their immigrant parents often experience conflict with their parents by needing to balance both their new culture and old culture (Aldwin & Greenberger,1987; Chen, Roberts, & Aday, 1998). Similarly, research also points to cultural orientation and interpersonal relationships in the development of mental distress in Asian American adolescents (Wong, 2006). In a study of 144 Asian American adolescents, Wong (2006) found that cultural orientation and interpersonal relationships were significant predictors of depression where adolescents who reported high orientation toward their own ethnic culture and low orientation towards mainstream American culture experienced greater depressive symptoms. The study also indicated that positive parent and peer relationships

predicted lower depressive symptoms. Furthermore, academic stress and the need to satisfy parental expectations are also found to be associated with depressive symptoms for Asian American adolescents (Aldwin & Greenberger, 1987; Lee, 1997)

Despite their high levels of academic achievement, Asian American adolescents may experience higher risks in experiencing distress due to cultural factors such as distressed child-parent relationships, cultural orientation issues, and the need to satisfy parental expectations. Similarly, such cultural factors have also been previously discussed in this study as contributors to perfectionism in Asian Americans. In addition to understanding the cultural factors that may help explain the experience of depression for Asian American adolescents, it is also important to understand the cognitive components that help Asian Americans adolescents interpret the impact of culture factors on their experience of depression because cognitive theories of depression assert that individuals' perception of their environment influence the development and maintenance of depression (Abramson et al., 1989; Beck, 1967). Therefore, the interaction between cultural factors and cognitive components that may lead to depression for individuals depends upon an understanding of cognitive theories of depression described below.

Cognitive Theories of Depression

Cognitive theories of depression hypothesize that how individuals interpret experiences determine whether they will feel depressed (Beck, 1967, Abramson et al., 1989; Nolen-Hoeksema, 1991). These theories offer a view in which individuals' perception of their environment shape their understanding of different stimuli, and their subsequent reactions and emotions to the stimuli. Considerable research has examined the

etiology of depression centering around three influential cognitive models including Beck's (1967) Cognitive Theory of Depression, Abramson et al.'s (1989) Hopelessness Theory of Depression and Nolen-Hoeksema's (1991) Response-Style Theory.

Beck's (1967) theory describes three main concepts central to the maintenance and development of depression: (1) schemas, (2) the cognitive triad, and (3) cognitive errors. Schemas are stable cognitive patterns that help shape individuals' understanding of events or situations (Lakdawalla, Hankin, and Mermeltsein; 2007). When an individual faces a certain situation, a schema related to the situation will become activated and help guide the person's conceptualization and interpretation of the situation. Depressed individuals are thought to have negative schema that attend to negative aspects of situations and ignore positive aspects resulting in depressive state. Beck (1967) asserts that depressed individuals have negative schemas that serve to distort individuals' understanding of the self, world, and future. The second concept of Beck's (1967) theory is the cognitive triad, specific cognitive schemas that form an individuals' negative view of the self, world, and future. The first cognitive schema represents depressed individuals' tendency to possess negative views of the self and to blame the self for negative events attributed to perceived flaw within the self such as failure, loss, or worthlessness (Beck et al., 1979). The second cognitive schema consists of depressed individuals' tendency to perceive events in the world as negative and flawed, subsequently leading to misinterpretations of interactions in the environment. This negative perception of the world causes depressed individuals to interpret situations negatively when other harmless or milder interpretations are possible (Beck, 1967). The

third negative cognitive pattern of thinking in depressed individuals is their view that current struggles and difficulties will continue to occur and failure in situations is inevitable. Beck's third main concept involves cognitive errors, or faulty information processing, which are systematic errors in the overly negative interpretation of events in the form of overgeneralizations, all or nothing thinking, and personalization, among others. Again, events are misconstrued negatively due to the cognitive errors and negative beliefs are maintained, even in the face of conflicting evidence, often resulting in the creation of distorted automatic thoughts that are based on the cognitive errors (Beck, 1967). As a result, depression results when individuals' negative schemas about themselves, their worlds, and their future are activated when faced with stressful situations and results in the formulation cognitive errors that lead to negative automatic thoughts, which in turn create depressed moods (Beck, 1967).

Similarly Hopelessness Theory of Depression (Abramson et al., 1989), a reformulation of the Helplessness theory (Abramson, Seligman, & Teasdale, 1978), posits that individuals who exhibit a more depressive inferential style, when confronted with a negative stressor, are more likely to develop symptoms of depression. The theory further posits that three negative inferential styles lead to the development of depression. The first inferential style makes causal attributional interpretations of negative life events. Specifically, people who explain bad events in a global, internal, and stable manner tend to become depressed when negative events occur whereas those who attribute the events to specific, external, and unstable factors are less prone to depression. Second, depressed individuals are also thought to catastrophisize the outcome of negative events. Third,

depressed individuals also view the self as flawed and incapable of producing change to negative situations. Individuals who possess any of these three inferential styles increase the likelihood of developing hopelessness, and in turn depression.

Finally, the Response Style Theory posits that the way in which individuals respond to their depressive symptoms determines the severity and duration of those symptoms (Nolen-Hoeksema, 1991). Nolen-Hoeksema (1991) describes rumination, or focusing one's attention toward negative feelings, as the main response styles that maintains depressive symptoms. Ruminative coping is thought to increase accessibility and the recall of negative events (Bower, 1981), which leads to negative interpretations of behaviors and causes individuals to feel like they have little control over outcomes. Additionally, rumination interferes with effective problem solving because rumination makes negative cognitions more accessible and prevents the engagement of positive behaviors.

Overall, each theory shares the general hypothesis that the ways in which individuals attend to, interpret, and remember negative life events add to the possibility that they will experience depression. Each theory identifies distinct cognitive vulnerability factors that are hypothesized to contribute to the development of maintenance of depression where Beck (1967) identifies negative schemas, cognitive errors, and dysfunctional attitudes, Abramson et al. (1989) discusses negative cognitive inferential styles, and Nolen-Hoeksema (1991) identify a ruminative response style which increase accessibility and the recall of negative events, that in turn produces or maintains depression.

Cognitive Theories of Depression and Perfectionism

As such, cognitive theories of depression may help explain the association between perfectionism and depression. Beck (1976) suggested that many psychological disorders including depression occur because of certain cognitive errors in processing perceptual information, also referred to as cognitive distortions. Perfectionism fits conceptually with cognitive theories of depression and has been thought to represent a dysfunctional cognitive style as well (Pacht, 1984). First, perfectionists have been shown to employ what Beck (1967) termed cognitive errors/distortions including dichotomous thinking, overgeneralization, catastrophizing, and selective abstraction (Antony, Swinson, 1998; Burns, 1980). For example, when perfectionistic individuals engage in dichotomous thinking, they view performance as either "all right" or "all wrong" because perfectionists do not allow for any margin of error, yielding only possible results as total success or total failure. Any performance deviating from "all right" may lead perfectionists to make negative cognitive distortions about their forever lack of ability to perform well. Additionally, perceived failure is typically endorsed and confirms perfectionists' self-critical attributional tendencies as well as heightens their sensitivity to criticism (Flett, Hewitt, Blankstein, & Pickering, 1998). As a result, such errors in cognitive processing have been shown to cause and maintain various negative thought patterns(automatic thoughts) potentially leading to depression (Beck, 1967). Hewitt and Flett (2002) also assert that the associations found between socially prescribed perfectionism and negative outcome expectancies suggest that socially prescribed perfectionism includes a "negative future events" schema consistent with Beck's (1967)

theory, leading perfectionists to be inclined to view that their performance is never good enough, is negative, and will lead to inevitable and unchangeable failure. Consistent with Beck's (1967) idea of the negative cognitive triad, perfectionists' 'negative future events' schema impedes healthy and accurate information processing, leading to more negative explanatory styles, which consequently may lead to depression (Hewitt & Flett, 2002).

Next, in the Hopelessness Theory, Abramson et al. (1989) suggest that hopelessness is the primary cause of depression and hopelessness is the ultimate pathway for any additional causes of depressive symptoms. Attributional styles and other variables that influence depression do so through the activation of hopelessness. Given the positive association between perfectionism and depression, and the similar way individuals high in perfectionism and individuals with depressive symptoms react to failure or rather have a fear of failure (Flett, Hewitt, Blankstein, & Mosher, 1995; Forest et al., 1990), it follows that perfectionists may have attributional styles similar to individuals with depression. Because perfectionists are sensitive to external feedback and often react negatively to performance outcomes, Flett et al. (1998) suggest that perfectionists and non-perfectionists differ in their ways of explaining positive and negative outcomes with perfectionists making external attributions for positive outcomes and internal attributions for negative outcomes, whereas non-perfectionists make internal attributions for positive outcomes and external attributions for negative outcomes. Perfectionists may never obtain self-reinforcement due to their external attributions of positive outcome, which may facilitate hopelessness, which in turn leads to negative affective states, such as depression (Flett et al., 1998). Additionally, perfectionists focus on personal deficiencies

when encountering difficult situations that also result in feelings of hopelessness, which leads to further depressed moods.

Finally, consistent with Nolan-Hoeksema's (1991) Response Style Theory, perfectionists are found to have ruminative response orientations (Flett & Hewitt, 2002), suggesting that elements of perfectionism may be associated with persistent depression through its association with maladaptive, ruminative response orientation. Perfectionists who dwell and ruminate over their imperfect performances, may be more prone to experiencing depression. Since perfectionists are thought to have certain cognitive styles related to depression, they may be particularly vulnerable to experiencing depression by the way they attend to, interpret, and experience negative stressors or events. However, despite this vulnerability, some research suggests the existence of potential protective factors that may buffer against effect of negative stressors such as perfectionism and depressive symptoms (Cohen & Willis, 1985).

SOCIAL SUPPORT

One of the potential protective factors that may buffer against the effect of life stressors such as perfectionism on depressive symptoms is social support (Cohen & Willis, 1985). Social support is ubiquitous and something that humans rely on throughout our lives to maintain health and adjustment (Cauce, Reid, Landerman & Gonzales, 1990). Social support is comprised of relationships that provide material or interpersonal resources for its recipients (Cohen, 1992). Similarly, social support has also been defined as information from others that one is loved and cared for, esteemed and valued, and part of a network of communication and mutual obligations (Cobb, 1976; Cohen & Wills,

1985). Much of existing research on social support focuses on its role in health maintenance and psychological adjustment (Cohen, Underwood, & Gottlieb, 2000; Kaplan, Cassel, & Gore, 1977). Research has found that social support reduces psychological stress such as depression or anxiety during times of stress (Fleming, Baum, Gisriel, & Gatchel, 1982) and is associated with positive health benefits such as positive health adjustments to heart disease, lung disease and cancer (Holahan, Moos, Holahan, & Brennan, 1997; Stone, Mezzacappa, Donatone, & Gonder, 1999). For individuals with perfectionistic tendencies, social support may serve as a potential protector against the depression that may arise from perfectionism.

Perceived Social Support

Researchers have acknowledged social support as a multidimensional construct categorized into three classifications including social network (quantity and types of relationships that exists for individuals), received social support (emotional, instrumental, informational, and social companionship support individuals receive) and perceived social support (the perception of available emotional, instrumental, information, and social companionship support). However, perceived social support is the component most relevant to the discussion of potential buffers against the effect of perfectionism on depressive symptoms (Cohen, 1992). Perceived social support involves *cognitive appraisals* of availability and adequacy of support from social others (Procidano & Heller, 1983). Perceived social support is the most relevant aspect of social support when examining potential protective factors because researchers have found that perceived social support is the component of social support most closely related to health outcomes

(Antonucci & Israel, 1986). Also, research examining the influences of social support on adjustment has found that one's belief of the availability of social support is much more important than whether or not one actually receives support because social interaction is only as helpful as individuals perceive them to be (Cohen et al.,2000; Noberg, Lindblad & Boman, 2006).

Models of Social Support in Adjustment

There are potentially significant implications for the presence of social support on the effects of perfectionism and resultant depressive symptoms. Research has suggested that there are two models of the role of social support in adjustment –a main effect model and a buffering model (Cohen & Willis, 1985). The main effect model asserts that there is a direct relationship between social support and psychological adjustment (Cohen & Willis, 1985; Wheaton, 1985). The main effect model asserts that social support will influence psychological adjustment regardless of the presence of a stressor or negative life event. Social support enhances self efficacy, esteem, and acts as a coping mechanism to life stressors (Bishop, 1997). The function of social support is commonly viewed as helping to diminish helplessness feelings and to boost self-esteem, which in turn reduces stress-related depression (Becker & Schmaling, 1991). Studies have found that individuals who report having friends and family who provide psychological and material resources in general have better psychological adjustment than those individuals who report having less supportive contacts (Billings & Moos, 1982). In this model social support provides direct positive experiences and tools for coping that help individuals adjust (Dubow, Tisek, Causey, Hryshko & Reid, 1991).

The buffering model, the most influential theoretical perspective on social support, hypothesizes that there is an interaction between stress and social support to influence psychological adjustment (Cohen & Willis, 1985; Cohen et al., 2000). The model hypothesizes that when social support is present, the stressful event will have less of an effect on individuals' adjustment than when support is not present (Cohen & Willis, 1985). The model posits that when faced with stressors, individuals with greater support from family and friends are less likely to become depressed than individuals with lower levels of support because social support presumably enhances self efficacy, self esteem, and confidence, which increase individuals' perception that they can cope with the negative stressor (Bishop, 1997). Cohen et al. (2000) maintain that social support may play a role at several points in link between stress and psychological adjustment. First, perceived social support may intervene between the stressful event and negative psychological adjustment by leading individuals to interpret stressful events less negatively. As a result, individuals may believe that they have support and adequate coping resources to handle the stressful events. Second, perceived social support may reduce or eliminate the affective reaction to stressful events or dampen physiological events responses to negative events. The buffering model has been empirically supported by numerous research studies (Cohen & Willis, 1985; Leavy, 1983). Subsequently if dimensions of perfectionism are considered life stressors or stressful events, social support may buffer against the negative impact of perfectionism on depressive symptoms.

Social Support and Adolescence

Much of the research on social support and adjustment has focused on adolescents (Cheng, 1997; Garnefski & Diekstra, 1996; Licitra-Kleckler & Waas, 1993). Adolescence is a period marked my relational changes where significant others within adolescents' social network are restructured and changed (Meeus, 1989). During childhood, although peers are important to children's social networks, parents and family are the most important significant others in children's social network. During this time of development, children mainly look to and depend on parents for social support in order to feel loved, valued, and unconditionally accepted (Sarason, Shearin, Pierce & Sarason, 1987). On the other hand, during adolescence, peers become increasingly important within adolescents' social networks and serve as important sources of social support similar to the parents' and families' roles (Barrera & Garrison-Jones, 1992). This emerging role of peers in adolescents' social network is evident in several studies that found that during adolescence, whereas the perceived support from parents either remained constant or decreased, the support from peers was seen to increase (Cauce et al., 1990; Furman and Buhrmester, 1992). Additionally, gender differences may exist in the changes in relationships with parents and peers during adolescence. Research on social relations has also found that girls generally reported receiving more social support and fewer but more intensive contacts than boys who received less social support but had more superficial relationships (Furman & Buhrmester, 1992; Bryant, 1994). However, other studies have found no sex differences in the changes in relationships during adolescence with parents and peers in terms of social support (Shulman, 1993).

The distinction between different types of social support is important as different individuals rely on or benefit from friend or family support to different extents (Procidano & Heller, 1983). Since family and peers are two key components of adolescents' social environment (Barrera & Garrison-Jones, 1992), it is important to examine perceived social support from family and peers separately. Cross-sectional research has consistently found that perceived family/parent support underscores the psychological adjustment of adolescents across ethnic groups (Feldman et al., 1988; McFarlane et al., 1995). In a study of 123 African Americans adolescents, Luster & Adoo (1995) found a significantly positive correlation between self esteem and perceived quality of relationships with family members. In another cross-sectional study of 1,725 primarily Caucasian middle school adolescents, Harter & Whitesell (1996) also found that perceived parental support was significantly positively correlated with self worth and negatively correlated with depressive symptoms. Similar to the influence of perceived family support on adolescents' psychological adjustment, research has also found that perceived peer support is positively associated with self esteem (Buhrmester & Yin, 1997; Hirsch & Rapkin, 1987; Ryan, Stiller, & Lynch, 1994) and negatively correlated with depressive symptoms and other negative psychological adjustment indicators. Typically, adolescents who report greater satisfaction with friendships report less feelings related to depression, anxiety, and social stress (Demaray & Malecki, 2002).

Additionally, researchers have also found support for the buffering model of social support for adolescents across ethnicities in high risk environments and under stress (Becker & Luthar, 2002; Luthar, Cicchetti, & Becker, 2000; Way & Chen, 2000).

For example, Becker and Luthar (2002) found that parent and teacher support are two important factors contributing to the success of disadvantaged students. Students who reported higher perceived parental and teacher support reported to be well-adjusted in schools and reported less depressive symptoms. In another study, Crosnoe and Elder (2002) found that close relationships with teachers and involvement with friends protected against parent-related stress among Asian American adolescents. Overall, although perceived social support does not involve actually receiving material assistance or emotional support from others, perceived social support is still found to be functional in mitigating stress-related depression in among adolescents across ethnicities.

Finally, given that perfectionism is considered a stress-generating mechanism (Hewitt & Flett, 2002), it is reasonable to hypothesize that social support may also buffer against the negative effects of perfectionism on depression. Specifically, in the current study, perceived social support from parents and/or peers may protect against the depressive symptoms typically associated with parent-driven perfectionism for Asian American adolescents.

CHAPTER 3: PROPOSED RESEARCH STUDY

STATEMENT OF PROBLEM

Asian Americans are characterized as having perfectionistic tendencies (Yee, 1992). Certain dimensions of perfectionism such as worrying about one's own actions, concerns about making mistakes, concern about parental criticism, and concerns about meeting parental high expectations are associated with maladjustments indicators such as depression (Frost et al., 1990). Researchers examining the origins of perfectionism theorize that the origins of perfectionism are results of children's exposure to family environment and parental influences marked by characteristics such as control, harshness, and high expectations (Hewitt & Flett, 2002). While the increased risk of perfectionism and depressive symptoms among Asian American college students compared to other ethnic groups such as Caucasians and African Americans has been documented, no research has examined the relationship in Asian American adolescents (Chang, 1998; Castro & Rice, 2003). Additionally, the effects of parental contributions to perfectionism, referred to as parent-driven perfectionism, on depressive symptoms may be particularly concerning for Asian American adolescents. In addition to experiencing the stressors of being an adolescent (Steinberg, 2007), Asian American adolescents are also bound by strong cultural and family obligations and expectations to succeed academically (Chao & Tseng, 2002; Sue & Okazaki, 1990). From a collectivist cultural orientation standpoint, Asian American adolescents may be concerned with group goals such as the academic expectations set by their parents (Yoon & Lau, 2008) exacerbating

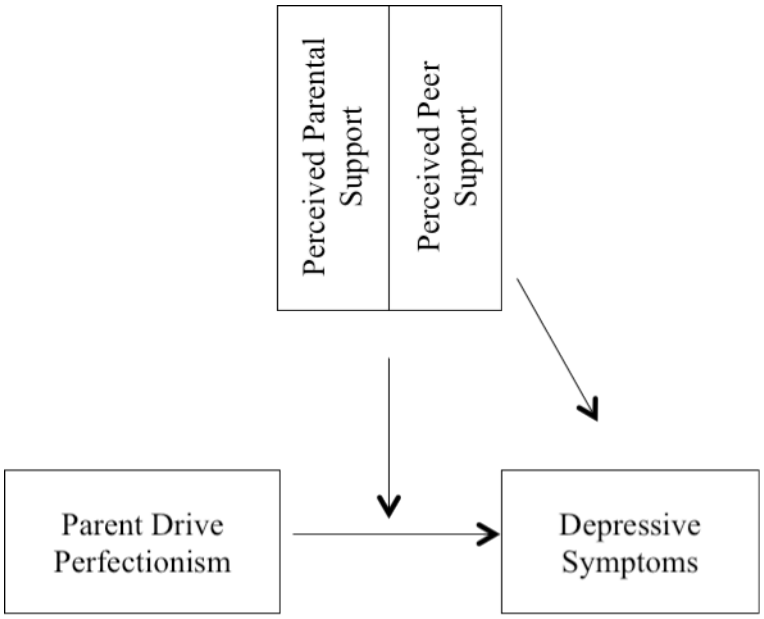
the distress associated with parent-driven perfectionism since individual failures may be perceived to be negative reflections of the whole family. While parent-driven perfectionism as measured by Frost et al.'s (1990) *Parental Criticism* and *Parental Expectations* subscales are known significant correlates with depressive symptoms and are seen as potential life stressors, research also indicates that certain protective factors such as perceived parental support and perceived social support may buffer against the negative life stressors such as perfectionism on depression (Becker & Luthar, 2002; Luthar, Cicchetti, & Becker, 2000). During adolescence, peers become increasingly important within adolescents' social networks and serve as important sources of social support similar to the parents' and families' roles (Barrera & Garrison-Jones, 1992). Subsequently, the next step in research would be to explore the relationship between parental contributions of perfectionism and Asian American adolescents' depressive symptoms and investigate whether perceived parental support and/ or perceived peer support may buffer against the negative effects of parent-driven perfectionism on depressive symptoms for Asian American adolescents.

STATEMENT OF PURPOSE

The purpose of this study will explore how parent-driven perfectionism, perceived parental support and perceived social support influence Asian American adolescents' experience of depressive symptoms. The study proposes that perceived parental support and perceived social support from peers will buffer against negative effects of parent-driven perfection on depressive symptoms for Asian American adolescents who perceive high parental support and/or high social support from peers.

RESEARCH QUESTIONS AND HYPOTHESES

Figure 1. Proposed model for Asian American adolescents.



Research Question 1. Does parent-driven perfectionism influence Asian American adolescents' level of depressive symptoms (See Figure 1)?

Hypothesis 1. Controlling for perceived parental support, perceived peer support, gender, SES, and generation status, higher parent-driven perfectionism scores will be associated with more severe depressive symptoms in Asian American adolescents.

Rationale 1. Parenting in Asian American families often involves placing demands on their children to conform closely to parental expectations and desires (Chao, 1994; Mau, 1995; Mau 1997) potentially causing children to develop perfectionistic tendencies (Hewitt & Flett, 2002). Several studies have found that Asian American college students' scores on parental contributions to perfectionism subscales (*Parental Expectations* and *Parental Criticisms)* of Frost et al.'s (1990) measure of perfectionism

were significantly correlated with depressive symptoms. It is possible that Asian American adolescents, who are also bound by strong cultural and family obligations and expectations to succeed academically (Chao & Tseng, 2002; Sue & Okazaki, 1990) will also experience depressive symptoms associated with parental contributions to perfectionism (parent-driven perfectionism). Gender is controlled for because research indicates that during adolescence, girls are more likely than boys to experience depressive symptoms (Hammen & Rudolph, 2003). Socioeconomic status is controlled for because low socioeconomic status is generally associated with high psychiatric morbidity, more disability, and psychiatric disorders such as depression potentially due to greater exposure to life stressors and poor access to health care (Link, Lennon, & Dohrenwend, 1993). Generation status is also controlled for because studies have shown that generational status in Asian Americans can influence the presentation of dysfunction and depressive symptoms (Abe & Zane, 1990; Chiu et al, 1992).

Research Question 2. Does perception of the level of parental support influence the severity of depressive symptoms in Asian American adolescents (See Figure 1)?

Hypothesis 2

Controlling for parent-driven perfectionism, perceived peer support, gender, SES, and generation status, there is an inverse relationship between perception of parental support and depressive symptoms in Asian American adolescents. In other words, higher perceived parental support scores will be associated with less severe depressive symptom scores.

Rationale 2. Many studies have reported that parental support is inversely related to an array of maladjustment indicators. Specifically, parental support has been found to be inversely related to levels of depression in both Caucasian adolescents as well as ethnic adolescents including Asian Americans (Greenberger & Chen, 1996; Harter & Whitesell, 1996; Way & Robinson, 2003). Additionally, many studies have reported that adolescents who perceive high parental or family support experience less severe depressive symptoms in the event of stressful events (Feldman, et al., 1988; McFarlane et al., 1995)

Research Question 3. Does perception of the level of peer support influence the severity of depressive symptoms in Asian American adolescents (See Figure 1)?

Hypothesis 3. Controlling for parent-driven perfectionism, perceived parental support, gender, SES, and generation status, there is an inverse relationship between perception of peer support and depressive symptoms in Asian American adolescents. In other words, higher perceived peer support scores will be associated with less severe depressive symptom scores.

Rationale 3. Similar to the influence of perceived family support on adolescents' psychological adjustment, research has also found that perceived peer support is negatively correlated with depressive symptoms and other negative psychological adjustment indicators (Buhrmester & Yin, 1997; Hirsch & Rapkin, 1987; Ryan, Stiller, & Lynch, 1994). Typically, adolescents who report greater satisfaction with friendships report less feelings related to depression, anxiety, and social stress (Demaray & Malecki, 2002).

Research Question 4. Does perceived parental support *moderate* the effect of parent-driven perfectionism on depressive symptoms in Asian American adolescents (See Figure 1)?

Hypothesis 4. Parent-driven perfectionism will significantly predict depressive symptoms among Asian American adolescents who reported low perceived parental support, but not among those who report high levels of parent support.

Rationale 4. Research indicates that perceived parental/family support serves as buffers against the effects of life stressors on depressive symptoms for adolescents under stress (Becker & Luthar, 2002; Luthar, Cicchetti, & Becker, 2000). Becker and Luthar (2002) found that adolescents whom reported higher perceived parental support reported being more well-adjusted in schools and reported less depressive symptoms. Additionally, investigators have noted that high levels of parental control and expectations in Asian families are marked not only by high expectations and tendencies toward criticism, but also by parental involvement, love, and concern (Chao, 1994). As a result, it is possible that the psychological threats associated with disappointing parents may be mitigated by the perception that high levels of closeness and support from parents will eventually be received.

Research Question 5. Does perceived peer support *moderate* the effect of parent-driven perfectionism on depressive symptoms in Asian American adolescents (See Figure 1)?

Hypothesis 5. Parent-driven perfectionism will significantly predict depressive symptoms among Asian American adolescents who reported low perceived social support, but not among those who report high levels of social support.

Rationale 5

During adolescence, peers become important part of adolescents' social networks that can serve as a form of social support (Barrera & Garrison-Jones, 1992). Studies have found that peer support in the form of close relationships and involvement with friends serve as protective buffers against parent-related stress among ethnic adolescents including Asian American adolescents (Crosnoe and Elder; 2004). As a result, it is possible that the psychological threats associated with disappointing parents and parent-driven perfectionism may be mitigated by the perception of available peer support to turn to during times of distress.

CHAPTER 4: METHOD

PARTICIPANTS

Participants will include 159 self-identified Asian American students, ages 13-18, enrolled in public high school campuses throughout Los Angeles, CA. Asian American will consist of those who identify their ethnicity on the assent forms as descendants from countries in the Far East, Southeast Asia, or the Indian subcontinent (I.e. China, Japan, Korea, India, Thailand, and Vietnam). In order to ensure adequate English reading ability, only Asian American students enrolled in general education English or Social Science classes will be allowed to participate in the study.

INSTRUMENTATION

Parent-Driven Perfectionism. The Multidimensional Perfectionism Scale – Frost (MPS-F; See Appendix A) will be used to measure the parental contributions to perfectionism (parent-driven perfectionism). Frost et al.'s (1990) self-report measure consists of 35 items measuring six different dimensions of perfectionism including *Concern over Mistakes, Doubt about Action, Parental Expectations, Parental Criticism, Personal Standards, and Organization* asking participants to rate items on a 5-point Likert-type scale ranging from 1 (*strongly disagree)* to 5 *(strongly agree).* To measure parent-driven perfectionism, only 9 of the 35 items related to the parental contributions to perfection will be used; 5 items from the *Parental Expectation* subscale and 4 items from the *Parental Criticism* subscale. Sample items include "My parents set very high standards for me" and "As a child, I was punished for doing things less than perfect". An individuals' parent-driven perfectionism composite represents the sum of mean scores

from the 4- item *Parental Criticism* and 5-item *Parental Expectation* subscales. As a result, the parent-driven perfectionism composite score could range from a value of 2 to 10 where a higher value indicates the more parent-driven perfectionism an individual experiences. The internal reliabilities for the individual subscales are .84 for the *Parental Expectation* subscale and .84 for the *Parental Criticism* subscale (Frost et al., 1990). Previous factor analytic work supports this parental relation factor of perfectionism (Purdon, Anthony & Swinson, 1999; Stober, 1998) and a previous study using the same parent-driven perfectionism composite score on Asian American college students also had a good internal consistency alpha of .86 (Yoon & Lau, 2008). Scores from the MPS subscales including the subscales in the parent-driven perfectionism composite have yielded good evidence of both construct and criterion validity (Castro & Rice, 2003; Frost et al., 1990; 1993; Yoon & Lau, 2008). Criterion validity also is evident for the parent-driven perfectionism composite with a significant and positive correlation of .54 with measures of depressive symptoms (Castro & Rice, 2003). Construct validity is evident by the subscales comprised of the parent-driven perfectionism to be significantly correlated with other perfectionism measures such as Hewitt and Flett's (1991) Multidimensional Perfection Scale (*r=.62)*and Burn's (1980) Perfectionism Scale (*r=.43) (*Flett & Hewitt, 2002)

Depression. The Children's Depression Inventory (CDI) is a widely used scale that will be used to measure depressive symptoms and their severity in children aged 7 to 17 years old, inclusively (Kovacs, 1981; See Appendix B). The CDI provides an initial indication of depressive symptoms and indicates who may need more comprehensive

evaluation. The self-report consisting of 27-items requires children to read three statements reflecting depressive symptoms and to choose the response that best describes how they have felt or acted over the past two weeks. The range of scores is from 0 to 54, with higher scores indicating a significant level of depression. Total scores of 19 indicate a significant level of depression (Kovacs, 1992; Smucker, Craighead, Craighead, & Green, 1986). The internal consistency of scores on this scale has been in the range of .71 to .89 with various groups (Kovac, 1981). The test-retest reliability of scores on the scale has been in the range of .38 to .87 in different samples of children (Kovac, 1981). The CDI has good construct validity and is significantly correlated with other measures of depressive symptoms such the Reynolds Adolescent Depression Scale (*r*=*.56*) and corresponding subscales of the Behavior Problem Checklist (*r*=*.43*) (Nieminen & Matson, 1989).

Perceived Parental Support. The Perceived Social Support for Family Scale will be used to measure the extent to which participants perceive that their needs for support, information, and feedback are fulfilled by their parents (Procidano & Heller, 1983; See Appendix C). The PSS-FA is a 20-item self-report measure that requires simple "Yes", "No" or "Don't Know" responses concerning their experiences with their parents. For each item, a "Yes" response will be scored a +1, and a "No" or "Don't Know" response will be scored 0, so that the total score will range from 0, indicating no perceived family support, to 20, indicating the maximum perceived parental support. In the initial scale construction, the measure yielded good reliability and construct validity (Procidano & Heller, 1983). In a sample of 222 college students, the coefficient alpha for this measure

was .90. Additionally, a pretest indicated a high test-retest reliability .80 (Procidano & Heller, 1983). This measure was also found to demonstrate construct validity as it is strongly correlated with other family-based perceptions with a correlation of .67 (Spieldberger & Butcher, 1992). When used in urban samples of ethnically and racially diverse adolescents, this measure also demonstrated good reliability and validity with alpha levels that ranged from .90 to .91 (Tardy, 1985; Way & Leadbeater, 1999).

Perceived Peer Support. The Perceived Social Support for Friends Scale (PSS-FR) will be used to measure the extent to which participants perceives that his or her needs for support, information, and feedback are fulfilled by friends (Procidano & Heller, 1983; See Appendix D). Similar to the PSS-FA scale, the PSS-FR is a 20-item self-report that also requires simple "Yes", "No" or "Don't Know" responses concerning their experiences with their peers. For each item, a "Yes" response will be scored a +1, and a "No" or "Don't Know" response will be scored 0, so that the total score will range from 0, indicating no perceived peer support, to 20, indicating the maximum perceived support provided by peers. Similar to the PSS-FA, the coefficient alpha in the initial scale construction was .88 with a high test reliability of .80. Factor analysis of the measure also resulted in a single-factor solution, which further indicates good internal consistency of the items within this measure. This measure has also demonstrated good internal reliability and validity when used in ethnically and racially diverse adolescents with an alpha level of .79 (Way & Robinson, 2003).

Demographic Information. Participants will answer questions on the demographic form relating to their age, sex, ethnicity, and generation status indicated by

whether they, their parents, or their grandparents were born in the U.S. The parent consent form will include a question about combined family income indicating socioeconomic status.

PROCEDURES

Approval by the Human Subjects Committee. Before beginning this study, all materials will be submitted for approval to the Institutional Review Board for the Protection of Human Subjects at the University of Texas at Austin. This study will be in compliance with the ethical standards set forth by the American Psychological Association's (APA) Code of Ethics for research with human subjects.

Approval by School District. The researcher will submit a written proposal to the superintendent of the Los Angeles school district requesting approval to conduct the research on identified campuses. After gaining approval from the district, the researcher will meet with school principals and general education English and Social Science teachers to discuss the proposed study and answer any questions the staff may have regarding the study.

Recruitment of Participants. In the beginning of one class period, 9th through 12th grade general education English and Social Science teachers will read a scripted announcement prepared by the researcher about the proposed study and invite Asian American students to participate, with an incentive to participate and be entered into a random drawing for prizes for school supplies and movie tickets to a local movie theater. A letter describing the nature of the study and parental consent forms will be given to the interested Asian American students, explaining that participation is voluntary, consent

may be revoked at any time, and refusal to participate will not affect their school standing in any way. Additionally, the researcher will also explain the study and that participation is voluntary, etc., aloud to the students and answer any questions students may have. Interested participants are asked to return with parental consent forms at a pre-appointed time to fill out the self-report measures.

Data collection. Data collection will occur in school auditoriums during a pre-appointed time that has been deemed by the individual schools as minimally intrusive to their teachers and students. Students fitting the participant criteria who have returned the parental consent form will be offered the opportunity to participate and fill out designated items from the Multidimensional Perfectionism Scale – Frost, the Perceived Social Support for Family Scale, the Perceived Social Support for Friends Scale, the Children's Depression Inventory, and the demographic sheet. Prior to receiving the questionnaires, the study will be explained again, and each student wishing to participate will be asked to sign an assent form. Similar to other studies of perfectionism, participants will be allowed to fill out the measures in any order. Graduate students familiar with the measures will oversee the data collection and answer participants' questions. After participants complete the questionnaires and return them to the graduate student, they will be given a raffle ticket to enter into the drawing for the prizes.

DATA ANALYSES AND EXPECTED RESULTS

The purpose of this study is to examine the influence of parent-driven perfectionism, perceived parental support, and perceived peer support on Asian American adolescents' depressive symptoms and to determine the moderation effects of perceived

family support and perceived peer support. To test the hypotheses, data including parent-driven perfectionism ratings, perceived parental support ratings, perceived peer support ratings, and depression scores will be analyzed using simultaneous and sequential multiple regressions.

Preliminary Analysis- Power. Before collecting data, a power analysis using G-POWER, version 3.0.10 was conducted to determine the number of participants needed in order to achieve a design with 80% power for an effect size of .05. The power was estimated for an *F* statistic testing the significance of the squared multiple correlation (R^2) representing the proportion of variance in the outcome explained by a set of 7 predictors. It was determined that a sample size of 159 achieves 80% power with a significance level (alpha) of .05.

Analysis and Expected Results. Before beginning any statistical analysis, Keith (2006) recommended preliminary analysis to examine descriptive statistics including means, standard deviations, ranges, minimums, maximums, and variances for all measures, and demographics to examine for trends and to ensure normality. To meet the assumptions of multiple regression, linearity will be checked by inspecting scatter plots of the data, the existence of normally distributed residuals will be checked by plotting the residuals against the predicted values (homoscedasticity), and variables will be checked to be normally distributed. In addition, parent-driven perfectionism, perceived parental support, and perceived peer support scores will be centered in order to reduce potential multicollinearity.

Tests of Research Questions. An alpha level of .05 will be used for all analyses within this section.

Hypothesis 1. It is hypothesized that the higher score for parent-driven perfectionism, the more severe Asian American adolescents' depressive symptoms. In this model, using simultaneous regression, CDI scores will be regressed on parent-driven perfectionism scores. To control for variance due to other factors, perceived parental support, perceived peer support, gender, SES, and generation status will also be introduced as independent variables. It is expected that higher parent-driven perfectionism scores will be associated with more severe depressive symptom scores.

Hypothesis 2. It is hypothesized that the higher perceived parental support scores, the less severe depressive symptom scores in Asian American adolescents. In this model, CDI scores will be regressed on perceived parental support scores. To control for variance due to other factors, parent-driven perfectionism, perceived peer support, gender, SES, and generation status will also be introduced as independent variables. It is expected that higher perceived parental support scores will be associated with less depressive symptom scores.

Hypothesis 3. It is hypothesized that the higher perceived peer support scores, the lower depressive symptoms scores will be in Asian American adolescents. In this model, CDI scores will be regressed on perceived peer support scores. To control for variance due to other factors, parent-driven perfectionism, perceived parental support, gender, SES, and generation status will also be introduced as independent variables. It is expected

that higher perceived peer support scores will be associated with less depressive symptom scores.

Hypothesis 4. It is hypothesized that parent driven-perfectionism will significantly predict depressive symptoms among Asian American adolescents who reported low perceived parental support, but not among those who reported high levels of parent support. Hypothesis 4 will be tested using a sequential regression. According to Aiken & West's (1991) suggested method of testing moderation effects, the variables of perceived parental support and parent-driven perfectionism will be centered, and then a cross-product will be created (perceived parental support x parent-driven perfectionism). Depressive symptoms scores from the CDI will be regressed first on a block containing the previously used background variables (SES, gender, and generational status), perceived peer support, and the two centered variables and then on a block containing the cross-product. If the interaction term in the second block is significant, following Aiken and West's (1991) recommendations, simple regression lines will be plotted for depressive symptoms on levels of parent-driven perfectionism at low and high levels of perceived parental support (1 SD below and above the mean, respectively) in order to examine the nature of the moderating effect. It is expected that parent-driven perfectionism will significantly predict depression among those who reported low perceived parental support, but not for those who reported high perceived parental support (See Figure 2).

Hypothesis 5. It is hypothesized that parent-driven perfectionism will significantly predict depressive symptoms among Asian American adolescents who

reported low perceived peer support, but not among those who report high levels of peer support. Hypothesis 5 will be tested using a sequential regression. The variables of perceived peer support and parent-driven perfectionism will be centered, and then a cross-product will be created (perceived peer support x parent-driven perfectionism). Depressive symptoms scores from the CDI will be regressed first on a block containing the previously used background variables (SES, gender, and generational status), perceived parental support, and the two centered variables and then on a block containing the cross-product. If the interaction term in the second block is significant, simple regression lines will be plotted for depressive symptoms on levels of parent-driven perfectionism at low and high levels of perceived parental support (1 SD below and above the mean, respectively) in order to examine the nature of the moderating effect. It is expected that parent-driven perfectionism will significantly predict depression among those who reported low perceived peer support, but not for those who reported high perceived peer support (See Figure 3).

Figure 2. Moderating Effects of Perceived Parental Support on Parent-Driven Perfectionism and Depressive Symptoms

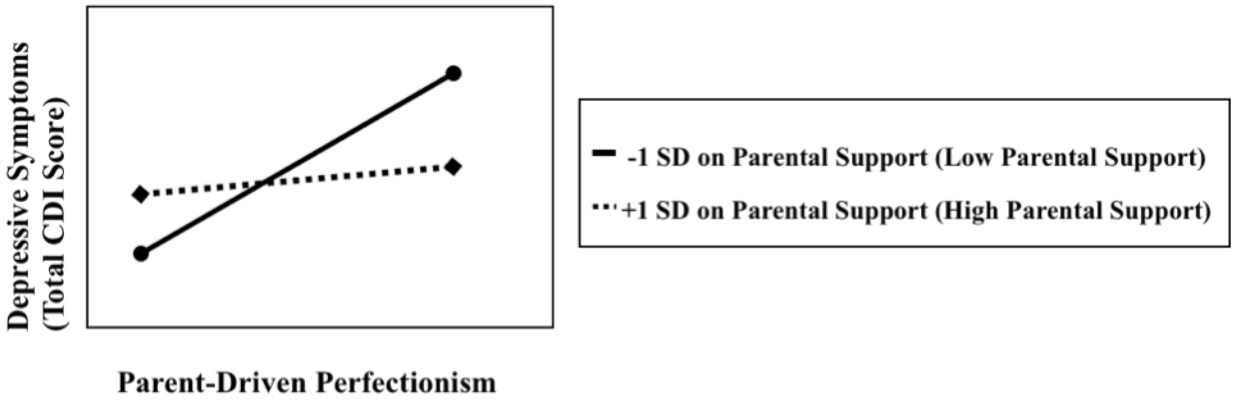
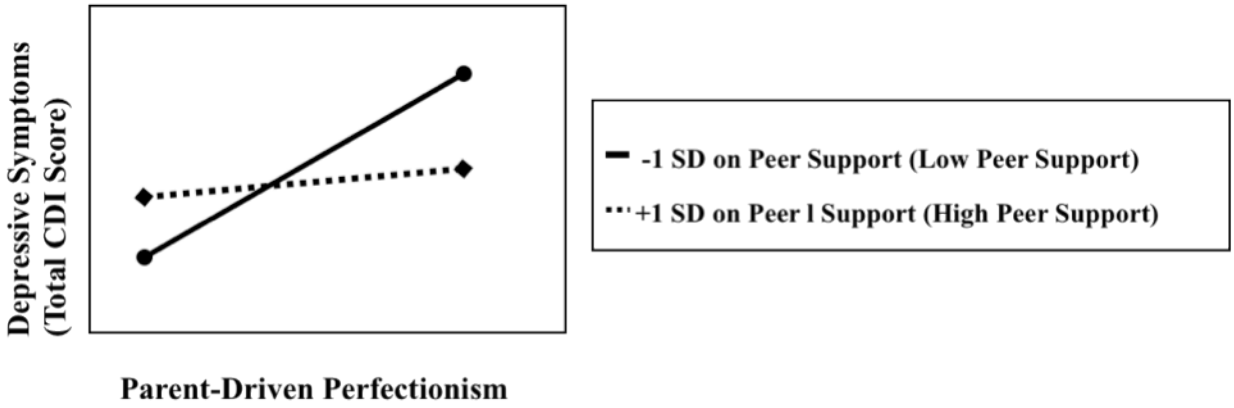


Figure 3. Moderating Effects of Perceived Peer Support on Parent-Driven Perfectionism and Depressive Symptoms



CHAPTER 5: DISCUSSION

SUMMARY

The proposed study seeks to extend current research by investigating the effects of parent-driven perfectionism, perceived parental support, and perceived peer support on depressive symptoms in Asian American adolescents. The study will also explore whether perceived parental and peer support will buffer against the effect of parent-driven perfectionism on depressive symptoms. It is expected that higher-levels of parent-driven perfectionism will be associated with greater depressive symptoms among Asian American adolescents while higher levels of perceived parental support and perceived peer support will be associated with less severe depressive symptoms. It is also expected that the effect of parent-driven perfectionism on depressive symptoms would be buffered by perceived parental and peer support. High perceived parental support and high perceived social support will protect Asian American adolescents against the negative effect of parent-driven perfectionism on depressive symptoms

LIMITATIONS AND FUTURE RESEARCH

Certain limitations of the current study may complicate the interpretation of the results. First, due to the cross-sectional nature of the study, we cannot be certain of the direction of causality. It is possible that depression tends to heighten perceptions of parent-driven perfectionism. Additionally, depressed individuals may be more aware to the possibility that they are not meeting parental expectations, may have heightened sensitivity to parental criticism, or be more likely to report poor perceived support from family and peers. A longitudinal study would help to examine the relationship between

parent-driven perfectionism, perceived family and peer support, and depression. Additionally, the use of self-reports may provide bias responses as depressive states may bias participants' self-reported responses on perceived social support and level of parent-driven perfectionism. Another limitation to this study is the generalizability of the findings to all Asian American adolescents, as different ethnicities have different cultural nuances that exist within the overarching Asian American category. Further research then could examine how different Asian American ethnicities, generation, acculturation, and gender may influence the relations between parent-driven perfectionism and depression.

IMPLICATIONS

Significant findings may have important treatment and practice implications for treating depression and maladjustment among Asian American adolescents. First, as mental health services are designed to meet the unique needs of the clients, it will be important for counselors and clinicians to consider the influence of cultural expectations and family pressures on Asian American adolescents' mental health experiences. It may be helpful for counselors to understand and even address the relational and cultural context of perfectionistic beliefs and tendencies among Asian American adolescents. While counselors should acknowledge Asian American adolescents' realistic perceptions of parental demand for excellence and perfection, they can also help Asian American adolescents learn strategies for coping with unrealistic appraisals of the consequences of not being perfect. Given the protective nature of perceived parental support, counselors can also work with adolescents to interpret parental pressures related to perfectionism as a culturally normative parental expression of love and support. Additionally, counselors

and clinicians may also elicit support from parents or peers when Asian American adolescents display depressive symptoms associated with achievement concerns due to parental pressures. Finally, counselors may also work with Asian American adolescents to enhance the quality of social relations with peers if evidence exists of maladjustment due to potential parental pressures to be perfect.

The addendum to this report contains an evaluation plan for a theoretical intervention program designed to cultivate coping strategies and alternative thoughts for unrealistic appraisals of the consequences for not being perfect as well as to elicit support from parents and peers of Asian American adolescents in order to buffer potential depressive symptoms associated with parent-driven perfectionism.

CHAPTER 6: EVALUATION PLAN

The implications for the proposed study suggested the development of an intervention to cultivate coping strategies about the unrealistic appraisals of the consequences for not being perfect. The implications also suggested the development of an intervention that elicits support from parents and peers of Asian American adolescents in order to buffer potential depressive symptoms associated with parent-driven perfectionism. The following proposed program outlines the essential components from both a decision-oriented and value-oriented approach, describes a model for the program, and proposes a method to measure the reported outcomes.

PROPOSED PROGRAM DESCRIPTION

Gateway to Success is a supplementary and free afterschool program open to all high school students designed to educate high school students about the importance of mental health (namely depression), to help cultivate healthy coping skills when faced with stress related to meeting expectations, and to provide a forum for on-going peer and adult support for the general overall well-being of the adolescents. The program uses a hybrid format for each of the sessions including psycho education, hands-on interactive group activities to practice learned skills, and a group therapy format that enables participants to connect and learn from peers experiencing similar issues related to managing academic expectations. The program operates on a quarterly schedule parallel to the quarter-system following high school and includes four 1.5 hour sessions per quarter that meet every other week after school. For each session, the licensed school psychologist in the school leads a 30 minute psycho educational talk regarding various

issues related to mental health such as information about depression, healthy coping skills, expectation management, potential cultural influences that may be contributing to stress, etc. Following the psycho education lecture, participants take part in an activity that reinforces the topic of the day, following a 30 minute group therapy format where the participants are guided by prompts from the school psychologist and have the opportunity to talk with peers experiencing similar difficulties at home and at school. The group-format is intended to enable the students to feel a sense of support from peers and adult figures within the school. While any student is allowed to enroll in the after school program, may participants enroll due to referrals from school counselors or teachers that notice certain students may need additional support in the mental health arena especially Asian American adolescents that staff notice to be experiencing some difficulties related to academic pressures. Within the program, the school psychologist can also work with adolescents to interpret parental pressures related to perfectionism potentially as a culturally normative parental expression of love and support. Each quarter, the maximum amount of participants is limited to 10 students per session in order to facilitate a sense of closeness and community among the participants.

Theoretical Orientations and Student Outcomes

To evaluate this program, I would utilize both a decision-oriented approach as well as a value-oriented approach. The first order outcome of the program would be whether the adolescents who are exposed to this program would have good understanding about various mental health issues as well as develop healthy coping skills when faced with stress related to academic pressures. From a decision-oriented approach I could

utilize the amount of the youth's knowledge about certain health issues as one objective to meet in order to meet the criteria for effectiveness. I could examine the coping skills that the adolescent know how to use when they are faced with academic pressures or unrealistic expectations as another objective to meet in order to meet the criteria for effectiveness. For example, the *Gateway to Success* Program would be considered effective if the adolescent participant's knowledge about mental health issues and coping skills increased after exposure to the four sessions within the quarterly program than before exposure to the program. Another first order outcome would be that the adolescent participant's perceived peer and parental support increased as a result of participating in the program. This could be measured by administering the Perceived Parent and Friends Support scale as a pre- and post-measure. The second order outcome of the program would be to see if the adolescent participants are actually using the coping skills and ways of communicating with their parents that they learned from the program in their everyday lives. In other words, the second order outcome would want to see if what the students have learned has actually generalized into their environment. This 2nd order outcome could be measured by reports from the teachers or staff that recommended the adolescents to the program or self-reports from the adolescents about their mental health. After meeting the 1st order outcome of gaining more information about coping skills and mental health issues, and gaining more access to peer support, participants may be happier or better adjusted to their academic environment, thus from a value-oriented standpoint, meeting the initial needs of the program.

PROGRAM DECOMPOSITION

Figure 4 represents an overview of the *Pathway to Success* program designed to educate high school students about the importance of mental health (namely depression), to help cultivate healthy coping skills when faced with stress related to meeting expectations, and to provide a forum for on-going peer and adult support for the general overall well-being of the adolescents.

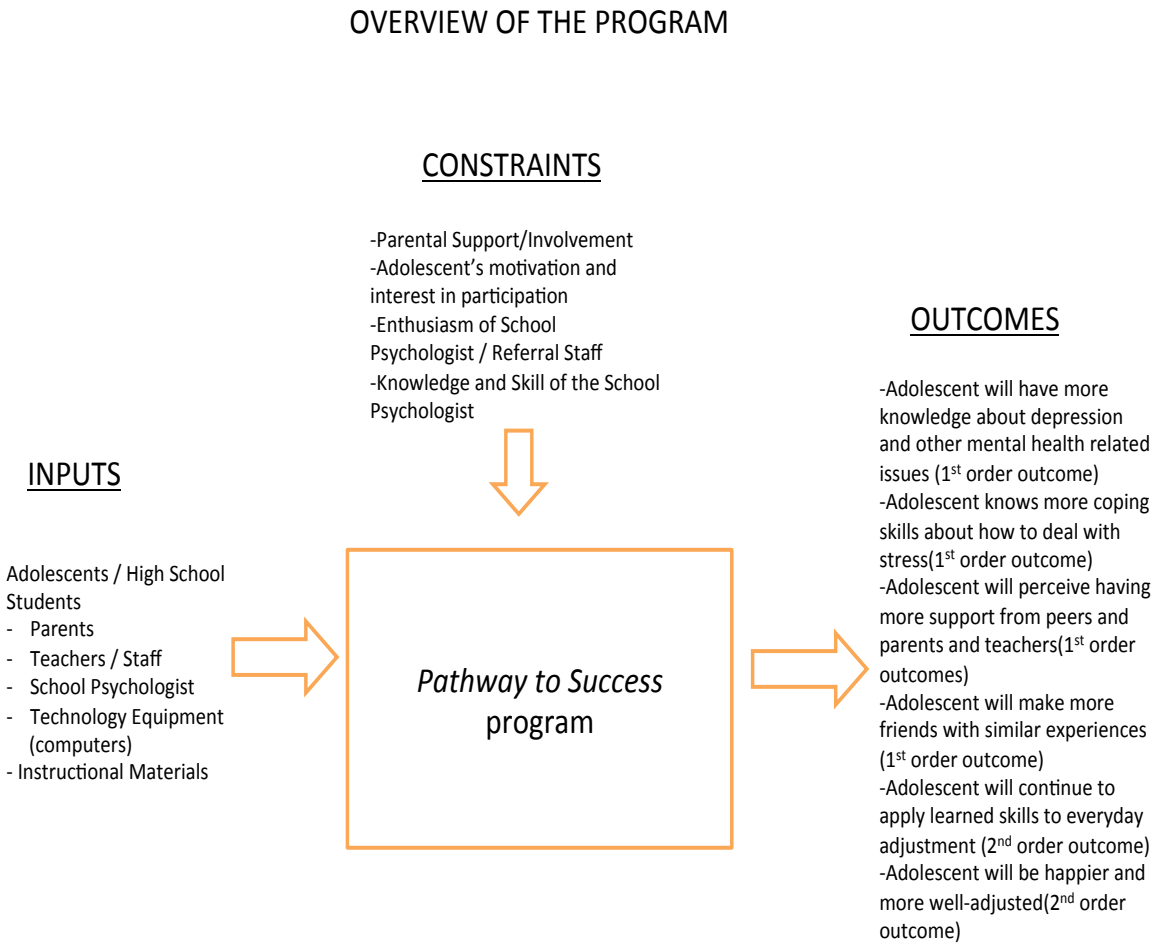


Figure 4: Overview of the program with inputs, constraints, and outcomes.

Inputs contributing to the program include the student participants, the parents of the adolescents, the school psychologists implementing the sessions, instructional materials, and technology for the program. Constraints or things that influence the outcome or goals of this intervention include the level of interest and motivation of the youth, parental involvement and support, and enthusiasm and knowledge of the staff making referrals, and the knowledge and skill of the school psychologists implementing the innovative programs. Adolescents that are already interested in learning more about mental health and meeting peers with similar experiences prior to the program will already have an advantage in obtaining the outcome and goals. Adolescents whose parents are involved and supportive also might be more motivated to participate in the program. Finally, the knowledge, enthusiasm and skills of the staff and school psychologist could also influence the youth's outcomes in this program by making it engaging, interesting, and worthwhile for the participants. First order outcomes include adolescents learning new information regarding depression and mental health related issues as well as how to protect themselves from experiencing distress. Additionally, first order outcomes also include adolescents learning coping skills to deal with stress, adolescents feeling like they have more peer and parent support as a result of being exposed to peers with similar experiences and learning how to interpret parental expectations as a form of love and support. Some second order outcomes include the adolescents being able to generalize the skills, knowledge, and perceived support that they've gained during the program to their lives even after the program is over. Another

second order outcome is that the adolescents will feel less depressed, more well-adjusted and happier in general as a result of being better able to deal with stress and pressures.

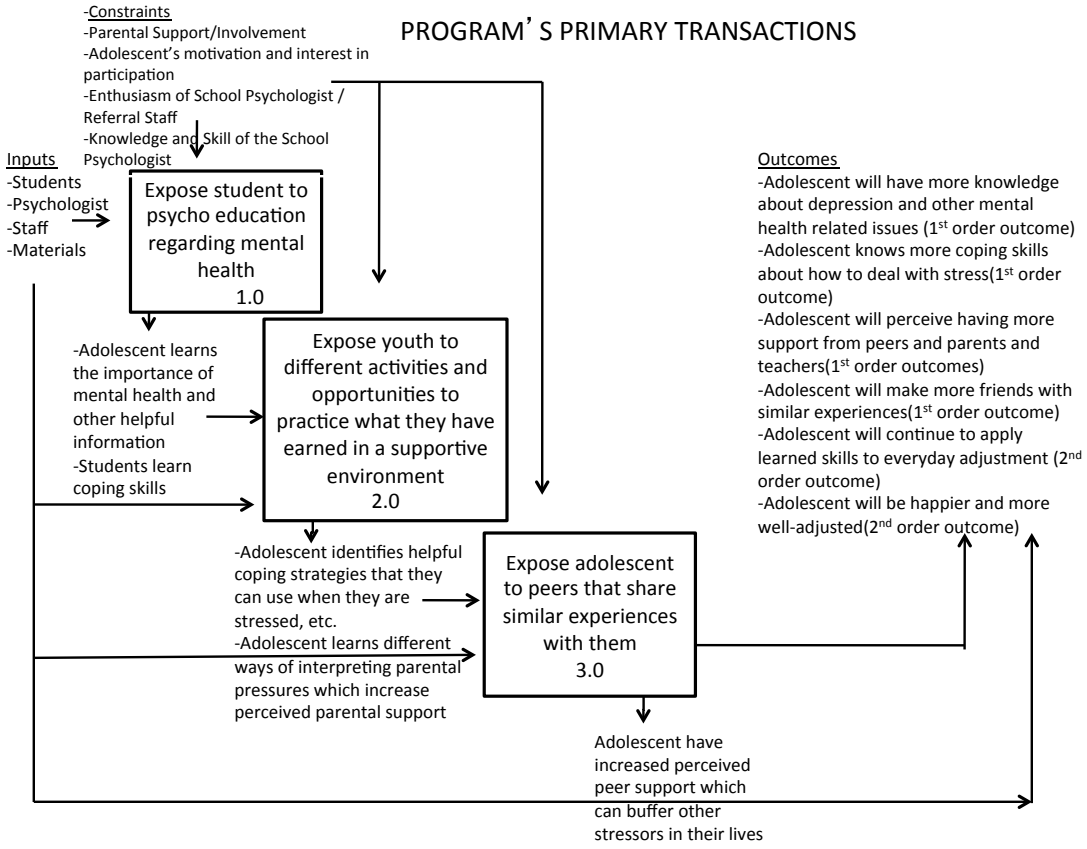


Figure 5. The program's primary transactions with inputs, constraints, and enabling outcomes.

The three main transactions that occur within the program are explained in Figure 5. The numerous transactions of the intervention program are designed to encourage the adolescent students to develop coping strategies about the unrealistic appraisals of the consequences for not meeting expectations, learn about mental health issues, and to gain support from parents and peers potentially to buffer potential depressive symptoms

associated with parental pressures. Each transaction will lead to outcomes that then serve as inputs contributing to the next transaction. In addition, each transaction is met with the same constraints as mentioned in Figure 4. Although the outcomes from the first transaction serve as inputs to the second transaction, the order of the transactions is not necessarily stagnant and firm. Transaction 1.0 is to expose the students to the psycho education regarding mental health, transaction 2.0 exposes the students to different activities and opportunities to practice what they have learned in a supportive environment and transaction 3.0 increases peer support for adolescents by providing them with a group format and supportive environment which enables them to bond with other peers. There is flexibility to the order of transactions with the program. Each transaction in the diagram tries to achieve a desired 1st or second order outcome. The constraints such as student motivation and staff buy-in, enthusiasm and skill remain throughout the transactions.

STAKEHOLDERS

Stakeholders are the people invested in the program and whom the program affects. Some stakeholders for the *Pathway to Success* program include student participants, parents, and school psychologists/ staff, and school administrators. Below are the natural language questions that each stakeholder might have regarding the program as well as the data analysis that might be used to answer each natural language questions. To determine the effectiveness of the program, the evaluator will use four main data collection and assessment tools:

- Data Collection Form: statistics and program data obtained from the schools in the evaluation
    - # of participating adolescents by grade level and ethnicity
    - # of session attended by each participant
    - Types of activities offered during each session
    - Budgets and expenditures of program events
- Parent Surveys – Pre and Post evaluation of their perception of their child's psychological state including any potential observed symptomatology.
- Adolescent Surveys – Pre and Post Surveys of symptomatology and perceived parental and peer support. Surveys asking the participants what knowledge they've learned.
- Anecdotal Records will also be collected from adolescents, parents and teachers sharing their experiences.

Responses from the survey and natural language questions asked to each of the stakeholder will subsequently be coded, chunked, analyzed, and interpreted to form coherent results.

Stakeholders 1: Students

The students are the most important stakeholders of the program as they are the ones participating in the program and of whom have most to gain and/or lose from the program. Some natural language questions that pertain to the students may be what the students learned and benefited from the *Pathway to Success* program. They may also be asked questions such as "what have you learned from the program?", "how has

participating in the program changed your perception of the people and support around you", "in what ways has the program helped you or not helped you?"

Stakeholders 2: Parents

Parents are also important stakeholders of the program, as the program will potentially shape the well being of their children and how they adjust to stressful situations. The program may also change the relationship between the students and their parents because the students will learn coping skills in order to handle stressful situations especially related to academic stress and pressures from home. It will be important to understand the parent's perception of the change that their children go through. Some natural language questions that pertain to the parents include "what kind of changes have you noticed, if any, in your child, since participating in the program", "has the program changed the nature of your relationship", "what are some things that your child has learned from the program", and "do you feel like the program was helpful? Why or why not?".

Stakeholder 3: Staff/School Psychologist/ Administrators

The overall staff in the school is also important stakeholders of the program because they are the ones in charge of designing, implementing, and helping the students. If the students change for the better and are well adjusted it would mean that the staff are successfully completing their duties as school staff. Some natural language questions to ask school personnel include " did program improve student well-being", "what did the student learn or gain from the program", "what are some difficulties that you faced in implementing the program".

APPENDIX A: MULTIDIMENSIONAL PERFECIONISM SCALE – FROST

Read each of the following items and decide how much you agree with each statement according to the following:

1	2	3	4	5
Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree

1. My parents set very high standards for me.
2. My parents wanted me to be the best at everything.
3. Only outstanding performance is good enough in my family.
4. My parents have expected excellence from me.
5. My parents have always had higher expectations for my future than I have.
6. As a child, I was punished for doing things less than perfect.
7. My parents never tried to understand my mistakes.
8. I never felt like I could meet my parents' expectations.
9. I never felt like I could meet my parents' standards.

APPENDIX B: CHILDREN'S DEPRESSION INVENTORY (CDI)

Kids sometimes have different feelings and ideas.

This form lists the feelings and ideas in groups. From each group of three sentences, pick one that describes you **best** for the past two weeks. After you pick a sentence from the first group, go on to the next group.

There is no right answer or wrong answer. Just pick the sentence that best describes the way you been recently. Put a mark like this X next to your answer. Put the mark in the box next to the sentence you pick.

1. I am sad once in a while.
   I am sad many times.
   I am sad all the time.

2. Nothing will ever work out for me.
   I am not sure if things will work out for me.
   Things will work out for me O.K.

3. I do most things O.K.
   I do many things wrong.
   I do everything wrong.

4. I have fun in many things.
   I have fun in some things.
   Nothing is fun at all.

5. I am bad all the time.
   I am bad many times.
   I am bad once in a while.

6. I think about bad things happening to me once in a while.
   I worry that bad things will happen to me.
   I am sure that terrible things will happen to me.

7. I hate myself.
   I do not like myself.
   I like myself.

8. All bad things are my fault.
   Many bad things are my fault.
   Bad things are not usually my fault.

9. I do not think about killing myself.
   I think about killing myself but I would not do it.
   I want to kill myself.

10. I feel like crying every day.
    I feel like crying many days.
    I feel like crying once in a while.

11. Things bother me all the time.
    Things bother me many times.
    Things bother me once in a while.

12. I like being with people.
    I do not like being with people many times.
    I do not want to be with people at all.

13. I cannot make up my mind about things.
    It is hard to make up my mind about things.
    I make up my mind about things easily.

14. I look O.K.
    There are some bad things about my looks.
    I look ugly.

15. I have to push myself all the time to do my schoolwork.
    I have to push myself many times to do my schoolwork.
    Doing schoolwork is not a big problem.

16. I have trouble sleeping every night.
    I have trouble sleeping many nights.
    I sleep pretty well.

17. I am tired once in a while.
    I am tired many days.
    I am tired all the time.

18. Most days I do not feel like eating.
    Many days I do not feel like eating.
    I eat pretty well.

19. I do not worry about aches and pains.
    I worry about aches and pains many times.

I worry about aches and pains all the time.

20. I do not feel alone.
    I feel alone many times.
    I feel alone all the time.

21. I never have fun at school.
    I have fun at school only once in a while.
    I have fun at school many times.

22. I have plenty of friends.
    I have some friends but I wish I had more.
    I do not have any friends.

23. My schoolwork is alright.
    My schoolwork is not as good as before.
    I do very badly in subjects I used to be good in.

24. I can never be as good as other kids.
    I can be as good as other kids if I want to.
    I am just as good as other kids.

25. Nobody really loves me.
    I am not sure if anybody loves me.
    I am sure that somebody loves me.

26. I usually do what I am told.
    I do not do what I am told most of the times.
    I never do what I am told.

27. I get along with people.
    I get into fights many times.
    I get into fights all the time.

APPENDIX C: PERCEIVED SOCIAL SUPPORT FOR PARENTS SCALE

Directions: The statements which follow refer to feelings and experiences which occur to most people at one time or another in their relationships with parents. For each statement there are three possible answers: Yes, No, Don't know. Please circle the answer you choose for each item.

Yes	No	Don't Know	1. My parents give me the moral support I need.
Yes	No	Don't Know	2. I get good ideas about how to do things or make things from my parents.
Yes	No	Don't Know	3. Most other people are closer to their parents than I am.
Yes	No	Don't Know	4. When I confide in my parents, I get the idea that it makes them uncomfortable.
Yes	No	Don't Know	5. My parents enjoy hearing about what I think.
Yes	No	Don't Know	6. My parents share many of my interests.
Yes	No	Don't Know	7. My parents come to me when they have problems or need advice.
Yes	No	Don't Know	8. I rely on my parents for emotional support.
Yes	No	Don't Know	9. There is a parent I could go to if I were just feeling down, without feeling funny about it later.
Yes	No	Don't Know	10. My parents and I are very open about what we think about things.
Yes	No	Don't Know	11. My parents are sensitive to my personal needs.
Yes	No	Don't Know	12. My parents come to me for emotional support.
Yes	No	Don't Know	13. My parents are good at helping me solve problems.
Yes	No	Don't Know	14. I have a deep sharing relationship with my parents.
Yes	No	Don't Know	15. My parents get good ideas about how to do things or make things from me.
Yes	No	Don't Know	16. When I confide in my parents, it makes me uncomfortable.
Yes	No	Don't Know	17. My parents seek me out for companionship.
Yes	No	Don't Know	18. I think that my parents feel that I'm good at solving problems.
Yes	No	Don't Know	19. I don't have a relationship with my parents that are as close as other people's relationships with parents.
Yes	No	Don't Know	20. I wish my parents were much different.

APPENDIX D: PERCEIVED SOCIAL SUPPORT FOR FRIENDS SCALE

Directions: The statements that follow refer to feelings and experiences that occur to most people at one time or another in their relationships with peers/friends. For each statement there are three possible answers: Yes, No, Don't know. Please circle the answer you choose for each item.

Yes	No	Don't Know	1. My friends give me the moral support I need.
Yes	No	Don't Know	2. Most other people are closer to their friends than I am.
Yes	No	Don't Know	3. My friends enjoy hearing about what I think.
Yes	No	Don't Know	4. Certain friends come to me when they have problems or need advice.
Yes	No	Don't Know	5. I rely on my friends for emotional support.
Yes	No	Don't Know	6. If I felt that one or more of my friends were upset with me, I'd just keep it to myself.
Yes	No	Don't Know	7. I feel that I'm on the fringe in my circle of friends.
Yes	No	Don't Know	8. There is a friend I could go to if I were just feeling down, without feeling funny about it later.
Yes	No	Don't Know	9. My friends and I are very open about what we think about things.
Yes	No	Don't Know	10. My friends are sensitive to my personal needs.
Yes	No	Don't Know	11. My friends come to me for emotional support.
Yes	No	Don't Know	12. My friends are good at helping me solve problems.
Yes	No	Don't Know	13. I have a deep sharing relationship with a number of friends.
Yes	No	Don't Know	14. My friends get good ideas about how to do things or make things from me.
Yes	No	Don't Know	15. When I confide in friends, it makes me feel uncomfortable.
Yes	No	Don't Know	16. My friends seek me out for companionship.
Yes	No	Don't Know	17. I think that my friends feel that I'm good at helping them solve problems.
Yes	No	Don't Know	18. I don't have a relationship with a friend that is as intimate as other people's relationships with friends.
Yes	No	Don't Know	19. I've recently gotten a good idea about how to do something from a friend.
Yes	No	Don't Know	20. I wish my friends were much different.

APPENDIX E: LETTER TO PARENTS

Dear Parent or Guardian,

My name is Judith Wan and I am a doctoral student in the School Psychology program at the University of Texas, Austin. Your adolescent is being asked to participate in a research study examining parental contributions to perfectionism, social support, and depression in Asian American adolescents. The current study is investigating how parental contributions to perfectionism may influence Asian American adolescents' adjustment and whether Asian American adolescents' perception of parental support or perceived peer support can influence their adjustment.

At this time, if you agree to let your adolescent participate in the study, he/she will complete four brief questionnaires at a pre-appointed time in his or her school auditorium. Your child will complete these questionnaires under the supervision of a graduate student and typically with a group of other Asian American adolescents. The questionnaires will take approximately 30 to 45 minutes to complete. As an incentive to participate, your adolescent will be given a raffle ticket to enter into a drawing in which prizes will include school supplies and movie tickets to a local movie theater.

The main risk of the study is the loss of privacy of the information the researcher will gather about your adolescent. Your adolescent may refuse to answer any questions he or she does not want to answer. Any information that is obtained from this study that can be identified with you or your child will remain confidential and will not be disclosed without your permission. Your adolescent's responses will not be associated with his/her name or your name in any written or verbal report of this research project. All records will be identified with a research-assigned number. By law, confidential information must be disclosed if your child indicates a desire to himself, herself, or others, or reports that someone is hurt.

Participation is voluntary, and you may choose to withdraw your child from the study at any time and are not required to provide a reason. Your choice to participate in the current study does not influence your current or future relationships with the University of Texas at Austin, or the Los Angeles school district in any way. If you have questions, or no longer wish to have your child participate, please contact Judith Wan at (512) XXX-XXXX.

Sincerely,

Judith T. Wan, B.A.
Doctoral Student, School Psychology
University of Texas at Austin
Departmental of Educational Psychology

APPENDIX F: PARENTAL CONSENT FORM

_____
Student's Name (please print)

_____
Parent/Guardian Name (please print)

You are making the choice by allowing your adolescent to participate in this study. Your signature below indicates that you have read the information provided above and you agree to let your adolescent participate in this study. If you decide later that you wish to withdraw your consent for your adolescent's participation you can contact the researcher, Judith Wan, at (512) XXX-XXXX. You may withdraw your adolescent's participation at any point during the study.

Please indicate **ONE** below:

_____ Yes, I do want my adolescent to participate in this study.

_____ No, I do not want my adolescent to participate in this study.

_____ I have some questions. Please contact me at: _____

Please circle your household's annual income:

$0 to $25,000
$25,001 to $50,000
$50,001 to $75,000
$75,001 to $100,000
over $100,000

_____ _____
Signature of Parent or Guardian Date

_____ _____
Signature of Investigator Date

Please ask your adolescent to return this form at the pre-appointed time to fill out the questionnaires.

APPENDIX G: STUDENT ASSENT FORM

_____
(please print your name)

I understand that I am being asked to participate in a research study about parental contributions to perfectionism, social support, and depression. I understand that my parent or guardian must give their permission for me to participate and that I may decide at any time that I do not want to participate. I understand that my responses and any information I provide will remain confidential and will not be disclosed to anyone unless I indicate that I am likely to hurt myself or others, or that someone else is hurting me.

I have read the information describing the study and I agree to participate. I have been explained of the study's purpose and procedure, and possible risks, and benefits.

Please indicate ONE below:

_____ YES, I agree to complete the questionnaires.

OR

_____NO, I do not wish to participate.

_____ _____
Signature of Student Date

_____ _____
Signature of Investigator Date

APPENDIX H: DEMOGRAPHIC SHEET

Name: _____

Birth date: _____

Check next to the box that applies to you:

Sex:

_____ Male

_____ Female

Ethnicity:

_____ Chinese _____ Indian _____ Thai

_____ Korean _____ Pilipino _____ Other: (Please specify)

_____ Japanese _____ Vietnamese

Generation Status:

____ I was born in the U.S.

____ My parents were born in the U.S.

____ My grandparents were born in the U.S.

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