

Endorsing the Model Minority Myth: A Fine Line Between Social Support, Parental  
Perfectionism and Depression Among Asian College Students

Honors Research Thesis

Presented in Partial Fulfillment of the Requirements for graduation “with Honors Research  
Distinction in Communication” in the undergraduate colleges of The Ohio State University

By

Chau-Sa Thanh Dang

The Ohio State University

April 2013

Project Advisor: Professor Susan L. Kline, School of Communication

### Abstract

Understanding the influence of social networks for Asian college students who endorse the model minority myth on mental health is the focus of this study. Asian college students (n=118) completed measures on their endorsement of positive Asian stereotypes, depression level, professional help-seeking, coping, perceived social support, person-centered messages, family satisfaction and parental perfectionism. The findings show evidence that endorsement of Asian positive stereotypes is both a help and hindrance. General Asian stereotypes predicted family satisfaction and parental perfectionism, but self-internalized Asian stereotypes predicted less depression, family satisfaction, and perceived social support. Consistent with the minority myth, depression was positively correlated with parental perfectionism, and that family satisfaction, perceived social support and parental perfectionism were inter-related. Greater endorsement of general Asian positive stereotypes moderated the effect of perceived social support on coping; with greater endorsement there was greater attempt to cope by seeking social support. Besides the moderation effects, mediation analyses showed the importance of perceived social support, in that perceived social support completely accounted for the relation of Asian family satisfaction to depression, and partially accounted for the relation of parental perfectionism to depression. As expected, person-centered messages by parents and friends were negatively related to parental perfectionism and positively associated with coping, perceived social support, and self-internalized Asian stereotypes. Implications of these findings for research on the model minority stereotype are discussed.

**Keywords:** Asian model minority myth, Asian attitudes towards professional health-seeking, social support, coping

## Endorsing the Model Minority Myth: A Fine Line Between Social Support, Parental Perfectionism and Depression

Asian Americans comprise a diverse ethnicity of over 28 Asian groups (Lee, 1997).

Despite the heterogeneity of Asians, there is a common misconception that all Asian Americans are a model minority. According to the model minority myth, Asian cultural values of close family relations, hard work, and an emphasis on education propel Asian Americans to overcome great obstacles to become successful, intelligent, and wealthy individuals (Crystal, 1989).

Endorsing these positive stereotypes may have negative consequences for Asians, affecting their psychological well-being, academic performance, and willingness to seek professional mental help (Gupta, Szymanski, & Leong, 2011). The purpose of this study is to examine the implications for Asians who endorse positive Asian stereotypes and what role having social support may play in buffering mental health outcomes. After reviewing the model minority myth and the value of social support, I describe the aims and hypotheses of the study.

### **The Asian Model Minority Myth**

#### **Origins and its Debunking**

The labeling of Asian Americans as model minorities is a racially constructed conception that triangulates Asians between African-Americans and Caucasians (Espiritu, 1997). When Asian immigrants arrived to the U.S. during the late nineteenth and early twentieth century, they were greeted with discrimination and called “yellow perils,” evoking the perception of Asians as the perpetual foreigner threatening the economic well-being and safety of America (Espiritu, 1997, p. 125). But by the 1960s attitudes towards Asian Americans began changing (Yoo, Burrola, & Steger, 2010). The very term “model” in model minority alludes to the hierarchical ranks of other minorities and how Asians serve as ideal citizens that other minorities should emulate (Yu,

2006). By pinning the success of Asians over African Americans, social injustices and inequalities created by institutional racism can be ignored (Yu, 2006). Regardless of the successful image of Asian Americans, scholars contend that continued racism and discrimination perpetuates a racial hierarchy that places Asian Americans as inferior to Caucasians (Espiritu, 1997).

The model minority myth, like any other myth, combines truths and falsehoods (Crystal, 1989). Although the success of Asian Americans such as their higher salaries and educational levels is based on census data, simply accepting these data ignores the contextual reasons for why they exist. It is true that Asian Americans have the highest income (U.S. Census Bureau, 2010). According to the 2009 U.S. Census (2010), non-Hispanic Whites earned a median household income of \$51,861 compared to \$65,469 for Asian Americans. Geographically, Asian populations are most concentrated in metropolitan areas such as New York, Los Angeles, San Jose, San Francisco, San Diego, Honolulu, and Chicago (Hoeffel, Rastogi, Kim & Shahid, 2012). These cities are high-cost areas requiring higher earnings to compensate for higher spending (Varma, 2007). While data shows that Asian Americans earn higher incomes, they also suffer from poverty more so than Caucasians (Yu, 2006). The highest poverty rates among Asian American groups are Bangladeshi (23.6%), Cambodians (19.1%), and Hmong groups (27.7%; Takei & Sakamoto, 2011).

The perpetuation of the model minority myth has a negative economic toll for Asians. Those especially affected are low-income Asian Americans who are denied government aid and social services based on their model minority status (Chao, Chui, & Lee, 2010). Asian Americans are not considered minorities by many universities and are therefore excluded from financial assistance and minority scholarships (Yu, 2006). Even though a high proportion of

Asian Americans hold advanced degrees (Yoo et al., 2010), the return on investment for Asian American education is not equal to that of Caucasians (Kim & Park, 2008). For instance, Caucasians earn \$522 more for every year of education attained (Varma, 2004), Japanese Americans earn \$438, and Chinese Americans earn \$320 for every year of education attained (Varma, 2004).

### **Influence of the Model Minority Myth on Mental Health**

Besides the racial inequalities Asian Americans face as a consequence of their model minority status, scholars find that Asian Americans also face an array of psychological effects, including depression, stress, and lack of self-worth (Gupta et al., 2011; Lee, 1996; Lee, Wong, & Alvarez, 2008). Stressors such as high expectations and peer discrimination add to the psychologically damaging experiences of Asian Americans perceived as model minorities (Lee, Wong, & Alvarez, 2008; Zhang, 2010).

For instance, a study by Gupta et al (2011) examined the mental health outcomes of the internalization of the model minority stereotype among Asian Americans. Gupta et al conceptualized the endorsement of the model minority myth by measuring beliefs of positive Asian stereotypes with regards to the Asian ethnic group and self-internalization. The aim of the study was to examine how Asian Americans' attitudes towards help-seeking and stress levels were related to their endorsement of positive Asian stereotypes with regards to themselves and for their ethnic group. Gupta et al found Asian Americans reported higher levels of psychological distress and less favorable attitudes towards professional help-seeking when they endorsed positive Asian group stereotypes. Internalization of positive Asian stereotypes negatively correlated with psychological distress and was not significant for predicting help-seeking attitudes.

Asian Americans may evaluate their own identity based on how they measure up to the model minority myth, posing a risk to their level of self-worth (Lee, 1996, p. 125). A study by Lorenzo, Frost, and Reinherz (2000) found that in comparison to Caucasian American adolescents, Asian American students had higher academic performances, yet the same Asian American students also reported higher symptoms of depression and lower satisfaction with social support compared to their Caucasian peers. Frustrations with living the duality of the model minority myth and the self sometimes lead Asian youth to counter the model minority myth by engaging in risky activities such as drug use (Hunt, Moloney, & Evans, 2011) and gang activity (Chae, 2004).

Perception of Asian Americans as model minorities also targets them for discrimination and harassment (Lee, Wong, & Alvarez, 2008). A qualitative study by Qin, Way, and Mukherjee (2008) found that the perception of Chinese American adolescents as model minorities was positively related to their experiences of harassment and feelings of tension and alienation. When Asian success begins to reflect poorly on Caucasian downward mobility, Asians start to become viewed as less of a model minority and more as a domineering threat to Caucasian status (Lee, 1996). Especially at universities where the Asian student body is disproportionately larger, students may even go so far as to avoid classes with Asians from fear of their unfair competitive advantage (Lee, 1996, p.123). Concerns with perceived racial discrimination are also associated with higher risks of psychological distress, anxiety, and depression (Hwang & Goto, 2008). Negative social interactions with Asians is reflected in Zhang's (2010) study of college students' perceptions and interactions with African American, Hispanic, Caucasian, and Asian students. Zhang (2010) found that Asians were most likely to face peer rejection and were least likely

initiated in friendships, which may be damaging to their psychological development (Zhang, 2010).

### **Model Minority Familial Pressures**

Internalization of the model minority myth may be shaped in part by Asians' home environment and family life. Counter to American philosophy which encourages decision-making in the best interest of the individual, Asian American culture encourages decisions that are in the best interests of the family, such as which major to pursue in college (Wong & Halgin, 2006). Hence, education is highly valued by young adult Asians since they often feel that earning a degree in higher education is an achievement for the family (Lee, 1997).

In a study by Yao (1985) comparing high-achieving students of Asian American and Anglo American families, both groups of families shared many similarities in terms of interest, concern, and support of their children, but Asian American parents placed higher values on education and had higher expectations on grades than Anglo American parents. These pressures to achieve may lead to feelings of shame for not measuring up to the standards of the model minority (Lee, Wong, & Alvarez, 2008) and higher levels of depression (Gupta et al., 2011; Yu, 2006).

The model minority myth's emphasis for Asian Americans to exceed academically may account for their perfectionist tendencies, higher concerns with making mistakes, and having self-doubt (Castro & Rice, 2003). This perfectionist characteristic of Asian Americans may stem from fear of criticism from their parents if they do not meet their expectations (Choi, Rogers, & Werth, 2007). Feelings of shame or guilt may lead Asian Americans to silence personal issues which contradict the model minority stereotypes (Lee, Wong, & Alvarez, 2008).

Studies assessing the effect of internalizing positive stereotypes on academic performance have produced mixed results in regards to whether the stereotype was blatantly activated or subtly activated. In a study by Cheryan and Bodenhausen (2000), Asian American college students were administered a questionnaire measuring ethnic salience and then completed a math skills assessment. Asian Americans in the ethnicity salience manipulation had lower scores than the other condition, suggesting the manipulation made it more difficult to concentrate. By emphasizing the exceeding math skills of Asians in the questionnaire, a lack of concentration may have resulted from fear of undermining the reputation of Asians (Cheryan & Bodenhausen, 2000). Findings from Shih, Ambady, Richeson, Fujita, and Gray (2002) suggest that even if subtly activated, stereotypes can still have a moderating influence on behavior. When given a questionnaire with an implicit manipulation suggesting that Asians are good at math, Asian Americans had higher scores on a quantitative test compared to those with a blatant positive stereotype manipulation (Shih et al., 2002).

Asian Americans are currently the fastest growing population of any other race in the U.S. (Hoeffel, Rastogi, Kim & Shahid, 2012). As the Asian American population continues to expand, it is important that knowledge of Asian American mental health issues increases. Suicide continues to be a leading cause of death for Asian Americans and is prevalent among young adults ("Health, United States, 2010," 2011). By exploring factors such as the model minority myth's influence on the mental health and well-being of Asian Americans, more possibilities can be developed for improvement.

### **Perceived Social Support, Support-Seeking, & Mental Health**

It is clear from the literature that Asian Americans experience a wide variety of stressors as a result of their model minority status. Often we address stressors by seeking social support



from those we are close to in our social network (Burleson, 2003). Social support may be a resourceful way to cope with the negative effects of stress (Goldsmith, 2004) by providing clarity and problem-solving solutions (Burleson, 2010).

Burleson and MacGeorge (2002) define social support or supportive communication as “verbal (and nonverbal) behaviors intended to provide or seek help.” Support can come from a wide range of members such as friends, family, significant other, coworkers, and membership in group organizations (Cohen, 1988). Commonly recognized forms of social support include emotional support (showing concern or care), informational support (providing advice or new perspectives), tangible support (offering material assistance such as money), esteem support (reassuring one’s self-worth), and network support (expressing belonging to a group; Goldsmith, 2004, p. 13). Research finds many beneficial psychological outcomes of social support, including lower levels of depression (George, Blazer, Hughes, & Fowler, 1989), lower levels of stress (Cohen & Hoberman, 1983), higher self-esteem (Cramer, 1985), and better satisfaction with life (Wan, Jaccard, & Ramey, 1996). Social support can even have a positive influence on physical outcomes. Studies suggest that emotional support may speed up recovery times of diseases and injuries (Anson, Stanwyck, & Krause, 1993; Glass & Maddox, 1992) and improve immune functions (Ader & Cohen, 1984).

Perceived social support is also an equally important factor which yields many benefits. Sarason, Pierce, and Sarason (1990) have found that greater perceived social support fosters a sense of acceptance and higher positive attributes in individuals. Findings by Sarason, Sarason, and Shearin (1986) also suggest that those with greater perceived social support have better interpersonal skills to become adept in effective communication interactions and leadership roles. Moreover, the perception of a reliable social network is enough to reduce stress

(Furukawa, Sarason, & Sarason, 1998) and decrease levels of depression (Lynch, Mendelson, Robins, Ranga, Krishnan, George, Johnson, & Blazer, 1999).

The quality and sensitivity of received support is an important factor in effective social support (Burleson, 2003). Insensitive emotional support may result in poorer coping, exacerbate levels of stress, and lower relationship satisfaction. Messages which condemn, criticize, or challenge the individual seeking support are consistently found to be unhelpful and dysfunctional forms of social support (Burleson & Samter, 1985). Helpful messages on the other hand, exhibit supportive intentions, positive facework (messages which do not negatively affect one's self-esteem or competence), and person-centered qualities (Burleson, 2003). Burleson (1987) describes person-centered messages as behavior which "reflects an awareness of and adaptation to the subjective, affective, and relational aspects of communicative contexts." High person-centered messages will provide comprehension, understanding, elaboration, and broader perspectives of the situation experienced by the distressed other (Burleson, 2003). Messages high in person-centered qualities are considered more sensitive and an effective way to decrease feelings of stress (Jones & Guerrero, 2001).

Although social support is a fundamental aspect of human interaction (Burleson & MacGeorge, 2002), functions of social support varies culturally (Cohen, 1988). In the case of Asian Americans, previous research finds they are less likely than European Americans to engage in social support for stress coping (Taylor, Sherman, Kim, Jarcho, Takagi, & Dunagan, 2004), which may be an implication of the model minority stereotype that all Asians are high achievers. By failing to meet normative expectations (low internalization of positive Asian stereotypes), social integration is not met and therefore self-esteem is lost (Cohen, 1988). However, if internalization of positive Asian stereotypes is high, Asians may feel a greater sense

of social integration, thus resulting in greater perceived social support and self-worth (Cohen, 1988).

Asian Americans are found to utilize social support from family or friends after dealing with a problem alone does not succeed (Uba, 1994, p. 199). Taylor and colleagues (2004) found in a comparison of Asian and European American use of social support and stress coping, Asians turned to their social networks for stress less than European Americans, from fear of causing relationship strain, preferring to maintain harmony among their social network instead. But by not engaging with one's social network for support, Asians and Asian Americans may risk losing benefits such as gaining helpful information and coping strategies.

Although Asians may seek social support less than European Americans, the importance of having social support is still equally useful. According to a study by Xu and Burleson (2003), both Chinese and American married individuals identified emotional support as the most important form of social support to receive from spouses. Burleson and Mortenson (2003) also found that American and Chinese individuals both preferred highly person-centered messages over low-person centered messages, but interestingly, Chinese individuals found low-centered messages to be more sensitive than did American individuals.

### **Professional Help-Seeking Attitudes**

While social support can be beneficial in decreasing stress, it is equally important to have adequate access to mental health services should problems become severe or if social support is lacking (Choi et al., 2007). Unfortunately, stigma surrounding mental health is a major barrier for Asian Americans who need or desire to seek professional help (U.S. Department of Health and Human Services, 2001). Only 17% of Asian Americans sought help for a psychological problem and 6% of those sought help from a mental health provider." (U.S. Department of

Health and Human Services, 2001). Moreover, Asian Americans who seek therapy tend to do so once levels become severe (Uba, 1994, p. 198). Mental health stigma can be found across a variety of Asian ethnic groups, stemming from feelings of shame which in turn reflects poorly on the family (Uba, 1994, p. 199). Academic career centers on the other hand, tend to be over-utilized by Asian Americans (Solberg, Ritsma, Davis, Tata, & Jolly, 1994). Asian American college students reportedly seek help for academic or career problems while Caucasian college students focus more so on seeking support for emotional or interpersonal problems (Uba, 1994, p. 160).

Generational status and citizenship appears to play a role in the utilization of mental health service use. Le, Zane, Cho, and Takeuchi (2009) analyzed data from the 2002-2003 National Latino and Asian American Study and found that U.S.-born Asians utilized mental health services more than immigrants. Abe-Kim et al. (2007) found in a sample of 2,095 Asian Americans, that 62.6% of those with a probable mental disorder who sought help were third-generation or later as compared to 30.4% mental health service use from first-generation respondents. Thus, it appears that certain conditions make it more likely for Asians to use professional mental health services. While stigma curbs the willingness to utilize mental health services, factors such as severity and generational status may influence the decision to seek professional help.

### **Research Aims and Hypotheses**

The overall aim of this study is to understand the effect of endorsing general elements of the model minority stereotype and internalizing the Asian model minority stereotype on the mental health status of Asian American college students. The hypotheses and research questions are organized into five groups.

### **Health-Related Differences in the Endorsement of General and Self-Internalized Asian Stereotypes**

Whether the endorsement of positive Asian stereotypes affects the role of social support in helping Asians who are undergoing stress is not known. The model minority myth's emphasis on diligence may account for the avoidance of social support among Asian Americans. However, subtly activated positive stereotypes have resulted in improved academic performance, making it possible for Asian Americans to have increased confidence. Thus, it may be the case that the endorsement and internalization of positive Asian stereotypes may influence coping by seeking social support and perceived social support for health issues. Gupta and his associates (2011) found that endorsement of general and self-internalized Asian stereotypes both predicted depressive symptoms, while endorsement of general Asian stereotypes predicted negative attitudes towards professional help-seeking. Given these findings, I expected that the general endorsement of Asian model minority stereotype by Asian college students would be associated with higher levels of depression and negative attitudes towards professional help-seeking, but that self-internalized stereotypes would not be so related:

H1: Asian college students' general endorsement of positive Asian stereotypes (but not self-internalized stereotypes) is associated with (a) higher levels of depression and (b) higher negative attitudes towards professional help-seeking.

### **Correlates of Asian college students' depression level, professional help-seeking, and coping**

Based on previous research, it is reasonable to expect that Asian students' level of depression and professional help-seeking may be associated with Asian family dynamics as well as students' efforts at seeking available social support. Specifically, I hypothesized:

H2: Level of depression in Asian college students is negatively associated with coping, perceived social support and family satisfaction, and positively associated with parental perfectionism; likewise, professional help-seeking is positively associated with coping, perceived social support and family satisfaction, and negatively associated with parental perfectionism.

Similarly, Asian college students' coping with their mental health issues by seeking support is likely to be associated with the social support they perceive from friends and family, but negatively with parental perfectionism, an element of the Asian minority stereotype:

H3: Coping by support seeking among Asian college students is positively associated with perceived social support and family satisfaction, but negatively associated with parental perfectionism.

Given that there is far less research documenting the role of positive Asian stereotype endorsement on coping and social support, I next explore the relationship between stereotype endorsement, family dynamics, and social support. A general research question was posed:

RQ1: What is the relationship between Asians' endorsement of positive Asian stereotypes (both general and self-internalized) and family satisfaction, parental perfectionism, perceived social support, and support seeking?

### **The Moderating Role of the Model Minority Stereotype**

A next series of hypotheses tested the moderating role of model minority stereotypes on the relationship of perceived social support and coping on mental health. Endorsement of the Asian minority stereotype may likely have a tampering effect on employing social support in maintaining mental health, for fear of shame, stigma, and failure. Endorsement of the stereotype may also constrain the effect of social support on coping. Thus, a fourth hypothesis was formulated:

H4: Endorsement of positive Asian stereotypes will moderate the relationships between (a) perceived social support and coping on depression and help seeking, and (b) the relationship between perceived social support and coping.

### **Asians' Social Support as a Mediating Process of Family Dynamics and Depression**

A next hypothesis posits a theorized mediation between family satisfaction, parental perfectionism, perceived social support, and depression. Given the important role of social support in linking family structures, beliefs and values to health outcomes, theoretically it should be the case that supportive communication practices should mediate links between family evaluations and mental health. Social support is the social process that expected to mediate the relationship between family satisfaction and depression, as well as the relationship between parental perfectionism and depression:

H5: Perceived social support mediates the relationship between family satisfaction and depression, as well as the relationship between parental perfectionism and depression.

### **Person-Centered Messages**

A final hypothesis explored the relationship between person-centered support messages expressed by parents and friends and mental health. Research on person-centered support messages would suggest that they would not be associated with parental perfectionism, but be more likely to be elements of a perceived socially supportive network:

H6: Person-centered support messages from parents and friends is positively associated with perceived social support, coping and family satisfaction, and negatively associated with parental perfectionism.

## **Method**

### **Participants and Procedure**

Participants were 118 self-identified Asian undergraduate and graduate students at a large Midwest U.S. university. Participants ranged in age from 18 to 31 ( $M = 20$ ) years. The sample was 68% female; ethnicities included Chinese (37%), Indian (12%), Taiwanese (6%), Vietnamese (11%), Filipino (5%), Japanese (3%), Korean (6%), and 11% other (multiracial, biracial, Bengali, Hmong, Malaysian, Pakistani, Sri Lankan, and Laotian). U.S. citizenship status was 68%. Participants were 46% first generation, 21% second generation, and 5% third or older generation; 29% were international students.

Students were recruited to complete an online questionnaire in three ways, through Asian student organizations, academic classes, and Asian programs. Asian student organizations included the Vietnamese, Taiwanese, Chinese and Japanese Student Associations, Kappa Phi Lambda, and Pi Delta Sci. Students were also recruited through classes in the School of Communication, the Multicultural Center, and the Asian American studies program. Recruitment was done through emailing and social media, and participants were awarded \$10 upon completion of the online questionnaire.

An IRB approved mixed methods questionnaire was developed to measure the nine study constructs. General demographic information such as gender, race, nationality, generational status, and school rank were initially collected, after which participants completed a series of scales to measure the study constructs. The final component of the questionnaire posed two problem vignettes to learn the types of social support that were available to participants.

### **Instrumentation**

**Endorsement of Positive Asian Stereotypes-Group.** Participants' endorsement of the Asian minority myth was examined in two ways. In the first, participants completed the 11-item Attitude toward Asian Americans Scale (ATA; Ho & Jackson, 2001). This instrument was



developed to assess the degree to which participants endorse general positive stereotypes about Asian-Americans. Items focus on the extent to which participants endorse beliefs about the intelligence, diligence and hard work of Asians and the close ties that characterize Asian families; items also focus on the value and importance of intelligence, diligence and hard work of Asians and closeness of Asian families to the U.S. The scale used a 5 point Likert response format (Strongly Disagree to Strongly Disagree; e.g., “Generally, Asian Americans are smart.” Items were averaged to denote greater endorsement of positive Asian stereotypes at the group level. Descriptive statistics for all the variables are presented in Table 1; the *Cronbach’s alpha* for the group endorsement of positive Asian stereotypes was .86.

**Endorsement of Positive Asian Stereotypes-Self.** The second way the Asian model minority myth was assessed was with Gupta et al.’s (2011) modification of the ATA scale. Gupta et al altered the 11 items to assess participants’ endorsement of positive Asian stereotypes with regard to their own sense of self (e.g., “I am smart”). As expected, they found negative associations with psychological distress. Like Gupta et al., the items were averaged to denote greater endorsement of self-Asian positive stereotypes. The *Cronbach’s alpha* was an acceptable .85.

**Depression.** The shortened version of the Iowa CES-D depression symptoms index (Radloff, 1977) was used to assess the depression level of the participants. After comparative assessment, Kohout, Berkman, Evans, and Cornoni-Huntley (1993) have recommended this measure for its validity and reliability. The Iowa form consists of 11 statements that describe depressive symptoms (e.g., “I could not get “going”), each of which is rated from 0 (hardly ever or never) to 2 (much or most of the time) to indicate the severity of depression felt by the

respondent over the past week. Two items were reversed scored and all items averaged to indicate higher levels of depression. The *Cronbach's alpha* was an acceptable .83.

**Attitudes towards Seeking Professional Help.** To measure attitudes towards mental health services, participants completed the shortened version of the Attitude Towards Seeking Professional Psychological Help Scale (Fisher & Farina, 1995). Using this measure has been associated with higher intentions to seek professional help (Elhai, Schweinle, & Anderson, 2008). Ten items measuring participants' perceived value of utilizing professional mental help services were completed using a 4 point Likert response format (0 (Strongly Disagree) to 3 (Strongly Agree); e.g., "Considering the time and expense involved in psychotherapy, it would have doubtful value for a person"). Five items were reverse scored, with all items averaged to indicate participants' attitudes towards professional help-seeking. The *Cronbach's alpha* was an acceptable .70.

Table 1

**Descriptive Statistics and Correlations for the Variables in the Study**

<b>Variable</b>	<b>M (SD)</b>	<b>1</b>	<b>2</b>	<b>3</b>	<b>4</b>	<b>5</b>	<b>6</b>	<b>7</b>	<b>8</b>
1. Endorse Asian Stereo-Group	3.62 (.51)	--							
2. Endorse Asian Stereo-Self	3.62 (.60)	.16	--						
3. Depression Level	1.64 (.38)	.13	-.19*	--					
4. Prof. Help-Seeking Attitudes	2.41 (.49)	.12	.04	.14	--				
5. Coping by Support Seeking	3.73 (.40)	-.03	.13	-.22*	-.27**	--			
6. Perceived Social Support	2.47 (.40)	-.04	.37***	-.39***	-.13	.53***	--		
7. Person-Centered Messages	5.25(1.10)	-.06	.20*	-.09	-.20*	.28**	.21*	--	
8. Family Satisfaction	3.46 (.92)	.31**	.48***	-.19*	-.05	-.01	.39***	.10	-
9. Parental Perfectionism	2.97(1.03)	.20*	-.12	.24**	.26**	-.17#	-.37***	-.31**	-.49***

# p < .10; \*p < .05; \*\*p < .01; \*\*\*p < .001.

**Coping by Seeking Social Support.** To determine the extent to which individuals coped with their stress by seeking social support, participants completed items from the coping inventory developed by Carver, Scheier and Weintraub (COPE; 1989). Functional coping, such as seeking social support, is positively associated with psychological well-being (Meyer, 2001). The theoretically grounded inventory measures 13 coping strategies using four items to measure each strategy (e.g., “I try to get advice from someone about what to do”). For this study eight items were chosen that were designed to assess the strategies for seeking emotional social support and instrumental support. Participants rated how much they saw each statement as their response to stress (e.g., “I try to get advice from someone about what to do;” “I discuss my feelings with someone”). Statements were rated with on 5-point scales anchored by 1 (not at all like me) and 5 (just like me). The *Cronbach’s alpha* for this sample was .87.

**Perceived Social Support.** Participants completed the component of the Duke Social Support Index that measured perceived social support (Landerman, George, Campbell, & Blazer, 1989). The Landerman et al instrument assesses the extent to which participants feel valued and useful by one’s personal network, and whether one’s personal network would provide support if needed( e.g., “In times of trouble, can you count on at least some of your friends and family?”). Participants rated six items on a three-point continuum (“hardly ever,” “some of the time,” and “most of the time”). Low perception of perceived social support is associated with levels of depression (George et al., 1989). The *Cronbach’s alpha* was .79.

**Satisfaction with Family Life.** To examine what role family members played in coping with mental health problems, participants completed the Satisfaction with Family Life (SWFL) Scale (Zabriskie & McCormick, 2003). This scale consists of five statements about the degree to which a person is satisfied with his or her family life (e.g., “In most ways, my family life is close

to my ideal”). Each item was completed with a Likert response format ranging from 1 (strongly disagree) to 5 (strongly agree), with items averaged to denote greater satisfaction with family life. This conception of family satisfaction has been related to family leisure, family cohesion and family adaptability (Agate, Zabriskie, Agate & Poff, 2009). In this sample the *Cronbach's alpha* was .87.

**Parental Perfectionism.** Participants completed three items from the Multidimensional Perfectionism Scale (Frost, Marten, Lahart, & Rosenblate, 1990). Of these items, two were included in this report, as they enabled a clear expression of the Asian model minority myth (i.e., “If I am not perfect, I feel that my parents will be upset with me.”). The *Cronbach's alpha* was .61.

**Person-Centered Support Messages.** Besides obtaining a general measure of perceived social support from parents and friends, an actual measure of support messages was also obtained. Participants were given two scenarios in which they were asked to respond to situations in which they are undergoing stress from various reasons. Both scenarios and their instructions are presented below:

**Scenario 1:** It is common from time to time to endure a "rough patch." Say for various reasons (relationship issues, roommate issues, financial issues, or difficult coursework) you are going through a tough time. Unfortunately, your grades have dropped significantly because of this tough time. Your parents have discovered your poor grades and want to talk about it.

**Scenario 2:** Think of a time when you had too many responsibilities at once. This could be due to various activities (homework, projects, extracurricular activities, work,

relationship issues, living independently, etc...) and you were not sure how to cope with all the stress. You started to feel extremely overwhelmed.

Participants answered whether or not they would disclose the situation with someone in their social networks like a friend, family, or religious figure. Answers were written to resemble a realistic conversation in which they confided with someone in their social network, and how the other person would respond. Participants rated how realistic they felt each situation would be on a 1-3 unrealistic-very realistic scale. Each situation was rated between somewhat and very realistic ( $M_s = 2.43, 2.66$ ).

Responses were coded using Burleson's (1984; Burleson & Samter, 1985) nine-level hierarchical coding system of comforting strategies. This hierarchy captures the degree to which messages either denied the legitimacy of the other's perspective, implicitly acknowledged and legitimated the other's perspective, and explicitly legitimated and developed the other's perspective. To assess intercoder reliability, codings on 10% of the sample were conducted by two raters, and the resulting *Cohen kappa* was an acceptable .78.

## Results

The hypotheses were tested and research questions answered with Pearson correlations and a series of moderated regression and mediation analyses. The mediation analyses were conducted using Hayes PROCESS computation tool for path analysis-based moderation and mediation analysis (Hayes, 2013). The results are presented in five sections, corresponding to the sets of hypotheses advanced.

### **Differences in the Endorsement of General and Self-Internalized Asian Stereotypes**

Hypothesis 1 predicted that Asian college students' endorsement of positive Asian stereotypes (both general and self-internalized) would be associated with higher levels of

depression and higher negative attitudes towards professional help-seeking. Pearson correlations of these constructs are presented in Table 1. H1 was disconfirmed for the general Asian positive stereotype endorsement, as it was not significantly associated with depression or professional help-seeking ( $r_s = .13, .14, ns$ ). Table 1 also reports that self-internalized stereotypes were negatively associated with depression level ( $r = -.19, p < .05$ ) and not associated with professional help-seeking ( $r = .02, ns$ ). Asians who had internalized positive Asian stereotypes were actually less likely to report depression.

H1 was further assessed with two hierarchical regression analyses on general and self-internalized Asian positive stereotypes that are presented in Table 2. These regressions also addressed the first research question, which asked about the differences between general and self-internalized Asian stereotypes in their relationship to four other constructs: family satisfaction, parental perfectionism, perceived social support and coping by support seeking. Since Gupta et al (2011) found that gender and generational status influenced depression and professional help-seeking attitudes, these variables were entered as control variables in the first step of the regressions. At Step two coping, perceived social support, family satisfaction and parental perfectionism were entered, which were mean-centered prior to entry.

Table 2

**Hierarchical Regressions Predicting General and Self-Endorsed Asian Stereotypes in Asian American College Students**

Step/Variable entered	B	SE	$\beta$	t	B	SE	$\beta$	t
	Group Stereo				Self-Stereo			
<b>Control Variables</b>								
Gender	-.12	.10	-.11	-1.20	.02	.10	.01	.171
Generational Status	-.05	.06	-.07	-.813	.02	.05	.03	.736
<b>Main Effects</b>								
Coping	.13	.08	.17	1.62	.07	.07	.09	1.04
Perceived Social Sup	-.15	.16	-.12	-.985	.28	.13	.20	2.10*
Parental Perfectionism	.11	.05	.21	2.30*	.06	.04	.10	1.34
Family Satisfaction	.23	.05	.41	4.30***	.24	.05	.37	4.82***
Depression	.21	.12	.16	1.73	-.08	.11	-.06	-.731
Prof. Help-Seeking	.12	.10	.11	1.20	.11	.09	.10	1.29
<b>Summary</b>	<b>R</b>	<b>Adj.R2</b>	<b>F</b>	<b>p</b>	<b>R</b>	<b>Adj. R2</b>	<b>F</b>	<b>p</b>
	.45	.16	3.961	.001	.52	.23	7.34	.001

\*p < .05; \*\*p < .01; \*\*\*p < .001. Variables are reported at initial entry



Table 2 shows that the covariates were not predictive of general endorsed Asian stereotypes on Step 1 (adjusted  $R^2 = .01$ ,  $F = .639$ ,  $ns$ ), and neither depression nor help seeking attitudes predicted general endorsed Asian stereotypes on Step 2. However, the regression analysis was significant at Step 2,  $R = .45$ , *adjusted*  $R^2 = .14$ ,  $p < .001$ , with parental perfectionism and family satisfaction significant predictors ( $\beta_s = .23, .41$ ). Table 2 also reports the regression for self-internalized Asian stereotypes. In that analysis the control variables were not significant at Step 1,  $R = .04$ ,  $F = .132$ ,  $ns$ , but the analysis was significant at Step 2,  $R = .52$ , *adjusted*  $R^2 = .23$ ,  $F = 6.98$ ,  $p < .01$ . Neither depression nor help-seeking predicted self-internalized Asian stereotypes. However, perceived social support and family satisfaction predicted self-internalized Asian stereotypes ( $\beta_s = .23, .36$ ). The regressions provided answers to RQ1, in that general and self-internalized Asian positive stereotypes were associated with the constructs of the study in different ways. While both types of endorsement of Asian stereotypes were positively associated with family satisfaction, only endorsement of self-internalized Asian stereotypes was positively correlated with perceived social support, and only general endorsed Asian stereotypes was positively correlated with parental perfectionism. These findings show that the two ways of endorsing Asian stereotypes were associated with different constructs.

### **Social Support, Family Dynamics on Depression, Help-Seeking, and Coping**

Hypothesis two predicted that Asian college students' level of depression and help-seeking would be associated with coping, perceived social support, family satisfaction and parental perfectionism. Table 1 shows that H2 was wholly confirmed for depression level, in that depression was weakly correlated with coping and family satisfaction ( $r_s = -.22, -.19$ ,  $p < .05$ ), and moderately correlated with perceived social support and parental perfectionism ( $r_s = -.39, .24$ ,  $p < .01$ ). However, H2 was only partly confirmed for professional help-seeking attitudes, in

that help-seeking was not associated with social support or family satisfaction, but was weakly correlated with coping and parental perfectionism ( $r_s = -.24, .24, p < .01$ ). As expected, family satisfaction, perceived social support and parental perfectionism were inter-correlated ( $r_s = -.49$  to  $.39$ ).

### **The Moderating Effects of Positive Asian Stereotypes**

H2, H3, and H4 were further tested in a series of three hierarchical regressions on depression, professional help-seeking, and coping. Similar to H2, H3 predicted that Asian college students' coping with support seeking would be positively associated with perceived social support, family satisfaction, and parental perfectionism. H4 predicted that endorsement of positive Asian stereotypes would moderate the relationship between perceived social support, coping and the health constructs. In these regressions the stereotype measures and other study constructs were mean centered and entered on Step 2 after the gender and generational status covariates were entered on Step 1. Interaction terms were created for the Asian stereotypes, social support and coping, which were entered on Step 3 of each equation. Evidence for a moderator effect is indicated at Step 3 by significant beta weights for the particular interaction term. The results for these regressions are presented in Table 3.

Table 3

**Hierarchical Regressions Predicting Depression, Professional Help-Seeking, and Coping in Asian-American College Students**

Step/Variable entered	B	SE	$\beta$	t	B	SE	$\beta$	t	B	SE	$\beta$	t
	<b>Depression</b>				<b>Help-Sk</b>				<b>Coping</b>			
<b>Control Variables</b>												
Gender	-.07	.08	-.08	-.814	-.17	.09	-.16	-1.85#	.40	.14	.24	2.73**
Generational Status	.01	.04	.02	.205	.10	.05	.17	1.93*	.16	.07	.18	2.06*
<b>Main Effects</b>												
Coping	-.04	.06	-.07	-.644	-.21	.07	-.32	-3.04**				
Perceived Soc Sup	-.25	.12	-.26	-2.11*	.21	.14	.17	1.44	1.10	.17	.60	6.44***
Family satisfaction	-.07	.05	-.15	-1.41	-.06	.06	-.13	-1.20	-.18	.07	-.23	-2.45*
Parental perfect.	.06	.04	.17	1.76#	.11	.04	.24	2.55*	-.01	.06	-.02	-.235
Endorse Stereo-Grp	.10	.06	.14	1.45	.08	.08	.09	.989	.13	.12	.09	1.12
Endorse Stereo-Self	.03	.06	.03	.341	.07	.08	.09	.890	-.01	.11	-.01	-.164
<b>Interaction Effects</b>												
Asian S-Grp x Cope	-.04	.11	-.05	-.39	-.04	.14	-.04	-.323				
Asian S-Slf x Cope	.00	.09	.00	.00	-.11	.11	-.13	-1.06				
Asian S-Grp x Sup	-.08	.21	-.05	-.38	-.12	.25	-.06	-.492	.54	.26	.17	2.07*
Asian S-Slf x Sup	-.05	.17	-.04	-.29	-.10	.21	-.07	-.501	-.17	.21	-.08	-.822

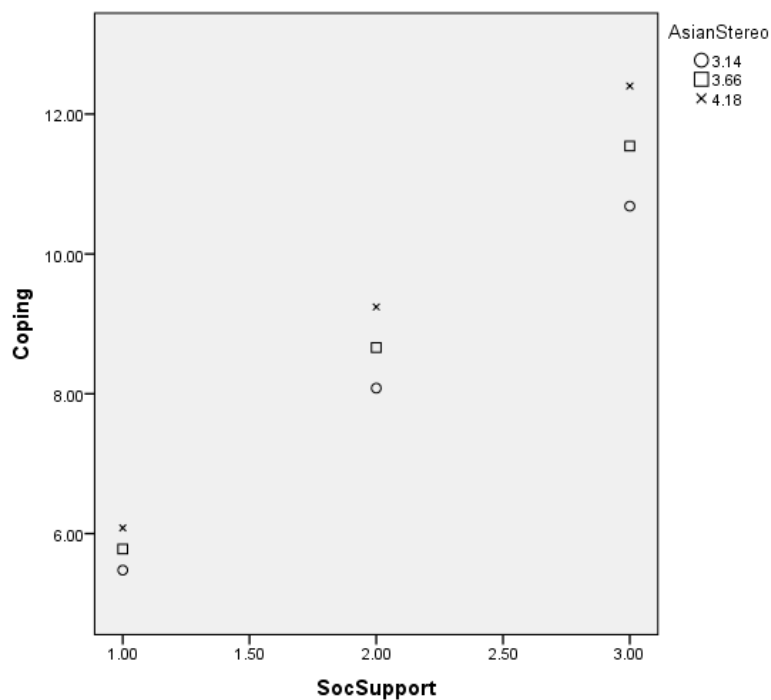
#  $p < .10$ ; \* $p < .05$ ; \*\* $p < .01$ ; \*\*\* $p < .001$ . Variables are reported at initial entry.

Table 3 shows that the regression on depression revealed no significant effect for the controls at Step 1,  $R = .08$ ,  $adjusted R^2 = -.01$ ,  $F = .367$ ,  $ns$ . However, the regression was significant on Step 2,  $R = .49$ ,  $adjusted R^2 = .18$ ,  $F = 4.30$ ,  $p < .001$ , with perceived social support and parental perfectionism significant or near significant predictors of depression level ( $\beta s = -.26$ ,  $p < .01$ ;  $.17$ ,  $p < .10$ ). Family satisfaction and coping were not significant predictors. None of the interaction terms were significant at Step three, indicating that endorsement of Asian stereotypes did not moderate the effect of social support or coping on depression level.

Table 3 reports that the regression for professional help-seeking attitudes produced a significant effect for the controls at Step 1,  $R = .24$ ,  $adjusted R^2 = .041$ ,  $F = 3.848$ ,  $p < .05$ , carried by near significant effects for gender and generational status ( $\beta s = -.16$ ,  $.17$ ,  $p < .07$ ). Males and later generation Asians were more likely to seek professional help if needed. The regression was also significant on Step 2,  $R = .44$ ,  $adjusted R^2 = .14$ ,  $F = 3.63$ ,  $p < .01$ , with coping and parental perfectionism significant predictors of help-seeking attitudes ( $\beta s = -.32$ ,  $p < .01$ ;  $.24$ ,  $p < .05$ ). Those with poor social support and high parental perfectionism were more likely to report positive professional help-seeking attitudes. As with depression level, there were no main or interaction effects for general and self-internalized endorsement of Asian stereotypes, thus disconfirming H4.

Finally, Table 3 reports the regression for coping. The first Step produced significant effect for the controls at Step 1,  $R = .30$ ,  $adjusted R^2 = .07$ ,  $F = 5.49$ ,  $p < .01$ , with both gender and generational status significant predictors of coping ( $\beta s = .25$ ,  $p < .01$ ;  $.19$ ,  $p < .05$ ). Step 2 was also significant,  $R = .61$ ,  $adjusted R^2 = .34$ ,  $F = 9.45$ ,  $p < .001$ , with perceived social support and family satisfaction significant predictors of coping ( $\beta s = .60$ ,  $p < .001$ ;  $-.23$ ,  $p < .05$ ). Perceived social support was positively related to Asians' efforts to cope by seeking social

support. Low family satisfaction was also related to more coping. Table 3 also shows that Step 3 produced a significant interaction effect; as endorsement of general Asian positive stereotypes moderated the effect of perceived social support on coping ( $\beta = .17, p < .05$ ). This interaction was deconstructed and is presented in Figure 1. It shows that with greater endorsement of general positive Asian stereotypes, there was greater attempt to cope by seeking social support, as long as there was also perceived social support by participants' social networks. Those who held the general stereotype were more likely to pursue support seeking if they perceived that their social networks were supportive, which is consistent with the expectation of the positive Asian stereotype of close knit families. Taken together, then, H4 was confirmed for professional help-seeking and coping.



*Figure 1.* Interaction between perceived social support and endorsement of Asian group-stereotypes on coping.

### The Mediating Role of Social Support on Asian Family Dynamics and Depression

H5 tested mediating relationships between Asian family dynamics, social support, and mental health. H5 specifically predicted that perceived social support would mediate the relationship between family dynamics (as measured by family satisfaction level and parental perfectionism) and depression. These analyses were conducted with the aid of PROCESS, SPSS macros developed to analyze indirect effects (Hayes, 2013). Employing Model 4, with bootstrap samples set at 10000, one mediation analysis assessed the total and direct effect of family satisfaction on depression, and the indirect effect of family satisfaction on depression through perceived social support. A second analysis assessed total and direct effects of parental perfectionism on depression, as well as the indirect effect of parental perfectionism on depression through perceived social support. Both analyses are presented in Table 4, with the general model displayed in Figure 2.

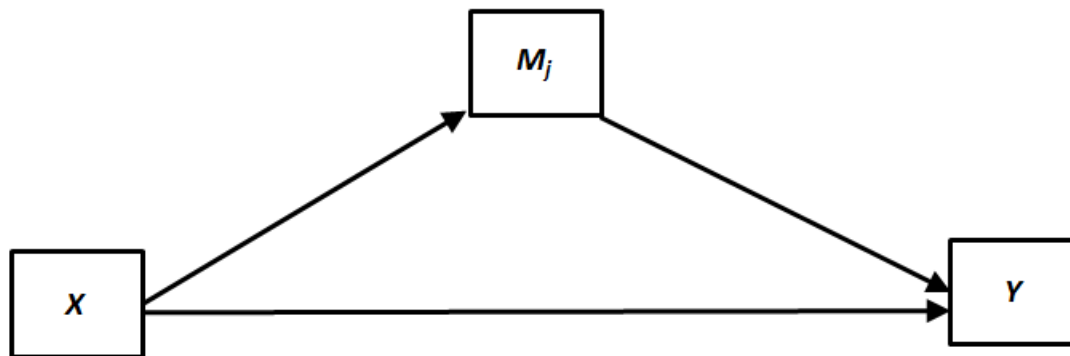


Figure 2. Direct effect of x (Family Satisfaction/Parental Perfectionism on y (Depression) mediated by m (Perceived Social Support)

Table 4

**Indirect effects analysis of Family Satisfaction and Parental Perfectionism on Depression through Perceived Social Support**

<b>Step/Variable entered</b>	<b>R</b>	<b>Adj R2</b>	<b>F</b>	<b>df</b>	<b>B</b>	<b>SE</b>	<b>t</b>	<b>LLCI</b>	<b>ULCI</b>
<b>Mediator Analysis #1</b>									
1. Family Satisfaction	.279	.078	12.491***	1,147					
<b>Total, Direct, Indirect Effects</b>									
<b>Total effect x on y</b>									
Family Sat					-.106	.029	-3.534***	-.1644	-.046
<b>Direct effect x on y</b>									
Family Sat					-.047	.031	-1.485	-.1103	.015
<b>Indirect effect of m*</b>									
Perceived Soc Sup					-.047	.032		-.098	-.029
<b>Mediator Analysis #2</b>									
1. Parental Perfectionism	.363	.131	22.246***	1,147					
<b>Total, Direct, Indirect Effects</b>									
<b>Total effect x on y</b>									
Parental Perfectionism					.097	.020	4.726***	.056	.138
<b>Direct effect x on y</b>									
Parental Perfectionism					.063	.022	2.837**	.019	.106
<b>Indirect effect of m*</b>									
Perceived Soc Sup					.034	.012		.015	.063

\*\*p < .01; \*\*\*p < .001. \*The values for SE, LLCI, and ULCI for indirect effects are Boot SE, Boot LLCI, Boot ULCI.

As the top half of Table 4 indicates, H5 was confirmed in that perceived social support completely mediated the relationship between family satisfaction and depression level, from  $B = -.106, p < .01$  to  $B = -.047, ns$ . That is, the total effect of family satisfaction on depression occurred through the indirect effect of perceived family support. The bottom half of Table 4 presents the mediation findings for parental perfectionism and depression. In this case perceived social support partially mediated the effect of parental perfectionism on depression, from  $B = -.097, p < .001$  to  $B = .063, p < .01$ . That is, the indirect effect of perceived social support did not totally account for the relationship between parental perfectionism and depression, which suggests that parental perfectionism and depression is mediated by other factors in addition to perceived social support.

### **The Role of Person-Centered Messages on Depression, Help-Seeking and Coping**

H6 predicted that person-centered messages by parents and friends would be related to depression level, coping, perceived social support and family satisfaction. Table 1 shows that H6 was largely confirmed, in that highest level of person-centered messages was positively associated with perceived social support and coping ( $r_s = .21, .28$ ), and negatively associated with professional help-seeking and parental perfectionism ( $r_s = -.20, -.31$ ). Person-centered messages were also positively associated with self-internalized Asian stereotypes ( $r = .20, p < .05$ ). The actual person-centered support practices that were systematically associated with these constructs further validates the relationships.

The specific relationship between parental perfectionism and person-centered support messages can easily be seen in the hypothetical responses written by Asian students which display low person-centered messages. For instance, some students reported their parents using condemnation and ignorance of the stressful situation:



Parents: "Are you stupid? I can't afford for you to flunk."  
 Me: "I'm trying as hard as I can. I just want to give up."  
 Parents: "You need an education or you won't get a job."  
 Me: "I know it's, just frustrating."

Despite the ignored stressful experience the student expresses, one individual responded to the parents' condemnation with compliance:

Parents: OMG why are your grades so poor?!  
 Me: Some things happened...  
 Parents: You should not let other things affect your grades! You have to get a good education so you can have a good, high-paying job!  
 Me: Ok...I'll do better next semester...  
 Parents: You are getting dumber and dumber.  
 Me: Ok.

By contrast, some students reported their friends or parents producing highly person-centered messages:

Me: Hey, Dude, I'm so overwhelmed with all the things that's going on in my life right now, bro.  
 Friend: Dude, we all feel the same way. It's all about how you manage your stress. It's about you perceiving these tasks if it's valuable to you or not. If it's not valuable to you and you're just doing it to pad your resume, then I suggest you to stop volunteering at the hospital and pursue tasks that you really care about.  
 Me: Hmm, yeah, I do feel burnt out doing things I don't really care about. I should consider your advice, Brah. Thanks.

Low person-centered messages, such as the two examples written by Asian students above, contain verbal insults and condemnation of the situation. While the individual is vocalizing that certain experiences contributed to the decline in grades, the parents focus solely on academics and not the individual's experiences. There is also a lack of comfort or advice given for the situation. The high person-centered messages written by Asian students reflect understanding, provide a broader perspective of the situation at hand, and offer advice.

### **Discussion**

Understanding the mental health outcomes of Asians who endorse or internalize the model minority myth and the role of social support was the focus of the study, and the findings show evidence that social networks have different influences on Asians based on their endorsement of positive Asian stereotypes with regards to the self and group. While both endorsement and self-internalized positive Asian stereotypes predicted family satisfaction, parental perfectionism predicted the endorsement of positive Asian stereotypes and perceived social support predicted internalization of positive Asian stereotypes. Mediation analyses showed that perceived social support was the mechanism that related Asian family satisfaction to depression, and that it also partially accounted for the relation of Asian parental perfectionism to depression. Endorsement of self-internalized Asian stereotypes predicted less depression; however, consistent with the model minority stereotype, depression was positively correlated with parental perfectionism, and family satisfaction, perceived social support and parental perfectionism were inter-related. Moderation analyses showed that greater endorsement of general positive Asian stereotypes moderated the effect of perceived social support on coping; with greater endorsement there was greater attempt to cope by seeking social support if it was available.

The influence of the model minority stereotypes on depression and professional help-seeking attitudes produced some findings that were different from those produced by Gupta et al. (2011). Instead of non-significant relationships, stereotype internalization predicted less depression. Both the endorsement of positive Asian stereotypes and internalization were not significant predictors of attitudes towards help-seeking. Previous work has not examined the influence of model minority stereotypes on the way Asians engage in support-seeking for their mental health issues. Using Gupta et al's measures, we discovered positive results. Self-

internalized endorsement of Asian stereotypes produced a stronger not a lesser relationship with perceived social support. The findings suggest a distinct upside to internalizing positive Asian stereotypes, in that those with greater stereotype internalization were more likely engage in coping by support-seeking, as long as Asians perceived their family and friend networks to be socially supportive.

The findings on self-internalized endorsement of positive Asian stereotypes are similar to the findings by Shih et al (2002) on improved academic performance for Asian American students using subtle positive stereotype activation. The association of the endorsement of positive Asian stereotypes with higher coping engagement suggests that endorsement may facilitate ethnically salient traits of self-confidence and diligence, which are also aspects of the model minority stereotype. The notion that Asian traits of self-confidence and diligence allow them to overcome hardships, as described by the model minority myth, may encourage Asians who endorse the myth to engage in more coping strategies as an effective way to overcome their problems.

The mediation analyses provided further insight about the value of perceived social support in accounting for the relationship of family satisfaction with college students' depression. Satisfaction with one's family was negatively associated with depression and this association was completely mediated by the perception of a supportive environment created by family and friends. Similarly, parental perfectionism was less associated with depression when there is a supportive environment created by one's social network. This latter mediation was only partial, however, which suggests that parental perfectionism may be a way the model minority myth plays a role in Asian students' mental health issues. It may be of value to measure Asian students' perceptions of their parents' internalization of the model minority myth, as well as

actually measuring parents' endorsement of positive Asian stereotypes, as parental attitudes likely influence their students' mental health issues.

Considering the findings collectively, there appears to be two findings that are consistent with previous negative expectations about endorsing and/or internalizing the Asian model minority myth on mental health issues. First, the interaction effect of Asian stereotypes and perceived social support on coping suggests that those with strong stereotype endorsement either pursue professional help-seeking or seek support from their networks, but not both. Their pursuit of help with personal problems appears dichotomous, compared to those who endorse the stereotypes in more moderate fashion. Second, the mediation analysis involving parental perfectionism and depression suggests that endorsement of minority myth beliefs may account for this association over and beyond the perception of a social support environment.

The significance of parental perfectionism and depression points to the pivotal role of parental relationships in the psychological well-being of young adult Asians. Consistent with literature on Asian parenting styles, parental perfectionism stems from Asian parents' tendency to emphasize higher achievement goals. High person-centered support messages from parents help to influence the internalization of positive Asian stereotypes for Asian students. While it is believed that internalizing the perfectionistic tendencies of the model minority myth lead to higher psychological distress, this does not necessarily reflect depression or maladaptive behavior. For example, Castro and Rice's (2003) study of perfectionism and ethnicity found that setting higher personal standards for Asian Americans predicted higher GPAs and did not predict depression. Therefore, Asians with high internalization of positive Asian stereotypes may feel more stressed, but this is buffered by a high perception of social support and highly person-centered messages received by their social network, which in turn relates to less depression.

An example below displays the high academic expectations of Asian parents, but still reflects understanding and support for the student.

Parents: Your grades dropped a lot. Do you have problems? Are you not working hard enough?

Me: I am working hard as ever; it's just that I am having a relationship issue. I spend as much time on my studies just that I can't concentrate enough. I keep going back to it.

Parents: If you feel this relationship is not contributing positively to your life, cut it off. You have a long way ahead of you, so why don't you let go of this? At this age of yours, studying is more important than relationship because academic life is the foundation of your future career. If you forgo your studies for relationship-seeking, which seems understandable but all the same dangerous, probably you will regret your choices tomorrow. There are, remember, appropriate tasks to finish in specific periods of life. Of course, it is about the time when girlfriend issues hit you and hit you hard. We've all been through it. But you need to weather through the maze. We think you are smart enough to make reasonable choice.

Me: Yes, I think what you said makes sense. I will make the choice to my interest.

Parents: If you feel talking about it further on, don't hesitate to talk to us. We want to listen about your updates. Get up, go out, and go get some exercise.

Me: Alright.

Consistent with previous research on Asian parenting styles, the parent in the above conversation is displaying concern for the grades which have dropped. Instead of focusing solely on the academic situation, the parents are able to understand that there are underlying reasons contributing to the poor grades. The parent displays a person-centered message by vocalizing that they understand the experiences being felt by the student and help the student to understand the wider perspective at hand. This may relate to Asian internalization of the positive Asian stereotypes in the ways in which parents instill confidence in their children through supportive communication. Features of encouragement and situation elaboration in person-centered messages received by Asians may help to reaffirm their abilities to overcome obstacles, aligning with the model minority myth.

Likewise, we see the disconnection between parental perfectionism and the endorsement of Asians as model minorities. Since parental perfectionism predicted higher endorsement of

positive Asian stereotypes but not with regards to the self, it seems that pressures from parents to succeed creates a disconnect between the student's perception of Asians and perceptions of the self, which may relate to higher levels of depression. The support messages from students in this study further highlights the disruption which may occur between parental perfectionism and internalizing positive Asian stereotypes.

Parents: Why are you doing so badly in school?

Me: It's nothing, I'm just distracted.

Parents: Well don't get distracted! Work harder.

Low person-centered messages such as the example above often focus solely on academics and disregard the unique experiences of the student as an individual, which serves to emphasize that they do not meet the expectations of the model minority myth. In the example given, the student vocalizes that he/she is performing poorly in school due to distraction. Instead of the parents inquiring about what is causing the distraction, they condemn the student's behavior and urge the student to work harder. In this case, the parents are activating a facet of the model minority myth which depicts all Asians are hard-working overachievers. But unlike the high person-centered messages received by Asian students, low person-centered messages do not reaffirm the abilities of the student to overcome obstacles nor provide elaboration for the student to understand the situation from a wider perspective.

Intergenerational conflicts or communication barriers may further heighten frustrations between parent and child, which in turn may attribute to depression levels associated with parental perfectionism. Differences in communicative expectations or appraisals may occur between parent and child, especially for Asians born in the U.S. with immigrant parents. The combination of Western and Eastern communication styles may hinder effective communication between parent and child in Asian families. Language as an additional barrier may make it

difficult for parents to effectively elaborate messages. Further investigation into the communicative support (or lack thereof) between parent and child would provide better insight into the underlying reasons behind parental perfectionism and depression for Asian students.

Beyond these two findings, it appears that other factors such as strong social support help override the negative associations associated with endorsing the general Asian model minority myth. The social relationships which Asians forge with friends and family are a critical factor for Asians endorsing the model minority myth. Stereotype endorsers had less depression, perceived greater social support from their social networks and reported higher levels of family satisfaction.

A strong sense of community and ethnic ties may point towards the internalization of positive Asian stereotypes for Asian Americans. Just as the model minority stereotype emphasizes strong family bonds, family satisfaction and perceived social support predicted internalization of the model minority myth. Given these two sets of findings, it appears that future research on the endorsement of the model minority myth and its association with health issues need to also study the role of social support seeking and social support that exists within their networks as the vehicle for buffering the negative effects of endorsing the model minority myth.

### **Implications**

The importance of social support and perceived social support highlights the importance for strong social networks for Asian students. Since perceived social support and the quality of messages received by Asians from friends and family is an important factor in predicting depression, it is crucial that colleges support student organizations or services which help to promote social bonds for Asian students.

The findings from this study may also help to promote counseling services better suited for Asian students by understanding the role which parents' perfectionism plays in the prediction of depression and social support for Asian students. Counselors may want to focus more on the home environment and family of students seeking help to better understand where sources of stress or depression may stem from. It may also be pertinent to involve family members in counseling in how they may help develop a more supportive environment for Asian students undergoing stress. That is not to say that parents should be discouraged from promoting high achievement in their children; rather, a supportive environment is an important focus is promoting the success and well-being of students as well.

### **Limitations and Future Research**

Recruitment of the sample limited the scope of Asian students who participated in this study. Students were recruited through their participation and involvement in Asian student organizations and therefore may have a stronger sense of identity and support. There was also a limitation in the diversity of the Asian population that participated in the study. Asian Americans are a very diverse group and require a large sample size with substantial participation across all ethnic groups. Recruiting a larger sample would provide a more accurate description and more insight into the findings for each subgroup.

Interest in the model minority myth has produced new measures (Yoo, Burrola, & Steger, 2010) that would be also be useful to include in a replication to create a more accurate picture of the endorsement of positive Asian stereotypes rather than relying on a modified scale. Different measures of social support and coping, as well as different measures of mental health threats and professional health-seeking attitudes, could also be useful in future research.



Future directions could examine the endorsement of positive Asian stereotypes from a cross-cultural perspective to observe social support's significance among those of other ethnicities. It would be interesting to compare the impact social support has on different ethnicities. The findings may be useful in ways we approach communication and social support based by ethnicity, such as the role of supportive communication from parents across different ethnicities.

### References

- Abe-Kim, J., Takeuchi, D. T., Hong, S., Zane, N., Sue, S., Spencer, M. S., Appel, H., Nicdao, E., & Alegría, M. (2007). Use of mental health-related services among immigrant and US-born Asian Americans: results from the National Latino and Asian American Study. *American Journal of Public Health, 97*(1), 91-8. doi: 10.2105/AJPH.2006.098541
- Ader, R., & Cohen, N. (1984). Behavior and the immune system. In W. Doyle Gentry (Ed.), *Handbook of behavioral medicine* (pp. 117-173). New York: Guilford.
- Agate, J. R., Zabriskie, R. B., Agate, S. T., & Poff, R. (2009). Family leisure satisfaction and satisfaction with family life. *Journal of Leisure Research, 41*(2), 205-223.
- Anson, C. A., Stanwyck, D. J., & Krause, J. S. (1993). Social support and health status in spinal cord injury. *Paraplegia, 31* (10), 632-638.
- Burleson, B.R. (1984). Comforting Communication. In H.E. Sypher, & J.L. Applegate (Eds.), *Communication by children and adults: Social cognitive and strategic processes* (pp. 63-104). Beverly Hills, CA: Sage Publications.
- Burleson, B.R. (1987). Cognitive Complexity. In J.C. McCroskey, & J.A. Daly (Eds.), *Personality and interpersonal communication*. (pp. 305-349). Newbury Park, CA: Sage Publications.
- Burleson, B.R., (2010). Explaining recipient responses to supportive messages. In S.W. Smith & S.R. Wilson (Eds.), *New directions in interpersonal communication research*. (pp. 159-179). Thousand Oaks, CA: Sage Publications.
- Burleson, B.R., & MacGeorge, E.L., (2002). Supportive Communication. In M.L. Knapp & J.A. Daly (Eds.), *Handbook of interpersonal communication*. (pp.374 -424). Thousand Oaks, CA: Sage Publications.

- Burleson, B., & Mortenson, S. (2003). Explaining cultural differences in evaluations of emotional support behaviors: Exploring the mediating influences of value systems and interaction goals. *Communication Research, 30*(2), 113-146.
- Burleson, B., & Samter, W. (1985). Consistencies in theoretical and naive evaluations of comforting messages. *Communication Monographs, 52*(2), 103-123.
- Carver, C.S., Scheier, M.F., & Weintraub, J.K. (1989). Assessing coping strategies: A theoretically based approach. *Journal of Personality and Social Psychology, 56*(2), 267-283.
- Castro, J. R., & Rice, K. G. (2003). Perfectionism and ethnicity: Implications for depressive symptoms and self-reported academic achievement. *Cultural Diversity & Ethnic Minority Psychology, 9*(1), 64-78. doi: 10.1037/1099-9809.9.1.64
- Chae, H.S. (2004). Talking back to the Asian model minority discourse: Korean-origin youth experiences in high school. *Journal of Intercultural Studies, 25*(1). 59-73. doi: 10.1080/07256860410001687027
- Chang, E. C. (1996). Cultural differences in optimism, pessimism, and coping: Predictors of subsequent adjustment in Asian American and Caucasian American college students. *Journal of Counseling Psychology, 43*(1), 113-23.
- Chao, M. M., Chiu, C., & Lee, J. S. (2010). Asians as the model minority: Implications for US government's policies. *Asian Journal of Social Psychology, 13*(1), 44-52.  
doi:10.1111/j.1467-839X.2010.01299.x
- Cheryan, S., & Bodenhausen, G. V. (2000). When positive stereotypes threaten intellectual performance: The psychological hazards of "model minority" status. *Psychological Science, 11* (5), 399-402.

- Choi, J. L., Rogers, J. R., & Werth, J. L. J. (2009). Suicide risk assessment with Asian American college students: A culturally informed perspective. *Counseling Psychologist, 3*(2), 186-218. doi: 10.1177/0011000006292256
- Cohen, S. (1988). Psychosocial models of the role of social support in the etiology of physical disease. *Health Psychology: Official Journal of the Division of Health Psychology, American Psychological Association, 7*(3), 269-97. doi: 10.1037/0278-6133.7.3.269
- Cohen, S., & Hoberman, H. M. (1983). Positive Events and Social Supports as Buffers of Life Change Stress1. *Journal of Applied Social Psychology, 13*(2), 99-125.
- Cramer, D. (1985). Psychological adjustment and the facilitative nature of close personal relationships. *The British Journal of Medical Psychology, 58*, 165-168.
- Crystal, D. (1989). Asian Americans and the myth of the model minority. *Social Casework: the Journal of Contemporary Social Work, 70*(7), 405-413. doi: 10.1606/0037-7678.1994
- DeLongis, A., Coyne J.C., Dakof, G., Folkman, S., & Lazarus, R.S.. (1982). Relationship of daily hassles, uplifts, and major life events to health status. *Health Psychology, 1*(2), 119-136.
- Elhai, J. D., Schweinle, W., & Anderson, S. M. (2008). Reliability and validity of the Attitudes Toward Seeking Professional Psychological Help Scale-Short Form. *Psychiatry Research, 159*(3), 320-9. doi: 10.1016/j.psychres.2007.04.020
- Espiritu, Y. L. (1997). *Asian American women and men: Labor, laws and love*. Thousand Oaks, Calif: Sage Publications.
- Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: a shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368-373.

- Frost, R. O., Marten, P., Lahart, C., & Rosenblate, R. (1990). The dimensions of perfectionism. *Cognitive Therapy and Research*, *14*(5), 449-468. doi: 10.1007/BF01172967
- Furukawa, T., Sarason, I. G., & Sarason, B. R. (1998). Social support and adjustment to a novel social environment. *The International Journal of Social Psychiatry*, *44*(1), 56-70.
- George, L. K., Blazer, D. G., Hughes, D. C., & Fowler, N. (1989). Social support and the outcome of major depression. *The British Journal of Psychiatry*, *154*(4), 478-485. doi: 10.1192/bjp.154.4.478
- Glass, T. A., & Maddox, G. L. (1992). The quality and quantity of social support: Stroke recovery as psycho-social transition. *Social Science & Medicine*, *34*(11), 1249-1261.
- Goldsmith, D. J. (2004). *Communicating social support*. Cambridge, UK: Cambridge University Press.
- Greene, J. O., & Burleson, B. R. (Eds.). (2003). *Handbook of communication and social interaction skills*. (Ed.). Mahwah, N.J: L. Erlbaum Associates.
- Gupta, A., Leong, F. T. L., & Szymanski, D. M. (2011). The “model minority myth”: internalized racialism of positive stereotypes as correlates of psychological distress, and attitudes toward help-seeking. *Asian American Journal of Psychology*, *2*(2), 101-114. doi: 10.1037/a0024183
- Hayes, A. (2013). PROCESS. Available at <http://www.afhayes.com>.
- Ho, C., & Jackson, J. W. (2001). Attitudes toward Asian Americans: Theory and measurement. *Journal of Applied Social Psychology*, *31*, 1553–1581.

- Hoeffel, E. M., Rastogi, S., Kim, M. O., Hasan, S. (2012). The Asian population: 2010. Washington, D.C.: U.S. Department of Commerce, Economics and Statistics Administration, U.S. Census Bureau.
- Hunt, G., Moloney, M., & Evans, K. (2011). "How Asian am I?": Asian American youth cultures, drug use, and ethnic identity construction. *Youth & Society*, 43(1), 274-304. doi: 10.1177/0044118X10364044
- Hwang, W.-C., & Goto, S. (2008). The impact of perceived racial discrimination on the mental health of Asian American and Latino college students. *Cultural Diversity & Ethnic Minority Psychology*, 14(4), 326-335. doi: 10.1037/1099-9809.14.4.326
- Inzlicht, M., & Kang, S. K. (2010). Stereotype threat spillover: how coping with threats to social identity affects aggression, eating, decision making, and attention. *Journal of Personality and Social Psychology*, 99(3), 467-81. doi: 10.1037/a0018951
- Jones, S. M., & Guerrero, L. K. (2001). The effects of nonverbal immediacy and verbal person centeredness in the emotional support process. *Human Communication Research*, 27(4), 567-596.
- Kohout, F. J., Berkman, L. F., Evans, D. A., & Cornoni-Huntley, J. (1993). Two shorter forms of the CES-D depression symptoms index. *Journal of Aging Health*, 5(2), 179-193.
- Landerman, R., George, L. K., Campbell, R. T., & Blazer, D. G. (1989). Alternative models of the stress buffering hypothesis. *American Journal of Community Psychology*, 17(5), 625-642.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York: Springer Pub. Co.

- Le, M. O., Zane, N., Cho, Y. I., & Takeuchi, D. T. (2009). Use of specialty mental health services by Asian Americans with psychiatric disorders. *Journal of Consulting and Clinical Psychology, 77*(5), 1000-1005. doi: 10.1037/a0017065
- Lee, E. (1997). *Working with Asian Americans: A guide for clinicians*. New York: Guilford
- Lee, S. J., Wong, N. A., & Alvarez, A. N. (2008). The model minority and the perpetual foreigner: Stereotypes of Asian Americans. In N. Tewari & A. N. Alvarez (Eds.), *Asian American psychology: Current perspectives* (pp. 69–84). New York, NY: Erlbaum.
- Lorenzo, M. K., Frost, A. K., & Reinherz, H. Z. (2000). Social and Emotional Functioning of Older Asian American Adolescents. *Child and Adolescent Social Work Journal, 17*(4), 289-304.
- Lynch, T. R., Mendelson, T., Robins, C. J., Krishnan, K. R., George, L. K., Johnson, C. S., & Blazer, D. G. (1999). Perceived social support among depressed elderly, middle-aged, and young-adult samples: cross-sectional and longitudinal analyses. *Journal of Affective Disorders, 55*(2-3), 159-170.
- Meyer, B. (2001). Coping with severe mental illness: Relations of the brief COPE with symptoms, functioning, and well-being. *Journal of Psychopathology and Behavioral Assessment, 23*(4), 265-277.
- Qin, D. B., Way, N., & Mukherjee, P. (2008). The other side of the model minority story: The familial and peer challenges faced by Chinese American adolescents. *Youth & Society, 39*(4), 480-506. doi:10.1177/0044118X08314233 6
- Sarason, B. R., Sarason, I. G., & Pierce, G. R. (Eds.). (1990). *Social support: An interactional view*. New York: J. Wiley & Sons.

- Sarason, I. G., Sarason, B. R., & Shearin, E. N. (1986). Social support as an individual difference variable: Its stability, origins, and relational aspects. *Journal of Personality & Social Psychology*, 50(4), 845-855. doi: 10.1037/0022-3514.50.4.845
- Shih, M., Ambady, N., Richeson, J. A., Fujita, K., & Gray, H. M. (2002). Stereotype performance boosts: The impact of self-relevance and the manner of stereotype activation. *Journal of Personality and Social Psychology*, 83(3), 638-647.
- Solberg, V. S., Ritsma, S., Davis, B. J., Tata, S. P., & et, . S. P. (1994). Asian-American students' severity of problems and willingness to seek help from university counseling centers: Role of previous counseling experience, gender, and ethnicity. *Journal of Counseling Psychology*, 41(3), 275-279. doi: 10.1037/0022-0167.41.3.275
- Takei, I., & Sakamoto, A. (2011). Poverty among Asian-Americans in the twenty-first century. *Sociological Perspectives*, 54(2), 251-276. doi: 10.1525/sop.2011.54.2.251.
- Taylor, S.E., Sherman, D.K., Kim, H.S., Jarcho, J., Takgi, K., & Dunagan, M.S. (2004) Culture and social support: Who seeks it and why? *Journal of Personality and Social Psychology*, 87(3), 354–362. doi: 10.1037/0022-3514.87.3.35
- Uba, L. (1994). *Asian Americans: Personality patterns, identity, and mental health*. New York: Guilford Lee.
- U.S. Census Bureau, (2010). *Income, poverty and health insurance coverage in the united states: 2009*. Washington,DC: U.S. Government Printing Office.
- U.S. Census Bureau. (2000). *Resident population estimates of the United States by sex, race, and Hispanic origin*. Washington,DC: U.S. Government Printing Office.
- U.S. Department of Health and Human Services. (2001). *Mental health: culture, race and ethnicity—a suppl. to mental health: A report of the surgeon general*. Rockville, MD:



U.S. Department of Health and Human Services, Public Health Service, Office of Surgeon General.

Varma, R. (2004). Asian Americans: achievements mask challenges. *Asian Journal of Social Science*, 32(2), 290-307.

Wan, C. K., Jaccard, J., & Ramey, S. L. (1996). The Relationship between social support and life satisfaction as a function of family structure. *Journal of Marriage and Family*, 58(2), 502-513.

Yao, E.L. (1985). A comparison of family characteristics of Asian-American and Anglo-American high achievers. *International Journal of Comparative Sociology*, 26(3/4), 198-208.

Yoo, H.C., Burrola, K.S., & Steger, M.F. (2010). A preliminary report on a new measure: Internalization of the model minority myth measures (IM-4) and its psychological correlates among Asian American college students. *Journal of Counseling Psychology*, 51(1), 114-127. doi: 10.1037/a0017871

Yu, T. (2006). Challenging the politics of the model minority stereotype: A case for educational Equality. *Equity & Excellence in Education*, 39(4), 325-333. doi: 10.1080/10665680600932333

Zabriskie, R.B., & McCormick, B.P. (2003). Parent and child perspectives of family leisure involvement and satisfaction with family life. *Journal of Leisure Research*, 35(2), 163-189.

Zhang, Q. (2010). Asian Americans Beyond the Model Minority Stereotype: The Nerdy and the Left Out. *Journal of International and Intercultural Communication*, 3(1), 20-37.

## Appendix A

Researchers in the School of Communication at The Ohio State University are recruiting undergraduate students for a study about self-endorsement of positive stereotypes and its effects on self-disclosure to social networks and attitudes towards professional help-seeking. Participants must have an Asian background and be 18 years of age or older. International students with an Asian background are also welcome to participate. The study includes completion of an online questionnaire, lasting approximately 15-20 minutes. Participants in this study will be compensated \$10.

Participation in the study is completely voluntary. You may skip any questions you are uncomfortable with or unable to answer without any penalty or loss of benefits to which you are otherwise entitled, or loss or extra credit, as well as withdrawing from participation.

Your personal information and your answers will be kept completely confidential. Any personal information collected will only be used to award participants and will be in no way connected to your survey responses.

Your responses will be kept anonymous and confidential, and you can withdraw participation at any time without penalty. If you have any questions you can contact the co-investigator, Chau-Sa Dang at dang.39@osu.edu. For questions about your rights as a participant in this study or to discuss other study-related concerns or complaints with someone who is not part of the research team, you may contact Ms. Sandra Meadows in the Office of Responsible Research Practices at 1-800-678-6251.

Thank you!

If you are ready to complete the survey, please open the link below:

The following questions are to obtain the information needed to award correct credit or compensation. Remember, you must complete the entire questionnaire if you wish to be awarded.

Q1 Are you taking this questionnaire for class credit?

- Yes
- No

Answer If “Are you taking this questionnaire for class credit?” Yes Is Selected:

Q2 What is the course you are obtaining credit for?

Q3 What is your email so you can be notified of your award once you have completed the survey?

The following questions are basic demographics to help us better understand what background our participants come from. Please choose the answer which best describes you.

Q4 Gender

- Male (1)
- Female (2)

Q5 Race/Ethnicity

- African American (1)
- American Indian (2)
- Asian (3)
- Caucasian (4)
- Hispanic or Latino (5)
- Native Hawaiian or other Pacific Islander (6)

Q6 Please state your nationality or nationalities. (e.g., Chinese, Chinese American)

Q7 Are you a U.S. citizen?

- Yes (1)
- No (2)

Q8 What is your generational status?

- International (1)
- First generation (2)
- Second Generation (3)
- Third generation (4)
- Fourth or more (5)

Q9 School Rank

- Freshman (1)

- Sophomore (2)
- Junior (3)
- Senior (4)
- Graduate Student (5)
- Other (6)

Q10 What is your age?

We would now like you to respond to the following items about your attitudes and beliefs about your experience at OSU. Please answer each item using the response format beneath each item.

Q11 If I believed I was having a mental breakdown, my first inclination would be to get professional attention.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q12 The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q13 If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q14 There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q15 I would want to get psychological help if I were worried or upset for a long period of time.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q16 I might want to have psychological counseling in the future.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q17 A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q18 Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q19 A person should work out his or her own problems; getting psychological counseling would be a last resort.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q20 Personal and emotional troubles, like many things, tend to work by themselves.

- Agree (1)
- Partly agree (2)
- Disagree (3)
- Partly disagree (4)

Q21 Generally, I am smart.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q22 I am intellectually bright.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q23 My high intelligence benefits the US.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q24 I tend to be hardworking and diligent.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q25 I am very self-disciplined in my work.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q26 I tend to have close ties with my family.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q27 My diligence should be upheld as an example for others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q28 A strong commitment to family values characterizes me.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q29 The “togetherness” of my family should upheld as a model for others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)

- Agree (4)
- Strongly Agree (5)

Q30 I should be admired for my willingness to work hard.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q31 I increase the “brain power” of the US.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q32 In most ways, my family life is close to my ideal.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q33 The conditions of my family life are excellent.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q34 I am satisfied with my family life.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q35 So far I have gotten the important things I want from my family life.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q36 If I could live my life over, I would change almost nothing about it.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q37 I feel pressured by my parents to succeed at everything.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q38 My parents give me a high standard of academic performance.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q39 If I am not perfect, I feel my parents will be upset with me.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q40 I am concerned with protecting my self-image.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q41 I am concerned with not appearing weak in front of the other people.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q42 I am concerned with protecting my personal pride.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)



Strongly Agree (5)

Q43 I am concerned with not bringing shame to myself.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q44 The following set of questions addresses your coping strategies. Please choose the answer that best describes what you would do if you needed help.

Q45 I ask people who have had similar experiences what they did.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q46 I try to get advice from someone about what to do.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q47 I talk to someone to find out more about the situation.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q48 I talk to someone who could do something concrete about the problem.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q49 I talk to someone about how I feel.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q50 I try to get emotional support from friends or relatives.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q51 I discuss my feelings with someone.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q52 I get sympathy and understanding from someone.

- Not at all like me (1)
- Not like me (2)
- Neutral (3)
- Like me (4)
- Just like me (5)

Q53 Are you satisfied with how often you see your friends and relatives; that is, do you see them as often as you want to?

- Somewhat Dissatisfied (1)
- Satisfied (2)
- Very Satisfied (3)

Q54 In times of trouble, can you count on at least some of your friends and family?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q55 How satisfied are you with the kinds of relationships you have with your friends and family?

- Very Dissatisfied (1)
- Somewhat Dissatisfied (2)
- Satisfied (3)

Q56 Do you wish your friends and family would give you more help?

- Yes (1)
- No (2)

Q57 When you are with your friends and family, how often do you feel lonely?

- Hardly ever (1)
- Some of the time (2)

Most of the time (3)

Q58 Does it seem your friends and family understand you?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q59 Do you feel useful to your friends and family?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q60 Do you know what is going on with your friends and family?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q61 When you talk to your friends and family, do you feel you are being listened to?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q62 Do you feel you have a definite role among your family and friends?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q63 Can you talk about your deepest problems with at least some of your family and friends?

- Hardly ever (1)
- Some of the time (2)
- Most of the time (3)

Q64 The following questions are a list of ways you might have felt or behaved this past week. Please select one answer which best describes how often you have felt this way during the past week.

Q65 I did not feel like eating; my appetite was poor this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q66 I felt depressed this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q67 I felt that everything I did was an effort this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q68 My sleep was restless this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q69 I was happy this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q70 I felt lonely this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q71 People were unfriendly this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q72 I enjoyed my life this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q73 I felt that people disliked me this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q74 I could not get "going" this past week.

- Hardly ever or never (1)
- Some of the time (2)
- Much or most of the time (3)

Q75 The following statements are general perceptions of Asian Americans. Please select one answer which best describes your attitude.

Q76 Generally, Asian Americans are smart.

- Strongly Disagree (1)
- Disagree (2)

- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q77 Most Asian Americans are intellectually bright.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q78 The high intelligence of Asian Americans benefits the U.S.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q78 Asian Americans tend to be hardworking and diligent.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q79 Asian Americans tend to be very self-disciplined in their work.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q80 Asian Americans tend to have close ties with their families.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q81 The diligence of Asian Americans should be upheld as an example for others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q82 A strong commitment to family values characterizes Asian Americans.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q83 The “togetherness” of Asian American families should upheld as a model for others.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q84 Asian Americans should be admired for their willingness to work hard.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q85 Asian Americans increase the “brain power” of the US.

- Strongly Disagree (1)
- Disagree (2)
- Neither Agree nor Disagree (3)
- Agree (4)
- Strongly Agree (5)

Q86 The last part of the questionnaire is two short responses. You will read two scenarios of common stressful situations that arise during your time at college. Your responses will help us better understand communication under stress. Remember, there are no right or wrong answers, any response will be of great help to this study.

Q87 Scenario #1

It is common from time to time to endure a "rough patch." Say for various reasons (relationship issues, roommate issues, financial issues, or difficult coursework) you are going through a tough time. Unfortunately, your grades have dropped significantly because of this tough time. Your parents have discovered your poor grades and want to talk about it.

Q88 Would you confide in your parents about your tough time?

- Yes (1)
- No (2)

Q89 How do you think your parents would react in this conversation about your grades?

- Negatively; they would be angry and yell at me (1)
- Encouraging; they would give me supportive advice (2)

- Disappointed; they expected better from me (3)
- Other, write their reaction below (4) \_\_\_\_\_

Q90 Explain how the conversation with your parents in Scenario #1 would be like. Try to write as if you are in a real conversation and be as complete as possible. Example: Parents: "What your parents would say..."Me: "What you would say..."

Q91 How realistic would you rate this situation?

- 1 - Unrealistic (1)
- 2 - Somewhat realistic (2)
- 3 - Very realistic (3)

Q92 Scenario #2

Think of a time when you had too many responsibilities at once. This could be due to various activities (homework, projects, extracurricular activities, work, relationship issues, living independently, etc...) and you were not sure how to cope with all the stress. You started to feel extremely overwhelmed.

Q93 Who would you confide in first?

- Family member (1)
- Close friend (2)
- Spouse/significant other (3)
- Religious leader (4)
- Therapist or counselor (5)
- No one (6)
- Other (7) \_\_\_\_\_

Q94 If you chose to confide in someone, how did you explain what you were feeling to this person? Write this as if in a real conversation and try to be as complete as possible. Example: Me: "How you would start the conversation..."friend: "How the person you confided in would respond..."

Q95 How realistic would you rate this situation?

- 1 - Unrealistic (1)
- 2 - Somewhat realistic (2)
- 3 - Very realistic (3)

Answer If "Are you taking this questionnaire for class credit?" No Is Selected

Thank you for completing the questionnaire. You will be awarded \$10 for your participation. You will be emailed with information to obtain your compensation towards the end of the semester. In the case that you are feeling stressed or concerned due to participation in this study, please contact our Counseling and Consultation Service at (614) 292-5766.

Answer If "Are you taking this questionnaire for class credit?" Yes Is Selected

Thank you for completing the questionnaire. In the case that you are feeling stressed or concerned due to participation in this study, please contact our Counseling and Consultation Service at (614) 292-5766.