

## ABSTRACT

Title of Thesis: BOTH, AND: THE DICHOTOMOUS  
RELATIONSHIP BETWEEN THE MODEL  
MINORITY MYTH AND PSYCHOLOGICAL  
DISTRESS FOR SOUTH ASIANS IN THE  
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Psychological distress is a prominent concern for South Asian individuals in the United States. Despite substantial research indicating that the model minority myth has numerous consequences with varying implications—including mental health implications—for Asian Americans, very little is known about its impact for South Asians. The present study used an embedded mixed-methods design to explore the relationship between internalization of the model minority myth and psychological distress for South Asians in the United States. Results indicated that South Asians experience mental health consequences of the myth in complex and dichotomous ways: they balance feelings of both pride and pressure related to being a model minority, as well as experiences of both privilege and marginalization in society. Findings also elucidated meaningful differences in experience between South Asian diasporic subgroups, highlighting the importance of considering multiple marginalization and other systemic factors in assessing the impact of the model minority myth.

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MODEL MINORITY MYTH AND PSYCHOLOGICAL DISTRESS FOR  
SOUTH ASIANS IN THE UNITED STATES

by

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## Introduction

Since its invention, the model minority myth has been an important underlying factor for the hardships that Asian individuals face in the United States. Originally coined in 1966, the term “model minority” was used to help explain the relative “success” of Japanese Americans who were able to open small businesses after their release from United States concentration camps (Petersen, 1966). The concept of the model minority was based on the myth that it was Japanese Americans’ racial attributes that made them successful despite facing adversity; it was used as evidence against the negative effects of racism and to disparage other racial minorities who were seen as less resilient in response to adversity (Petersen, 1966; Kim, 1999; Poon et al., 2016). Today, the model minority myth impacts many Asian subgroups by homogenizing Asian Americans and by idealizing them above other racial minorities within a system of racial hierarchy. National reports and data show that Asian Americans are quantitatively the fastest-growing racial group in the United States, have the highest overall income and education (Pew Research Center, 2012), and are the most likely to meet standards of success such as graduating high school and attending elite colleges (Hsin & Xie, 2014). However, it is well-established that these successes are not due to race, but rather to external factors such as United States immigration policies: historically, the United States placed restrictions that only those who were highly educated, skilled, or could afford to establish themselves independently in the United States post-immigration could seek residency, skewing the statistics of immigrants from Asian countries and perpetuating the myth of the model minority. Today, the model minority myth has serious mental health implications for Asians in the United States.

Although the model minority myth has traditionally centered around achievement-related stereotypes of Asian Americans, emerging research highlights aspects of the myth related to their status as minorities relative to other racial minorities in the United States. For example, in addition to suggesting that Asian Americans are more intelligent and hardworking than other racial minorities, the model minority myth also suggests that they experience less discrimination and fewer barriers to success (Yoo, Burrola, & Steger, 2010). The mythological nature of these beliefs about Asian Americans has been well established in extant literature (Lee, 2009; Museus & Kiang, 2009; Mahalingam, 2012a; Museus & Park, 2015; Poon et al., 2016; Tran & Curtin, 2017). Further, research has demonstrated the numerous maladaptive ways in which the myth can affect Asian Americans, especially when it is internalized, including exacerbating psychological and academic distress, increasing interracial conflict, and presenting barriers to help-seeking (Chen, 1996; Gupta, Szymanski, & Leong, 2011; Wang, Siy, & Cheryan, 2011).

The present study sought to understand the model minority myth through a critical consciousness lens and to explore its relationship to psychological distress outcomes. In particular, this research examined the different mechanisms by which internalization of the model minority myth can relate to psychological distress, presenting a critically conscious theoretical framework with which to understand why these relationships might exist. Furthermore, the present research focused on South Asians in the United States and offers a compelling argument for the importance of mental health research within this population.

## **A Critical Race Perspective on the Model Minority Myth**

The critical race definition of the model minority myth sits rooted in the theory of racial triangulation, which posits that the model minority myth perpetuates White supremacy by using Asian Americans to chastise other racial minorities while also ostracizing them as perpetual foreigners (Kim, 1999; Poon et al., 2016). For Asian Americans, this otherization from Whites and from other racial minorities creates numerous potential consequences. First, the model minority myth establishes unwarranted expectations for success that Asian Americans may experience as pressure and psychological distress (Chu, 2002). The myth also disregards marginalization of Asian Americans by positioning their experiences relative to other racial minorities, where marginalization of Asian Americans is seen as less severe or nonexistent (Yoo, Burrola, & Steger, 2010). Moreover, since the model minority myth positions them against other racial minorities, internalizing the model minority myth can serve as a protective reaction for Asian Americans against their own marginalization. It is possible that this protective reaction could be experienced as an alleviation of distress symptoms. (Mahalingam, 2012b; Tajfel, 1981).

### **Psychological Distress**

A common societal assumption of the model minority myth is that Asian Americans are sheltered from experiencing psychological distress. However, research indicates that the prevalence of mental health problems is at least as high, if not higher, among Asian Americans compared with other racial minorities in the United States (Sue & Mckinney, 1975; Tracey et al., 1986; Zane et al., 1994; Yamashiro & Matsuoka, 1997; Sue, Cheng, & Chu, 2012; Sorkin, Nguyen, & Ngo-Metzger, 2011; Karasz et al., 2016).

Furthermore, researchers have speculated that these prevalence rates are inadequately measured due to language barriers (Jang et al., 2018) and cultural differences (Leong & Lau, 2001), suggesting that psychological distress may be more prevalent for Asian Americans than currently reflected in the literature.

Recent literature has identified internalization of model minority myth messages as a relevant predictor of psychological outcomes for Asian Americans. While internalization of the model minority myth has been defined in different ways across the literature, the underlying idea is that internalization means adopting the belief that model minority stereotypes about Asian Americans are true. Despite the growing body of evidence against the legitimacy of the model minority myth (Hsin & Xie, 2014; Museus & Park, 2015; Poon, et al., 2016; Tran & Curtin, 2017), many Asian Americans internalize the messages and stereotypes associated with it. Pressure to live up to the stereotypes of the myth and bias against the prevalence of problems can trigger psychological distress marked by internal conflict (Chan & Mendoza-Denton, 2008; Gupta, Szymanski, & Leong, 2011). Some researchers have noted that aspects of internalization may be linked to less psychological distress (Gupta, Szymanski, & Leong, 2011; Chang, 2017). For example, Chang (2017) found that internalization of both achievement-related model minority stereotypes and social mobility stereotypes was inversely predictive of depressive symptoms. Gupta, Szymanski, & Leong (2011) found that internalization of Asian stereotypes with regard to the self was inversely associated with psychological distress when controlling for internalization of the same stereotypes about Asian Americans in general. A possible explanation for this is that Asian Americans who either do or strive to meet internalized model minority stereotypes may

feel a sense of fulfillment or accomplishment that presents as lower levels of distress. Additionally, Asian Americans who internalize the myth may do so as a coping mechanism for their own marginalization. Adopting beliefs that position them above other minorities in the racial hierarchy perpetuates systems of oppression against other racial groups, but it also allows for blissful ignorance of their minority status (Jung, 2012; Poon, et al., 2016). Thus, any “positive” psychological effects of internalization are associated with problematic ideologies that warrant further unpacking through critically conscious frameworks such as the critical race and social identity theories.

The question of why these seemingly contradictory findings regarding internalization of the model minority myth and positive and negative mental health outcomes exist remains to be answered. Recently, a dual-pathway model was proposed to explain how internalization of the model minority myth could predict psychological distress through different pathways of pride and pressure (Mahalingam 2006; Mahalingam 2012b). Mahalingam hypothesized that internalization of model minority stereotypes would positively predict feelings of pride in one’s group affiliation related to the social status of that group as a “model minority,” and that feelings of pride would inversely predict psychological distress. In addition, Mahalingam (2012b) hypothesized that internalization of stereotypes would positively predict feelings of pressure to live up to those stereotypes, and that pressure would positively predict psychological distress.

While Mahalingam (2012b) hypothesized a dual pathway model, he predicted that the two pathways functioned independently of each other, and that individuals could fall into four conceptual quadrants: scoring high on both pride and pressure, scoring low on both, scoring high on pride and low on pressure, and vice versa. Based on this

conceptualization, he argued that researchers should explore how Asian Americans could adapt the idea of an “idealized” identity, such as the model minority myth, to their advantage as a potential source of resilience against stress and distress (Mahalingam 2012b). From a critical race perspective, it is important to acknowledge that within the framework of racial hierarchy—which is a system of oppression—a protective factor against distress does not necessarily equate to a positive experience. A protective factor against distress is still harmful when it perpetuates a system of oppression; feeling pride related to being part of a model minority group still perpetuates the system of racial hierarchy. However, exploring the nuances of the established conflicting relationship between internalization of model minority stereotypes and psychological distress is warranted.

Mahalingam (2012b) speculated about factors that may influence Asian Americans’ complex experiences of pride and pressure; however, the dual-pathway model itself does not account for conditions under which internalization may predict more or less distress. Researchers have previously speculated about the potential moderation impact of individuals’ self-concept of achievement related to model minority stereotypes, and Mahalingam (2012b) hypothesized about potential differences in experiences of pride and pressure based on success. It may be easier for individuals to use internalization of the myth as a coping mechanism for marginalization, and thus feel an alleviation of psychological distress, when they perceive themselves to match what are commonly considered to be the stereotypes of achievement endorsed by the myth. Alternatively, when individuals have a lower self-concept related to these stereotypes, internalization might predict more psychological distress. Therefore, the present study

adapted Mahalingam's (2012b) dual-pathway model to test mediation of the relationship between internalization of the model minority myth and psychological distress, and added to this model by exploring self-concept related to model minority stereotypes as a potential moderator of the mediation (see Figure 1). Further, based on the conceptualizations in extant literature of the importance of self-concept related to model minority stereotypes in potentially explaining the relationship between internalization of the model minority myth and psychological distress, the present study will also aim to test this variable as a moderator of the direct relationship.

### **South Asians**

While all Asian American subgroups are likely subjected socially to the myth of the model minority, the relationship between the myth and psychological outcomes is better understood for some subgroups than others. In particular, the ways in which South Asians understand, experience, and are impacted by the model minority myth are not well understood in extant literature. Although considered colloquially and legally as a subgroup of the pan-ethnic Asian American group, South Asians in the United States have traditionally been ignored or underrepresented in conversations about Asian American experiences (Davé et al., 2000; Accapadi, 2005). Key research studies exploring the model minority myth and its function in the lives of Asian American individuals have either excluded South Asians entirely or limited the subgroup to Asian Indians (Oyserman & Sakamoto, 1997; Yoo, Burrola, & Steger, 2010). Moreover, research exploring the model minority myth in South Asian communities is highly limited.

## **The Present Study**

The present study contributes to the literature in multiple ways. First, this study extends the research literature explaining the conflicting relationships between internalization of the model minority myth and psychological distress in the South Asian population in the United States. Variations of the dual-pathway model proposed by Mahalingam (2006; 2012b) have been applied and tested both in pan-ethnic Asian American groups and in South Asian American subgroups (Yim, 2009; Kanukollu, 2010; Daga & Raval, 2018). However, the model has not previously been tested for South Asians where the “idealized” identity was represented by internalization of the model minority myth and the outcome variable was psychological distress. The present study aimed to examine how the internalization of the model minority myth related to psychological distress in South Asians through dual pathways of pride and pressure related to the myth. Internalization of the model minority myth (IM) was defined in accordance with research by Yoo, Burrola, & Steger (2010) as the extent to which an individual endorses beliefs that Asian Americans are more successful than other racial minorities because of their values of achievement and hard work. The construct of Model Minority Pride (MMPrise) was defined as feelings of pride specifically related to group affiliation when that group is recognized as being a “model minority;” i.e., assigning positive attributes to the “model minority” social status and feeling gratification related to association with that status. Model Minority Pressure (MMPress) was defined as feelings of pressure to live up to “model minority” stereotypes; i.e., assigning value to achievement-related stereotypes about Asian Americans and feeling beholden to internal or external expectations to match those stereotypes.

Previous researchers have speculated that the relationships between internalization, pride, and pressure could be moderated by a variable of self-concept of achievement. Researchers theorized that South Asians who perceive themselves as satisfying the expectations of the model minority myth experience more pride, while those who perceive themselves as falling short of the myth experience more pressure (Daga & Raval, 2018). While a number of researchers have identified the existence of this construct and its potential impact, the language used to discuss the construct is highly varied and it has yet to be defined and operationalized. The present study aimed to operationalize the construct of self-concept related to model minority stereotypes by providing a specific definition that identifies its unique nature and creating a measure to capture it. Using this new measure, the present study aimed to gather empirical evidence to understand whether self-concept related to model minority stereotypes conditionally activates previously identified mediation pathways between internalization of the model minority myth and psychological distress. Self-concept related to model minority stereotypes (SCRMMS) was defined in the present study as the extent to which a person believes they have the qualities to be successful, or have the qualities that are considered to be qualities of success, based on items that have been shown in extant literature to reflect achievement-related stereotypes about Asian Americans (Chen, 1995; Ho & Jackson, 2001; Gupta, Szymanski, & Leong, 2011; Yoo, Burrola, & Steger, 2010). This definition is unique from other constructs such as self-efficacy because the SCRMMS construct focuses on individuals' real experiences separate from their beliefs about their abilities. For example, even if an individual believes they could get good grades if they studied hard, this belief might not be reflected in their actual grades or in the way that

they report their grades; thus, an individual could have high self-efficacy but low self-concept related to model minority stereotypes. Further, the SCRMMS construct is different from identification with achievement-related values. For example, even if an individual believes academic success is important, they still may not actually perform the behaviors or have the attributes necessary to be academically successful, in which case they would score lower on the SCRMMS construct.

### *Hypotheses*

The present study tested self-concept related to model minority stereotypes as a potential moderator of the direct relationship between internalization of the model minority myth and psychological distress among South Asians in the United States (Hypothesis 1). The moderation hypothesis was that at low levels of SCRMMS, internalization would relate positively to distress, while at higher levels of SCRMMS, internalization would inversely predict distress. Furthermore, this research adopted the model proposed by Mahalingam (2006, 2012b), grounded in theories of critical race and social identity, as a starting framework for illustrating a dual-pathway mediation model of internalization of the model minority myth as a predictor of psychological distress among South Asians. Specifically, Hypothesis 2 posited a mediated relationship between IM and psychological distress (PD) through MMPrize, where IM and MMPrize would be positively related, and MMPrize and PD would be inversely related. Hypothesis 3 posited a mediated relationship between IM and PD through MMPress, where IM and MMPress would be positively related, and MMPress and PD would also be positively related. The present study also explored the potential moderation of these mediation pathways by SCRMMS. The conditional indirect effect hypothesis (Preacher, Rucker, & Hayes, 2007)

was that the indirect effect of IM on PD through MMPrise would be conditional upon levels of SCRMMS, where the indirect effect would be stronger at higher levels and weaker at lower levels of the moderator (Hypothesis 4). In addition, the indirect effect of IM on PD through MMPress was also hypothesized to be conditional upon values of SCRMMS, where the indirect effect would be stronger at lower levels and weaker at higher levels of the moderator (Hypothesis 5). Visualizations of all hypotheses can be seen in Figure 1.

To give voice to the nuanced and complex ways that South Asians in the United States could experience impacts of the model minority myth, the present study used free-response questions to explore what South Asians know about the model minority myth and how they feel the myth impacts them. Prior research has illustrated numerous advantages to mixed methods designs, including augmenting traditional research methods to gain a deeper or clearer understanding of the research question (Driscoll et al., 2007; Almalki, 2016; Daga & Raval, 2018). The present study used an embedded mixed methods design in which the primary data was quantitative, and qualitative data was analyzed to supplement my understanding of the results (Creswell & Plano Clark, 2011; Almalki, 2016). This approach was ideal because the different methods addressed different questions (Creswell & Plano Clark, 2011), which together would help to gain an understanding of the mental health implications of the model minority myth for South Asians: the quantitative data assessed why prior research has shown conflicting relationships between internalization of the myth and psychological distress, while the qualitative data assessed how South Asians experience the model minority myth. The quantitative data extended current quantitative research literature about the relationship

between internalization of the model minority myth and psychological distress, while the qualitative data focused on specific questions. The qualitative method used was consensual qualitative research modified for simple qualitative data (CQR-M; Spangler et al., 2012). We chose CQR because of the openness of the free-response questions and the scarce prior research about how South Asians experience the model minority myth; as a bottom-up approach in which the domains and categories are informed by the data itself, CQR allows for exploration of themes across participant responses without restrictions associated with a priori categories (Hill, 2012). The modified methodology allows for use of this bottom-up approach with data from a large number of participants that consists of short (i.e., a few sentences) responses (Spangler et al., 2012).

## **Quantitative Methods**

### **Participants**

Participants were 295 individuals ranging in age from 18 – 62 ( $M_{age} = 27$ ). 129 participants identified as female, 127 as male, 1 queer, 2 nonbinary/gender nonconforming, and 36 undisclosed. With regard to generational status, 138 were second generation (born in the United States with at least one parent born outside of the United States), 64 were first generation (born outside of the United States), 63 were 1.5 generation (born outside of the United States and immigrated before the age of 18), 5 other (i.e., born in the U.S. but lived abroad as a child, international graduate student), and 25 unreported. Participants' education levels ranged from high school or some college ( $n = 51$ ), two or four-year degree ( $n = 91$ ), some graduate school ( $n = 18$ ), and master's or doctorate degree ( $n = 109$ ), with 26 unreported. Participants' self-reported

socioeconomic status on a scale from 1 (worst off with regard to money, education, and job) to 10 (best off) was an average of 6.74 ( $n = 269$ ).

In terms of ethnic identity, participants identified as Indian/Indian American ( $n = 212$ ), South Asian/South Asian American ( $n = 42$ ), Pakistani/Pakistani American ( $n = 24$ ), Bangladeshi/Bangladeshi American ( $n = 9$ ), Multiethnic ( $n = 4$ ; Sri Lankan & Indian, Pakistani & Indian Tamil, South Indian & Japanese, South Asian American & Syrian), Sri Lankan/Sri Lankan American ( $n = 2$ ), and Asian/Asian American ( $n = 1$ ). Regarding how strongly they identified with their ethnic group and how important their ethnic group identity was to them, on a scale from 1 (not at all) to 4 (extremely), participants scored an average of 2.85 and 2.72, respectively ( $n = 270$ ).

With regard to religion, 121 identified as Hindu, 43 as Atheist, 32 Spiritual or Agnostic, 31 Muslim, 13 Christian, 11 Sikh, 10 other (i.e., Ismaili, Parsi, Wiccan, Vedic), 4 Jain, 2 Buddhist, 2 Deist, and 25 unreported. 4 people identified as nonreligious but culturally Hindu. Regarding how important their religious identity was to them, on a scale from 1 (not at all) to 4 (extremely), participants scored an average of 2.22 ( $n = 269$ ).

## **Measures**

### ***Demographics***

A demographics questionnaire was administered to assess age, gender, ethnic identity and salience, religious identity and salience, generational status, education, and socioeconomic status. See Appendix L for measure items.

### ***Internalization of the Model Minority Myth Measure (IM4)***

Internalization of the model minority myth (IM) was measured using the IM-4 developed by Yoo, Burrola, & Steger (2010). It is a 7-point rating scale ranging from 1

(strongly disagree) to 7 (strongly agree) assessing the extent to which individuals endorse beliefs that South Asian Americans have “greater success than other racial minority groups associated with their stronger work ethics, perseverance, and drives to succeed” (Yoo, Burrola, & Steger, 2010). This is a subscale of the researchers’ general measure assessing internalization of the model minority myth, for which factor analysis returned two subscales: Achievement Orientation and Unrestricted Mobility. Confirmatory factor analysis supported the two-factor model (Yoo, Miller, & Yip, 2015). Instructions by Yoo, Burrola, & Steger (2010) state that the subscales should be used separately, and prior research exploring the relationship between IM and psychological distress has established precedent for examining internalization of achievement-related stereotypes in particular (Chen, 1995; Chu, 2001; Gupta, Szymanski, & Leong, 2011; Daga & Raval, 2018).

A potential concern regarding this measure is that some items are double-barreled (e.g., “Asian Americans generally perform better on standardized exams (i.e., SAT) because of their values in academic achievement”); however, for such questions, both parts of the item may be necessary in order to capture the nuanced difference between simply believing stereotypes and actually internalizing the myth. Further, authors reported good internal consistency ( $\alpha = 0.91$ ) and test-retest reliability (0.72) for the achievement subscale scores in prior research (Yoo, Burrola, & Steger, 2010; Kim & Lee, 2014; Yoo, Miller, & Yip, 2015; Chang, 2017).

Kim & Lee (2014) found that the achievement subscale of the IM-4 was significantly and moderately correlated with family recognition through achievement, demonstrating construct validity. Consistent with theory, Kim & Lee (2014) also found that internalization of the model minority myth was not significantly correlated with

conformity to norms, meaning that endorsing the model minority myth and stereotypes is unique from personally conforming to or matching those stereotypes. Both subscales of the measure have been used with both Asian American and South Asian samples (Yoo et al., 2010; Yoo et al., 2015; Daga & Raval, 2018). In the present study, the estimated internal consistency reliability of the scale scores was  $\alpha = 0.93$ .

### ***Self-Concept Related to Model Minority Stereotypes (SCRMMS)***

Self-concept related to model minority stereotypes was assessed using new measure using a 7-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree), created to assess the extent to which individuals believe they personally have qualities that are reflective of achievement-related stereotypes endorsed by the model minority myth. The scale was intended to measure individuals' beliefs about themselves regardless of their feelings about the model minority myth, and items were based on items that have been shown in extant literature to reflect achievement-related stereotypes about Asian Americans (Ho & Jackson, 2001; Gupta, Szymanski, & Leong, 2011; Yoo, Burrola, & Steger, 2010).

All items on the scale were adapted from items on existing measures. First, the 10 items from the IM-4 Achievement Orientation subscale were adapted to refer to the self, and the stem "in comparison to other racial minorities" was dropped from the items. The primary researcher consulted with a team of researchers which included one White cisgender man, one Latinx cisgender man, and one Asian Indian cisgender woman. Based on feedback, the item referring specifically to standardized exams was dropped. The two items referring to grades and GPA were collapsed into one broad item stating "I have a history of performing well in school." The double-barreled item "Asian Americans make

more money because they work harder” was changed to “I earn a high salary or I expect to earn a high salary in my future career.”

From the Attitudes Towards Asian Americans Scale (ATA; Ho & Jackson, 2001), the item “Generally, Asian Americans are smart” was adapted to “I am smart,” following the process reported in Gupta et al. (2011). While Gupta et al. (2011) adapted the entire ATA scale to refer to the self, the rest of the items on the measure strayed from achievement-related stereotypes and did not capture the construct definition of self-concept related to model minority stereotypes detailed here; thus, only one item from the ATA was used in the current measure.

The primary researcher obtained further feedback from individuals with content area knowledge, experience with quantitative and qualitative methods, and measure development and validation; they were one Asian Indian cisgender woman, one White European American cisgender woman, and one Korean American cisgender man. Based on feedback, the word “can” was removed from “I can persist through tough situations” in order to better capture the difference between self-concept related to model minority stereotypes (this measure) and self-efficacy.

The final set of eight items was sent individually to a team of three expert reviewers to evaluate item content representativeness and relevance (Davis, 1992; Grant & Davis, 1997; Rubio, et al., 2003). Reviewers were chosen because they are experts in the field of psychology specifically doing research and clinical work with South Asians in the United States, with a demonstrated understanding of the model minority myth and psychological distress in the South Asian population—key constructs in the present study. The team of three included two Asian Indian cisgender women and one nonbinary,

South Asian/mixed race individual. Expert reviewers were provided with a construct conceptualization, details about the measure, and an overview of the measurement development process (Appendix A). On the measurement rating scale (Appendix B), reviewers were provided with the construct name and theoretical definition, and were asked to rate each individual item for representativeness on a scale of 1 – 4, with 4 being the most representative, and for clarity, also on a 4-point scale (Rubio et al., 2003).

Researchers suggest that a score of 3 or 4 on the measurement rating scale indicates that an item is acceptable in the category being rated (representativeness or clarity), and data analysis recommendations for interrater reliability and content validity call for dichotomizing the scale by collapsing scores of 1 and 2 together, and collapsing scores of 3 and 4 together (Davis, 1992; Grant & Davis, 1997; Rubio, et al., 2003). For both representativeness and clarity, the reviewers rated all items as either 3 or 4, indicating 100% interrater agreement. The content validity index was estimated for each item by counting the number of experts who rated the item a 3 or a 4 for representativeness, and dividing by the total number of experts (Rubio et al., 2003). Based on ratings, the content validity index for all items was 100% (Appendix C). The estimated internal consistency reliability of the scale scores in the present study was  $\alpha = 0.77$ .

### ***Model Minority Pride Questionnaire (MMPride)***

Pride related to the model minority myth (MMPride) was measured using a 7-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree) assessing the degree to which individuals endorse feelings of pride specifically related to group affiliation when that group is recognized as being a “model minority” (Mahalingam &

Haritatos, 2007). A previous study using a 5-point scale for a 2-item subscale of this measure showed good internal consistency (0.70; Mahalingam, Balan, & Haritatos, 2008). Further, Daga & Raval (2018) reported good internal consistency of the measure using a 5-point scale in a South Asian sample ( $\alpha = 0.90$ ).

Daga & Raval (2018) found model minority pride to be significantly and moderately correlated with both the ethnic identity subscale and the affirmation or belonging subscale of the Multigroup Ethnic Identity Measure (Phinney, 1992), demonstrating construct validity. In the present study, the estimated internal consistency reliability of the scale scores was  $\alpha = 0.89$ . Evidence for construct validity includes the expected small but significant correlation with the Model Minority Pressure scale ( $r = 0.23, p < 0.01$ ).

#### ***Model Minority Pressure Questionnaire (MMPress)***

Pressure related to the model minority myth (MMPress) was assessed using a 7-point rating scale ranging from 1 (strongly disagree) to 7 (strongly agree) assessing the degree to which individuals endorse feelings of pressure to live up to “model minority” stereotypes. Previous research reported internal consistency of  $\alpha = 0.71$  using a 5-point scale in a South Asian sample (Daga & Raval, 2018).

Establishing construct validity, Daga & Raval (2018) found model minority pressure to be significantly correlated with all three subscales of the Ethnic Socialization Questionnaire, cultural socialization, preparation for bias, and promotion of mistrust (Hughes & Chen, 1997), as well as with the ethnic identity subscale of the Multigroup Ethnic Identity Measure (Phinney, 1992). In the present study, estimated internal consistency reliability of the scale scores was  $\alpha = 0.75$ . Evidence for construct validity

includes the expected small but significant correlation with the Model Minority Pride scale ( $r = 0.23, p < 0.01$ ).

### ***Hopkins Symptom Checklist 21***

Psychological distress (PD) was assessed using the 21-item Hopkins Symptom Checklist (HSCL-21) adapted from the original HSCL by Green et al. (1988); (Yoo, et al., 2010; Yoo, et al., 2015; Gupta, et al., 2011). The measure captures general distress, somatic distress, and performance difficulty, and higher scores are indicative of higher levels of PD. Evidence for high construct validity for this measure was previously established (Prusoff & Klerman, 1974, cited in Green, et al., 1988). Authors reported high split-half reliability (0.91) and internal consistency ( $\alpha = 0.90$ ).

Research has supported a three-factor structure for the measure with subscales of general feelings of distress, somatic distress, and performance difficulty (Green et al., 1998; Walkey, Aghanwa, & Taylor, 2002). Some results from confirmatory factor analysis of the measure have cautioned against the use of the full scale; however, authors stated that the high level of reliability of the measure could be considered reasonable support for the use of the full measure (Walkey, Aghanwa, & Taylor, 2002). Other researchers have also reported high reliability of the measure when assessed as a total score (Green et al., 1988; Krycak, Murdock, & Marszalek, 2012; Pacheco del Castillo, 2017).

Construct validity for the HSCL-21 has been established in multiple studies by comparisons of clinical or crisis-symptomatic participant scores with non-clinical or non-symptomatic scores (Deane, Leathern, & Spicer, 1992, Walkey, Aghanwa, & Taylor,

2002). Dean, Leathern, & Spicer (1992) also examined change in scale scores over time in a psychotherapy study and found support for both construct and discriminant validity.

Reliability and validity have been established for the HSCL-21 across multiple ethnic and racial populations, including Dominican (Pacheco del Castillo, 2017), Fijian (Walkey, Aghanwa, & Taylor, 2002), and Asian American (Yoo, Burrola, & Steger, 2010; Gupta, Szymanski, & Leong, 2011). In the present study, estimated internal consistency reliability of the scale scores was  $\alpha = 0.92$ .

### **Procedure**

Study approval was granted by the University of Maryland Institutional Review Board (IRB). Participants were recruited primarily through Reddit forums pertaining to Asian and South Asian Americans, after obtaining approval from forum moderators (r/AsianAmericanIssues, r/ABCDesis, r/DesiTwoX). Participants were also recruited through Facebook, emails to academic and community listservs, networking within the personal and professional communities of the researcher, and word-of-mouth snowball sampling. Due to the initial large percentage of Indian/Indian American-identified respondents, special care was given to recruiting participants of other South Asian identities through nonprofit organizations and social media groups directly serving those populations.

Participants who self-selected based on interest from the recruitment message (Appendix D) were emailed a link to a Qualtrics survey set where they were first asked to complete an online informed consent form. After providing informed consent (Appendix E), participants proceeded to a pre-screening questionnaire assessing age, ethnic identity and country of residence (Appendix F). They then completed relevant study measures,

followed by a general demographics survey. Following completion of all measures, participants were presented with debriefing information about the study. Further, after completion of the survey, participants were given the option of entering into a random and anonymous drawing to win 1 of 4 \$25 Amazon gift cards. This information was collected separately from survey data.

Some participants from Reddit responded to the recruitment message after completing the surveys with additional information and feedback regarding their experience with the surveys or supplementary thoughts. Thus, additional IRB approval was obtained from the University of Maryland to use this qualitative data in analysis.

## **Quantitative Results**

### **Preliminary Analysis**

Prior research studies testing the direct effect of internalization of the model minority myth on measures of psychological distress have found small to medium effects based on Cohen's (1992) conventions (Chen, 1995; Chu, 2002; Gupta, Szymanski, & Leong, 2011). Although self-concept of achievement has not previously been assessed, measures of academic performance such as grade-point average have also been shown to have small to medium effect sizes (Chu, 2002). Based on these parameters, I conducted an a priori power analysis using G\*Power (Faul, et al., 2007), which suggested that a sample size between 55 and 264 would be needed for the present study to detect medium or small direct effects, respectively, at a power of 0.8. Cohen's (1992) conventions suggested that for a study with 4 predictors, a sample size between 84 and 599 would be needed to detect medium or small effect sizes, respectively.

After two recruitment attempts, a total of 388 individuals responded to the survey and completed at least the informed consent. Of these, 19 cases were removed due to failing the screening survey, and 47 cases were removed due to missingness in all response items after the screening. Next, cases with greater than 50% missing data were removed due to the consideration of unacceptable relative bias in imputing Likert-type data in such cases (Leite & Beretvas, 2010), resulting in a total of 295 cases. Post-hoc power analysis using G\*Power (Faul, et al., 2007) revealed that for  $\alpha = 0.05$ , with a sample of 295, the power to detect a medium effect size was 0.99.

A missing value's analysis using Little's MCAR Test (Little, 1998) suggested that the remaining missing data was missing completely at random ( $\chi^2 = 400.85$ ,  $df = 493$ ,  $p = 0.99$ ), indicating the appropriateness of imputing missing values. For missing data across the five core variables (IM, MMPrize, MMPress, SCRMMS, and PD), multiple imputation was conducted at the item level using the predictive mean matching method (Enders, 2010; van Buuren & Groothuis-Oudshoorn, 2011; Eekhout et al., 2014; Eekhout, I., 2015; Plumpton et al., 2016; Heymans & Eekhout, 2019).

To ensure appropriateness of multiple regression analysis to fit the data, I tested the assumptions of normality and multicollinearity. Visual inspection of the frequency distributions showed even distribution, and none of the skewness or kurtosis values across the five core variables approached 1, suggesting that normality of the data was a reasonable assumption (George & Mallory, 2010). Analysis of Pearson correlations across the five core variables (Table 1) showed no strong correlations ( $r < 0.80$ ), meeting the assumption of multicollinearity.

## **Descriptive Statistics**

Bivariate correlations for the five core variables are displayed in Table 1; means and standard deviations are displayed in Table 2. IM was not significantly correlated with PD, which could be contrary to the hypothesis or could provide initial support for the hypothesis of a dichotomous mediated relationship between the two variables. SCRMMS was significantly correlated with both MMPrise and MMPress in the expected directions ( $r = 0.39, p < 0.01$  and  $r = -0.21, p < 0.01$ , respectively), indicating that a stronger match between self-concept and model minority stereotypes was associated with higher levels of pride and lower levels of pressure. MMPress and SCRMMS were correlated with PD in the expected directions ( $r = 0.43, p < 0.01$  and  $r = -0.25, p < 0.01$ , respectively), showing that higher levels of pressure were associated with higher levels of psychological distress, while a stronger match between self-concept and model minority stereotypes was associated with lower levels of distress.

## **Moderation of Direct Relationship**

A regression analysis using the PROCESS macro in SPSS (Hayes & Preacher, 2013; Hayes, 2018) was used to test hypotheses. All moderation hypotheses, including direct and indirect, were tested simultaneously using model 8, and parallel mediation hypotheses were tested using model 4 (Hayes, 2018).

A direct relationship between IM and PD was not found to be statistically significant ( $t(289) = -0.730, p = 0.47$ ). In terms of moderation, establishing a statistically significant direct relationship prior to testing moderation is not necessary, as the moderator may function as an explanation for an “unexpectedly weak” connection between the predictor and outcome (Baron & Kenny, 1986).

Hypothesis 1 posited that SCRMMS would function as a moderator of the direct relationship between IM and PD. This hypothesis was not supported ( $\Delta R^2 = 0.002$ ,  $F(1, 289) = 0.654$ ,  $p = 0.42$ ). This finding suggests that SCRMMS is not a factor influencing whether or not a statistically significant relationship between IM and PD exists.

### **Parallel Mediation**

While a direct relationship between predictor and outcome is often thought of as necessarily significant in order to establish the existence of mediation pathways (Baron & Kenny, 1986), recent statistical literature has suggested that significant indirect pathways independent of established direct relationships are common and should be explored outside of the causal steps framework (Hayes, 2018). Hayes (2018) suggests that there could be a variety of reasons that a direct relationship is nonsignificant despite significant mediation, including when the predictor exerts opposite effects on the outcome, as hypothesized in the present study.

Results from parallel mediation analysis indicated that IM was indirectly related to PD through its relationship with MMPrude; thus, hypothesis 2 was supported. First, as can be seen in Figure 2, higher levels of internalization were related to higher levels of pride related to model minority status ( $a_1 = 0.57$ ,  $p < 0.01$ ), and higher levels of pride were subsequently related to lower levels of psychological distress ( $b_1 = -1.82$ ,  $p < 0.01$ ). A 95% bias-corrected confidence interval based on 1000 bootstrap samples indicated that the indirect effect of IM on PD through MMPrude ( $a_1b_1 = -1.03$ ), holding the other mediator constant, was entirely below zero (-1.78 to -0.24).

In contrast, results indicated that IM was indirectly related to PD in the opposite direction through its relationship with MMPress; thus, hypothesis 3 was supported. First,

as can be seen in Figure 2, higher levels of internalization were related to higher levels of pressure related to model minority status ( $a_2 = 0.12, p < 0.05$ ), and higher levels of pressure were subsequently related to higher levels of psychological distress ( $b_2 = 5.23, p < 0.01$ ). A 95% bias-corrected confidence interval based on 1000 bootstrap samples indicated that the indirect effect of IM on PD through MMPress ( $a_2b_2 = 0.60$ ), holding the other mediator constant, was entirely above zero (0.15 to 1.09). Thus, while the direct relationship between IM and PD was not statistically significant, results indicate that a dichotomous and conflicting indirect relationship does exist between the two variables.

### **Conditional Parallel Mediation**

Conditional process analysis was conducted using model 8 of PROCESS in SPSS (Hayes & Preacher, 2013; Hayes, 2018) to explore the potential moderating effect of SCRMMS in the first stages of the mediated relationships between IM and PD.

Hypothesis 4 posited that SCRMMS would moderate the relationship between IM and MMPrize, meaning that the indirect effect of IM on PD through MMPrize would be conditional on values of SCRMMS. This hypothesis was not supported ( $\beta = 0.20, t(291) = 0.38, p = 0.71, \Delta R^2 = 0.0003$ ). The indirect effect of IM on PD through MMPrize was probed at three different values of SCRMMS: the mean (5.75) and  $\pm 1$  SD from the mean (4.67, 6.38). A 95% bias-corrected confidence interval based on 1000 bootstrap samples suggested that at all tested values of SCRMMS, the indirect effect of IM on PD through MMPrize remained entirely below zero. Further, the 95% confidence interval for the index of moderated mediation contained zero (-0.20, 0.12).

Hypothesis 5 posited that the indirect effect of IM on PD through MMPress would be conditional on values of SCRMMS through moderation of the relationship

between IM and MMPress. This hypothesis was also not supported ( $\beta = -0.07$ ,  $t(291) = -1.24$ ,  $p = 0.22$ ,  $\Delta R^2 = 0.005$ ). The indirect effect of IM on PD through MMPress was probed at the mean and  $\pm 1$  SD from the mean of SCRMMS. A 95% bias-corrected confidence interval based on 1000 bootstrap samples suggested that at the mean and -1 SD, the indirect effect of IM on PD through MMPress remained entirely above zero. In contrast, at +1 SD, the 95% confidence interval did contain zero (-0.09, 1.22); however, the 95% confidence interval for the overall index of moderated mediation also contained zero (-0.85, 0.10), suggesting that the relationship between IM and MMPress was not moderated by SCRMMS.

### **Post-Hoc Analysis**

#### ***Conditional Parallel Process Analysis for Indian/Indian American Subgroup***

Because a large proportion of participants identified as Indian or Indian American ( $n = 212$ ), the conditional parallel mediation model was tested for this subset of participants. This analysis was completed in order to probe potential differences between Indians/Indian Americans and other South Asian subgroups. Post-hoc power analysis using G\*Power (Faul, et al., 2007) revealed that with this sample size, the power to detect a medium effect at  $\alpha = 0.05$  was 0.99.

Conditional process analysis (Hayes & Preacher, 2013; Hayes, 2018) revealed support for hypothesis 5, that the indirect effect of IM on PD through MMPress would be conditional on values of SCRMMS ( $\beta = -0.13$ ,  $t(207) = -2.10$ ,  $p = 0.04$ ,  $\Delta R^2 = 0.02$ ). The indirect effect of IM on PD through MMPress was probed at the mean and  $\pm 1$  SD from the mean of SCRMMS (Figure 3). A 95% bias-corrected confidence interval based on 1000 bootstrap samples showed that the indirect effect was significant at -1 SD ( $\beta = 0.26$ ,

$t(207) = 3.51, p = 0.001, 95\%CI[0.11, 0.40]$ ) and at the mean ( $\beta = 0.13, t(207) = 2.05, p = 0.04, 95\%CI[0.004, 0.25]$ ), and nonsignificant at +1 SD ( $\beta = 0.05, t(207) = 0.56, p = 0.56, 95\%CI[-0.12, 0.21]$ ). The overall index of moderated mediation was statistically significant ( $95\%CI[-1.11, -0.15]$ ), suggesting that for Indian and Indian American individuals, a higher self-concept related to model minority stereotypes attenuates the positive indirect relationship of IM with PD through MMPress (Figure 4). These results are consistent with the hypothesis that the indirect relationship between IM and PD through MMPress is stronger at lower levels of SCRMMS and weaker at higher levels of SCRMMS.

### ***Between Groups Differences in Core Variables***

To assess potential group differences between Indian/Indian Americans and other South Asian subgroups, a one-way analysis of variance was conducted to compare means across all five core variables (IM, MMPrize, MMPress, SCRMMS, and PD) for Indian/Indian Americans compared with an aggregated group of all other South Asian subgroups. Using an alpha level of 0.05, this test was found to be statistically significant for IM ( $F(1, 293) = 5.10, p = 0.03; d = 0.28$ ), MMPress ( $F(1, 293) = 5.00, p = 0.03; d = 0.29$ ), and PD ( $F(1, 293) = 12.62, p < 0.001; d = 0.44$ ). Table 3 shows group means across the five variables.

## **Qualitative Method**

### **Participants**

#### ***Respondents***

Qualitative analysis was completed for the subset of total participants ( $n = 152$ ) who identified as Indian or Indian American and who entered answers into at least one of

two free-response questions included at the end of the quantitative survey. Questions were “What do you know about model minorities or the model minority myth, or what do you think they mean?” and “How does the model minority myth impact you?”

### ***Judges***

The coding team consisted of 3 cisgender female counseling psychology doctoral students (1 East Asian International, 1 Asian Indian International, 1 Asian Indian American, ages 26 to 28). The primary researcher, a 26-year-old, Asian Indian American, queer cisgender woman served as the team leader for qualitative analysis. The auditor for the coding process was a 71-year-old, White European American, cisgender female counseling psychology professor who had experience with CQR.

### **Procedure**

#### ***Selecting and Training Judges***

Judges were selected based on their experience with research and the model minority concept, interest in the topic, and availability and time to devote to the qualitative coding process. They were given an overview of the process for consensual qualitative research modified for simple qualitative data (CQR-M; Spangler, Liu, & Hill, 2012) by the primary researcher.

Prior to seeing the data, judges discussed their potential biases (including their knowledge of and experiences with the model minority myth) and expectations for participant responses to the survey questions. Judges were familiar with the model minority myth, including some of its associated stereotypes and how it can create a positive bias in how Asians and South Asians are viewed by others in society. Team members expected that participants would report being affected negatively by the myth.

They discussed their experiences with being Asian and South Asian in the United States, including experiencing xenophobia and racism.

Throughout the coding process, team members were encouraged to remain aware of their biases and expectations, and reactions to specific participants' responses were discussed within the group. The primary researcher facilitated the coding process and encouraged team members to openly state their own opinions and to not simply agree with each other to reach consensus.

### ***CQR-M Process***

We followed the procedure for conducting consensual qualitative research modified for simple qualitative data (CQR-M) outlined in Spangler et al. (2012). Responses to each of the two questions were first coded independently. First, the primary researcher reviewed responses from a random subset of 50 participants and developed an initial set of categories for the responses for each question. As a team, judges reviewed and revised the categories; they then together coded additional participant responses, revising the categories as needed and reaching consensus on the assigned code for each participant response. The primary researcher then coded the remaining participants' responses, with the other judges independently reviewing the assigned categories prior to the next meeting. As a team, judges then discussed all disagreements to reach consensus; they also further modified the categories as needed. The primary researcher then met with the auditor and reviewed the categories and examples. Based on the auditor's concern about overlap in the responses for the two categories, the primary researcher collapsed the data and then reviewed the results again with the auditor.

## **Qualitative Results**

Participants in the overall collected sample prior to any case deletion or data imputation (n = 388) were assigned code numbers based on the order in which they completed the surveys (for example, P1 was the first participant; P367 was the 367<sup>th</sup> participant). Cases in the subset used for qualitative analysis were not reassigned participant numbers.

Verbatim quotes are reported in this section; deleted words are indicated with ellipses (. . .) and any changes made for flow of sentences are indicated with brackets ([ ]). Following CQR-M guidelines, findings are presented in Table 4 as proportions of each category (i.e., the percentage of participants whose data fit into each category).

### **Stereotypes Associated with the Myth**

56.58% of participants described model minorities in terms of stereotypes. They discussed the picture painted by the model minority myth of what Asians and South Asians are like and how they behave, and how the myth contributes to the perpetuation of certain stereotypes. For example, P36 wrote,

Model minorities are minority groups who are viewed as high achieving and successful within American society. This is sometimes perceived as an attribute of that minority group, as it can be seen as the natural output of the cultures' values.

For P52, “The model minority myth perpetuates the narrative that South Asian Americans are proper, law abiding citizens that have achieved better success than the general population due to their attitudes towards academic success.” Participants reflected on their personal experiences of being stereotyped because of their ethnic group; for example, P207 wrote “It definitely impacted [me] growing up as one of the few Indian students in my entire school. I think I was viewed as smarter/harder working than

similar students just because I am Indian.” P356 said that South Asians were “expected to be good at math/science, expected to have college educated parents,” and that “people are surprised to learn that I drink alcohol or that I wasn’t a straight A student (even though I have a PhD—it was not easy).”

### **Navigating the Racial Hierarchy**

51.32% of participants reflected on how the model minority myth operates within a system of oppression and forces Asians and South Asians in the United States to carefully navigate a racial hierarchy in which they are both oppressed and privileged. Participants discussed how the model minority myth separates Asians and South Asians both from the White majority and from other racial minorities, creating a triangle in which Whiteness is at the top and racial minorities are at the base, but Asians and South Asians are separated from other racial minorities. This triangulation places model minorities in a pre-assigned role in society; P164 described it as,

Built on anti-Black racism but still contain[ing] a lot of anti-Asian racism. We are "smart," "hardworking," "non-complaining", etc., and only by adhering to these parts of the model minority myth are we "good minorities. When we deviate, we become a threat, an enemy.

P83 described how the way individuals are perceived within a framework of White supremacy is about maintaining the system of oppression,

Racial identity is an unchangeable biological fact of who you are. Unlike education, money or even health—you cannot do much to change [your] racial identity. The model minority theory necessitates that my in-group stay a minority. Secondly it necessitates that I stay within the confines of a model, neutered and

subservient definition. While I fit this mould today, this theory will be problematic politically, as the numbers of South Asians grow to become a visible minority. We see significant anti-brown sentiment manifesting itself as islamophobia, outsourcing Indians etc. in major Indian neighborhoods.

Participants stated that Asians and South Asians are described as more successful or favorable than other racial minorities and are seen as a model of the "ideal" minority; they are resilient because they achieve success despite adversities they face. This real or perceived success is used to shame, oppress, or otherwise perpetuate racism against other racial minorities. P80 wrote,

We are "better" than other minorities because we present ourselves and behave in ways that are respected by the majority. Our preoccupation with our cultural values, success, and status seeking naturally align with indications of success despite adversity. This resilience illustrates that other populations who do not demonstrate such success must suffer from failures of character.

In terms of social standing and racial hierarchy, model minorities are closer to Whiteness compared to other racial minorities; thus, model minorities experience more privilege, including resources, support, and opportunities, compared to other racial minorities. Participants described how the model minority myth serves to divide and create tension between minority groups. For example, P217 recorded,

A model minority is a minority group that the majority group (in this case, White Americans) hold up as an "example" of minority "success", primarily to disparage and shame minorities arbitrarily chosen as non-model minorities. It does not take

into account factors such as economic privilege or social capital, and instead serves to divide the larger community of People of Color from within.

Model minorities are forced to participate in a system in which they balance being both privileged and marginalized; their role is dictated by an external system of hegemony that is not only difficult to escape, but also sometimes difficult to identify as an institutional system of oppression. For P367,

It's a double-edged sword. People are impressed that I have integrated myself so successfully into American culture and commend me for my skills, talents, and performativity of whiteness. However, it simultaneously erases the impact that microaggressions and institutionalized racism have on me. In my own community, people participate in discrimination against Latinx, Black, Native, and other marginalized folx as if we really are a "better" minority than them, not realizing that we need to be united in the face of white hegemony because institutionalized racism affects us ALL.

### **Harm of the Model Minority Myth**

48.03% of the participants stated that the model minority myth is harmful to Asians and South Asians, in a variety of ways.

### ***High Standards and Pressure to Achieve***

The model minority myth places the expectation of achieving high standards, which Asians and South Asians feel pressured to meet or conform to model minority stereotypes. Participants (28.95%) reported a number of sources of pressure, including society in general (including friends and teachers), their own South Asian or Indian communities (such as parents and family friends), and internal pressure (i.e., holding high

standards for themselves). In addition, they reported that the pressure feels like a negative impact of the myth. P98 said,

It negatively impacts me because I am under constant pressure by both my family and society to be high achieving and to prove myself. I feel like I am under scrutiny by society to be high performing and to be successful.

This high pressure and its negative impacts were present even for participants who generally considered themselves to be high-achieving; for these participants, the pressure may have been present to maintain the success they were already achieving. It was also difficult for some participants to draw a distinction between pressure from society and internal or familial pressure. P132 noted,

I think I fit some Asian American stereotypes a bit too well—I always got good grades, I'm an engineering major attending a 4-year university (because I wanted to, not because my parents pressured me into it at all), and it definitely feels like I'm under pressure to do well academically, get a "good" job, etc. I don't know how much of that is pressure from the model minority myth vs pressure from myself or my family...

### ***Homogenization***

16.45% of participants described how the model minority myth makes generalizations about Asians and South Asians that obscure and dismiss the wide variation among individuals within the groups. They noted that the myth minimizes their successes as being due to their race, and limits people from developing and exploring their individual identities. For example, P254 wrote,

I do feel like some of my accomplishments have been dismissed casually because it's assumed that because I'm Indian I will (major in a certain degree /have a certain job /have a certain lifestyle) and I do feel like my personality and life choices are often not seen my own or decisions I've made, but rather me just following what my parents want me to do like a sheep. For example, I don't drink and I think people automatically assume that I don't because I'm conservative or I'm afraid of my parents rather than my own disinterest. I feel like I have to justify life choices constantly, like being a vegetarian or not drinking or not smoking or working in STEM because as an Indian American woman, I'm viewed as having no agency. I'm a good girl who does what mom and dad expects.

### ***Harmful to Those Who Don't Fit the Mold***

Participants (11.18%) described how the model minority myth is harmful to individuals who do not fit the "mold" or stereotype. For example, P132 reported,

The model minority myth . . . generalizes Asian Americans, and individuals who don't fit the stereotype of, for example, being good at math, are told there's something wrong with them for being an Asian American who's not good at math, rather than just being a regular person who happens to not like math.

P267 also reflected that the model minority stereotypes could be harmful to people who do not fit the mold, "Instead of negative stereotypes, positive stereotypes tend to exist about 'model minorities;' this still serves to perpetuate a narrative about model minority groups that is harmful to those members of the group that don't necessarily fall into those stereotypes."

### ***Perpetuation of Mental Health Concerns and Stigma Against Help***

10.53% of participants reported feeling emotional and psychological impacts including stress, guilt, worry, and shame related to the model minority myth. P5 said, “I felt ashamed for being a quiet person because I felt like I was contributing to the myth.” P132 wrote,

After starting college, it made my mental health deteriorate a lot. I wasn't getting straight A's anymore, and my first bad midterm grade caused a mental health breakdown and challenged something that had always been an important part of who I was - that I was a good student. My self worth was so closely tied to my academic accomplishments that I didn't know what else I valued about myself, and it took me a while to get over that.

Participants also indicated that the myth had implications for mental health such as delaying or overlooking diagnoses or making it difficult for people to seek help. For P206,

I am expected to be "smart" in conventional ways, studious, conservative, and hard working, and my non-academic talents and difficulties in school have been ignored by family, teachers, peers, and acquaintances—this may have played a role in why I was only diagnosed with ADHD in college after years of struggle.

In addition, participants described how expectations related to the model minority stereotypes make access to help and support difficult for Asians and South Asians, either because it is not offered to them, or because it is difficult for them to admit need or ask for help. Thus, they experience serious mental health concerns and also experience barriers to help-seeking (e.g., P297 noted that model minorities “are less likely to admit

mental health issues like anxiety and depression, yet are more likely to have these issues, in part due to the pressure to do well.”).

### **Myth Has No Impact on Personal Life**

25.66% of participants reported that their daily lives were unaffected by the model minority myth. They described a lack of impact due to not caring about expectations associated with the myth. For example, P26 wrote,

I don't think it impacts me because I don't care what people expect of me. I'm going to live my life according to my own standards, to achieve my own goals.

Do I want to make a comfortable living as well? Yes, who doesn't. But I think it's silly to live your life according to other people's standards, and to let comparisons affect you so much.

Similarly, some participants described holding underrepresented identities for which the model minority myth may not be applicable. P288 said, “I don't think it impacts me much. I feel proud to be Indian but I'm a Dalit and academia and the Indian community is hard to navigate.” Others described feeling no impact due to having personal realities that match model minority stereotypes (e.g., P355 said, “People think that and expect all South Asians to be good at math and science, but I am interested in and good at the two, so it doesn't affect me.”).

### **Positive Aspects of the Myth**

#### ***A Positive Image to Strive for or Take Advantage Of***

13.82% of participants described the model minority myth as a positive stereotype, or at least not as negative as some of the stereotypes associated with other racial minorities. They described having something to look up to or having motivation to

be successful. P292 said, “It definitely makes me more inclined to work harder to achieve my professional and educational goals, as I know that as a South Asian I am not the first to do so and that it is totally possible.”

Similarly, participants reported being respected or praised for attributes associated with the model minority myth. They described experiencing certain privileges associated with the myth and viewed it as something they could take advantage of. P247 wrote, “It helps me positively and is a privilege of sorts. When I interview for technology positions everyone assumes I know what I'm talking about and treat me with respect.”

### ***A Positive Image Reflective of Truth***

5.92% stated that the model minority concept is not necessarily or entirely a myth. They cited statistics or described that the myth is perpetuated by what is shown in statistics. P98 said, “I know that all Asian-Americans are sometimes considered the model minority because we have a higher median household income and other stats that show higher success and achievement compared to other minority groups.” P227 reported, “This myth is perpetuated by the fact that Asian Americans happened to be the highest earning minority group in the country.” Others, such as P112, stated that the model minority concept speaks to the truth of what Asians and South Asians in the United States are really like,

There are stereotypes associated with [model minorities] but the underlying truths are from more positive sources than others. For example, if you're Indian then you are going to be a doctor, lawyer, or engineer. Although that's kind of statement is a broad generalization, it is often true and does convey an underlying theme that Indian Americans often find success and contribute meaningfully to society.

### **Myth is Perpetuated by Immigration and its After-Effects**

Participants (14.50%) reflected on how the model minority myth is tied to the time, reasons, methods, and/or circumstances under which Asians and South Asians immigrated to the United States. People who immigrated to the United States were often the most highly educated, skilled, and successful, and the model minority myth focuses on these characteristics, thus giving a distorted image of all Asians and South Asians. For P42, “I think the myth represents the fact that Indians in the U.S. are not representative of the majority of Indians around the globe. The Indians who come to the developed world typically come with a higher educational status, work ethic and better habits than their counterparts.” P305 wrote, “South Asian Americans are a very minute population of South Asians/Americans. America select for only the most educated South Asians to emigrate to the US so we are a very skewed group.”

Asians’ and South Asians’ immigration circumstances were also different from those of other racial minorities who may have been refugees or forcefully displaced through enslavement. Immigration related to academic and economic contributions primed for the creation and perpetuation of model minority stereotypes. P302 wrote,

Our experiences and reasons for immigrating to the US are historically very different from other minorities. Our parents came here by choice, while African Americans, for example, have a much darker history. This all contributes to the discrepancy in opportunities we have had for education, high paying jobs, etc.

Participants also reported feeling a responsibility or expectation to succeed as homage to the struggles of immigration that they or their parents faced, or that the model minority myth overshadows struggles related to immigration. P239 indicated, “I often

feel the need to maintain or exceed the status quo in terms of socioeconomic success my parents have achieved. Anything less would be me not being a model minority;” P132 wrote, “I feel like because my parents worked so hard to be able to bring me to the US and are sacrificing to send me to college, I should be doing better.” P75 spoke directly to challenges related to immigration, “It allows me to blend in and feel well off financially, but also seems to invalidate struggles that my parents have gone through along with the richness of my culture.”

### **Discussion**

The primary goal of this research was to explore whether and how internalization of the model minority myth is related to psychological distress for South Asians living in the United States. First, a major and perhaps basic point of the findings is that they provide evidence that South Asians are impacted by the model minority myth. Scholars have long argued that South Asians as an ethnic group are different enough from other Asian subgroups (e.g., East Asians) in terms of their experiences to warrant their own field of study (Tran & Curtin, 2017; Davé et al, 2000). However, such a departure without acknowledgement of the shared experiences across Asian subgroups in the United States is reflected in the scarcity of literature regarding implications of the model minority myth specifically and exclusively for South Asians. The large discrepancy between model minority myth research for South Asians versus other Asian subgroups warrants answering whether the model minority myth is meaningful phenomenon for South Asians; the present study aligns with the literature that does exist to illustrate that the nuances of how the model minority myth impacts South Asians should be explored further.

Results of the present study largely supported the hypotheses, illustrating that internalizing the myth is negatively related to psychological distress indirectly through pride associated with model minority status, and positively related indirectly through pressure associated with model minority stereotypes. These findings align with prior literature indicating that especially for South Asians, experiences related to the model minority myth and its mental health implications are incredibly complex (Mahalingam, 2006, 2012b; Daga & Raval, 2018), and they confirm prior mixed findings (Chan & Mendoza-Denton, 2008; Gupta, Szymanski, & Leong, 2011; Chang, 2017). Specifically, the findings show that South Asians simultaneously experience both pride and pressure related to the model minority myth, which are associated with conflicting and potentially fluctuating experiences with psychological distress. This complexity is further illustrated by the statistically nonsignificant direct relationship between IM and PD despite the significant mediated relationships; these results show that even if the model minority myth is seemingly unrelated to psychological distress on the surface, there could be significant underlying mechanisms in play. The opposing nature of the mediating pathways could mathematically cancel out evidence for the direct relationship.

An important consideration for interpreting the results of the present study is that the model minority image is not necessarily something that emerges for South Asians only after immigration to the United States; in fact, model minority stereotypes (such as having a strong drive to achieve) align with values endorsed by some South Asian countries—for example, the structure and function of the education system in India places great importance on high exam scores, where scoring well can impact the trajectory of someone's life with regard to their future career, salary, and marriage

prospects (Dhesi, 2001). Thus, experiences such as pressure related to the model minority myth may be multifaceted both in their origins and in what perpetuates them. In post-survey feedback provided anonymously through social media, one participant wondered whether pressure to “choose high-paying and high-stability careers such as engineering or medicine... could just be a product of growing up in a country that is pushing its way through a late-industrial economy,” rather than a phenomenon learned after immigration. They also commented on whether specific achievement-related value systems, which are disproportionately represented among South Asians in the United States due to immigration trends, could be passed down to influence feelings of pressure in subsequent generations—this aligns with qualitative data from Indian/Indian American participants who identified multiple (societal, family, and internal) sources of pressure, the connection between the myth and immigration, and feeling a responsibility or burden to be successful in order to avenge parental hardships associated with immigration.

Other experiences, such as pride related to the model minority myth, can also be extremely nuanced. The present study, along with prior research (Yoo et al., 2010), illustrates that there is variety in what it means to be a model minority. There are multiple and sometimes conflicting images of what a model minority is; for example, it can be both a positively and negatively perceived stereotype, and it includes experiences of both privilege and marginalization. Thus, it can be difficult to pinpoint the origins of pride and to conceptualize what pride means in the larger picture of South Asians’ experiences in the United States. In anonymous post-survey feedback, one participant described having difficulty in assessing their level of agreement with feeling “proud of being a member of an ethnic group that is considered a model minority” on the MMPride Questionnaire:

My sense of pride comes from within. So while I might say I'm glad I'm unlikely to be randomly shot by a cop because of my model minority status, I don't feel a sense of pride because of that. So by that logic, I can eliminate the 'agree' choices. At the same time, I'm not angry that Desis [South Asians] generally have a positive perception by other races whether valid or not. I can't say "I am NOT proud..." so I guess I'm left with neither agreeing nor disagreeing?

Overall, a notable finding of the present research is that both the quantitative and qualitative results illustrate the multifaceted nature of the model minority myth. Further, both the quantitative and qualitative results indicate that when experiences are conflicting, they may seem on the surface to be neutral or nonsignificant, and researchers may too easily overlook their importance.

A surprising finding of the present study was that contrary to the hypotheses, the results did not support a moderation effect of self-concept related to model minority stereotypes for the full participant sample of South Asians living in the United States, whereas the moderation hypothesis for the mediation pathway through pressure was supported for the Indian/Indian American subsample. This could be due to meaningful differences between Indian/Indian Americans and other South Asian subgroups. Scholars have argued against the homogenization of South Asians as a single ethnic group (Davé et al., 2000; Inman et al., 2014); potential variation and heterogeneity between groups could account for why effects were found only when examining the Indian/Indian American subgroup alone. This explanation is supported by the post-hoc ANOVA illustrating significant differences between the Indian/Indian American subgroup and an aggregated subgroup of all other South Asian identities for IM, MMPress, and PD.

Just as there exists a racial hierarchy in the United States that perpetuates a system of oppression (i.e., White supremacy), there is a hierarchy among South Asians in which people of Indian origin hold more privilege than others. Historically, due to British colonialism, South Asian countries were divided based on religion; although religion is not necessarily restricted by borders today, Indian Hindu nationalism is still prevalent in the area in perpetuating the hierarchy and oppression of people of other South Asian countries (Kurien, 2003; South Asian Americans Leading Together [SAALT], 2019). In part reflective of Hindu nationalism crossing borders, people of Indian origin in the United States tend to be more accepted or seen than people of other South Asian countries of origin (Kurien, 2003); this is shown in that research focused on South Asians tends to have disproportionately high numbers of Indian/Indian American participants, resulting in underrepresentation of other South Asian subgroups (Inman et al., 2014). It is notable that while the aim of the present study was to recruit a representative sample of South Asians in the United States, roughly half of the participants identified as Indian or Indian American. This could be related to the sampling methods; it is possible based on the primary researcher's identities and related social networks (Indian American, cisgender, upper middle class, young professional, caste-privileged) that the population of Indian/Indian Americans best represented by the present study is young, privileged, and internet- and technology-literate.

People of South Asian countries other than India may be overlooked and may experience layers of marginalization both in the United States racial hierarchy and in the South Asian ethnic group. Pertinent to the present study, South Asians' experiences of multiple marginalization and additional stressors may account for why SCRMMS may

not be a meaningful moderator of the relationships between IM, MMPrize, and MMPress. Because they are marginalized across communities and may not be perceived by others as being reflective of model minority stereotypes such as success and achievement (Shams, 2020), South Asians who are not Indian may continue to feel pressure related to the model minority myth despite their own self-concept related to model minority stereotypes. The statistically significant positive correlation between MMPrize and MMPress also supports the notion of simultaneous and complex experiences of both pride and pressure related to the model minority myth, rather than a moderator that could shift a person's experience to either more pride or more pressure.

For Indian/Indian American people, despite their simultaneous experience of both pride and pressure related to the model minority myth, having a high self-concept related to model minority stereotypes may actually help to reduce experiences of pressure. These findings align well with findings by Daga & Raval (2018); although their study was correlational, they reported that internalization of the model minority myth was significantly associated with model minority pride, but not pressure, in their sample. Their speculations included the potential moderating effect of participants' "own success" (p. 27); further, they reported that their sample was 82% Indian/Indian American with 11% unreported, and 60% Hindu (compared to 72% Indian/Indian American and 41% Hindu in the present study), and stated that their findings "may be most applicable to Indian American emerging adults who identify as Hindu" (p. 28).

A significant revelation of the present study comes from the deeper exploration of model minority myth experiences of Indian/Indian Americans in the United States: that although they do experience both pride and pressure related to the model minority myth,

and although their self-concept related to model minority stereotypes does help to reduce their experiences of pressure (and therefore their levels of psychological distress), the model minority myth itself functions within a system of oppression and works to perpetuate White supremacy.

The present study was designed to extend theory and prior research from scholars wanting to explore how understanding the model minority myth—and particularly the “positive” aspects of it—could be used to Asians’ and South Asians’ advantage or as a protective factor against mental health concerns (Mahalingam, 2006, 2012b). Research and theory suggest that internalization of the model minority myth could be a response to personal experiences of discrimination and racism; in fact, many researchers describe internalization of the myth as a form of internalized oppression (Schwalbe et al., 2000; Osajima, 2007; Mahalingam, 2012b; Trieu, 2019), indicating that regardless of outcome, internalizing the myth is inherently functional within a system of oppression. However, where Mahalingam (2012b) theorized that there could be “within-group differences in the appropriation of [the] model minority myth in a way that is beneficial and not detrimental” for Asian individuals in the United States (p. 129), qualitative results of the present study suggest that Indian/Indian Americans recognize their positionality within the larger system of oppression regardless of their personal experiences with the myth. Over half of the participants in the qualitative sample acknowledged the presence and power of White supremacy as an external system of oppression and that the model minority myth is linked to navigating the racial hierarchy. Even if participants had neutral or even positive experiences with the model minority myth on an individual level, they endorsed that they were powerless within the system, that their positive or privileged

experiences were used to perpetuate discrimination against others, and that balancing both privilege and marginalization was not a choice but rather an expectation placed upon them by society. Participants further mentioned harmful implications of the model minority myth, including erasure of choice and individuality in light of model minority stereotypes. Participants who described the model minority myth as a positive image still largely endorsed that it is a broad generalization and is perpetuated by statistics and societal perceptions—both of which have been highlighted elsewhere in this paper as influenced by external systems such as immigration policy. Taken together, these findings suggest that even if the negative implications of the model minority myth on psychological distress could be attenuated by variables such as self-concept, the phenomenon would still be harmful in other ways that are meaningful for Indians and Indian Americans, such as perpetuating White supremacy and triangulating Indian/Indian Americans within the racial hierarchy (Kim, 1999; Poon et al., 2016).

### **Conclusions and Clinical Implications**

The present study illustrates that South Asians in the United States experience mental health implications of the model minority myth in complex and dichotomous ways. They balance feelings of both pride and pressure related to being a model minority, as well as experiences of both privilege and marginalization in society. The study also indicates that there are meaningful differences in the South Asian diaspora between those who identify as Indian/Indian American and those who do not, and highlights the importance of considering experiences such as marginalization—specifically, how marginalization can multiply based on a person's community—in assessing impacts of the model minority myth. Finally, the present study elucidates nuances in how the

“positive” aspects of the model minority myth—including reduction in psychological distress and promotion of a positive image—can be interpreted. This is especially important because the narrative is not so simple as noting that something like reducing psychological distress is a good thing; rather, the present study shows that it is important to look at the big picture of how even these individual-level positive experiences function within a larger system of oppression with serious implications on a grander scale.

The present study also presents implications for clinicians working with South Asian clients. It is important that clinicians do not assume that South Asian clients all find the model minority myth to be salient, internalize the messages, or experience it in the same ways; rather, clinicians should explore if and how model minority expectations may be relevant for their clients. For example, for clients presenting with symptoms of psychological distress, clinicians may assess for feelings of pressure related to model minority expectations and explore different potential sources of pressure. The present study provided evidence to support the many ways that the model minority myth and those subjected to it function within systems of oppression; therefore, clinicians may engage in psychoeducation with their clients to explore the nuanced ways that even “positive” experiences related to the myth could be harmful on a broader level for clients and their social worlds.

### **Limitations and Future Directions**

The present research study was limited in several ways. First, the study was primarily quantitative. Based on the initial a priori research and literature review, such a deep level of nuance and detail was not anticipated in the original research design; rather, part of the goal of the present research was to establish foremost that the model minority

myth has an impact on South Asians' lives and experiences. The extent and meaningfulness of the findings from the limited qualitative data gathered in the present study provide precedent for future research to explore the nuances of the model minority myth further using qualitative methods.

Recruitment for the present study began with convenience and snowball sampling using the primary researcher's contacts and communities as a starting point for outreach to potential participants. Although anecdotally it did seem a large number of participants found the study through social media, it is possible that snowball sampling contributed to the high percentage of Indian/Indian American participants. Further, the present study used a combined sample of participants identifying with all 7 South Asian countries of origin. The results of the present study indicated that there may be meaningful differences between Indian/Indian Americans and other South Asian subgroups; thus, future researchers should consider studying these groups separately, particularly to give voice to other South Asian subgroups that are even further underrepresented in the literature. It is also notable that the participants in the present study were primarily Hindu. Qualitative results align with prior research and literature indicating that for some South Asians, the United States climate after the September 11, 2001 terrorist attacks is important context for understanding the implications of the model minority myth; specifically, religious minorities such as Sikhs and Muslims may experience the myth as inapplicable or temporary because of increased tension and discrimination associated with terrorism. (Shams, 2020). Future researchers recruiting religious minorities with more intentionality could explore this further by focusing on the dynamics between terrorism-related discrimination and model minority stereotypes for South Asians.

The nature of the present study called for recruitment specifically of people who identify with South Asian or subgroup labels. While this aligns with norms in research methodology, it may still overlook people of marginalized groups who are part of the target population. With regard to the earlier discussion of differences between Indians/Indian Americans and other South Asian subgroups due to multiple marginalization within the South Asian population, an important consideration is that some people may choose to identify under other labels as a way to distance themselves from marginalization. For example, people from India who experience religious marginalization associated with Hindu nationalism may instead identify more strongly with a region or language (e.g., Tamil, Kannada) or religion (i.e., Sikh, Muslim). Further, first generation immigrants in the United States may continue to identify more closely with their regional or religious labels rather than with a broader South Asian or country-related label (Davé et al., 2000). Thus, future research should explore other methods of recruitment to better reach people of marginalized identities. For example, part of the recruitment strategy for the present study involved an intentional search for nonprofit organizations, community groups, and social media pages (on Facebook and Reddit) specifically for members of underrepresented South Asian subgroups—recruitment involved seeking permission from group moderators to make posts on social media pages for the given groups, and the primary researcher was careful to orient group members to how and why she was recruiting participants from their specific group. Similar strategies could be advantageous for future researchers recruiting participants from community groups that do not specify South Asian country-level identity labels.

To my knowledge, the present study was the first to operationalize and measure self-concept related to model minority stereotypes. Future research should be conducted to examine further score reliability and validity and the factor structure of this measure with and across diverse populations. The present study also did not operationalize or assess critical consciousness; conclusions drawn regarding associations between participants' understanding of the model minority myth, their social locations, and their critical consciousness are grounded in theories including racial triangulation (Kim, 1999), social identity (Tajfel & Turner, 1986), and critical race theory (Poon et al., 2016). Future research could provide empirical evidence to support our understanding of how the model minority myth functions within systems of oppression by using quantitative and qualitative methods to explore these phenomena more deeply.

## Appendix A

### Information for Expert Reviewers of SCRMMS Measure

#### **Construct Conceptualization**

As you know, I am developing an instrument to measure self-concept related to model minority stereotypes for South Asians in the United States. I am interested in understanding the relationship between internalization of the model minority myth and psychological distress in this population. Prior literature has suggested that internalization of the model minority myth is sometimes associated with more psychological distress, while other times it predicts less psychological distress. The question of why these seemingly contradictory findings exist remains to be answered. Researchers have previously speculated about the potential moderation effect of individuals' self-concept of achievement related to model minority stereotypes. It may be easier for individuals to use internalization of the myth as a coping mechanism for marginalization, and thus feel an alleviation of psychological distress, when they perceive themselves to match what are commonly considered to be the stereotypes of achievement endorsed by the myth. Alternatively, when individuals have a lower self-concept related to these stereotypes, internalization might predict more psychological distress.

#### **Measure Details**

The instrument consists of items representing model minority stereotypes with reference to the self. Self-concept will be assessed using a 7-point rating scale, with 1 representing *strongly disagree* and 7 representing *strongly agree*, for each item.

#### **Measure Development Process**

In order to ensure that the items for the Self-Concept Related to Model Minority Stereotypes Measure accurately captured model minority stereotypes, items were adapted directly from the Achievement subscale of the Internalization of the Model Minority Myth Measure (IM-4) developed by Yoo, Steger, & Burrola (2010). For your reference, I am providing below a list of the original IM-4 items. The IM-4 included a stem "In comparison to other racial minorities (e.g., African American, Hispanics, Native Americans)..."

- Asian Americans have stronger work ethics.
- Asian Americans are harder workers.
- Despite experiences with racism, Asian Americans are more likely to achieve academic and economic success.
- Asian Americans are more motivated to be successful.
- Asian Americans generally have higher grade point averages in school because academic success is more important.
- Asian Americans get better grades in school because they study harder.
- Asian Americans generally perform better on standardized exams (i.e., SAT) because of their values in academic achievement.
- Asian Americans make more money because they work harder.
- Asian Americans are more likely to be good at math and science.
- Asian Americans are more likely to persist through tough situations.

Steps toward development of the Self-Concept Related to Model Minority Stereotypes Measure:

1. Adapted the 10 IM-4 Achievement subscale items to refer to the self, dropped the “in comparison to other racial minorities” stem.
2. Based on feedback, dropped the item referring to standardized exams. A question asking specifically about standardized exams would be less relevant to individuals who did not pursue post-high school education or to individuals for whom these exams happened a long time ago. Based on the fact that the population for the present study is not restricted to college students like it was for Yoo’s study, it makes sense to drop this particular item for being too specific. Furthermore, there are other items in the measure that address academic achievement (grades, GPA).
3. Based on feedback, adapted the item “Asian Americans make more money because they work harder” to state “I earn a high salary or I expect to earn a high salary in my future career.” This wording makes this item more easily applicable to the broad range of experiences and ages in the population of interest for the present study.
4. Based on feedback, dropped the item stating “despite experiences with racism, I can achieve academic and economic success.” This item seemed too complicated when adapted to refer to the self, especially because of the implied assumption that each individual had experiences of racism.
5. Based on feedback, collapsed the two IM-4 items referring to grades and GPA into one broad item stating “I have a history of performing well in school.” This better captures the essence of the item as applicable to the population in the present study, which includes individuals who are not currently in school. This way, there is one item referring to academic performance, and one item referring to career and salary.
6. Added item “I am smart” from Gupta, Szymanski, & Leong (2011)
7. Removed the word “can” from “I can persist through tough situations” in order to better capture the difference between the self-concept construct and self-efficacy. Thus, the item becomes “I persist through tough situations.

Next steps:

1. Use an expert review method of establishing content validity (Davis, 1992; Grant & Davis, 1997; Rubio, et al., 2003) to finalize measure items.

### **Instructions**

Please utilize the enclosed document with instructions and a rating scale to evaluate the proposed items for the Self-Concept Related to Model Minority Stereotypes measure. If you have any questions or need for clarification, please do not hesitate to reach out to me! I appreciate your time and support.

## Appendix B

## Measurement Rating Scale for SCRMMS Measure

INSTRUCTIONS – This measure is designed to evaluate the content validity of a measure. Please rate each item as follows:

- Please rate the level of representativeness on a scale of 1 – 4, with 4 being the most representative. Space is provided for you to comment on the item or to suggest revisions.
- Please indicate the level of clarity for each item, also on a four-point scale. Again, please make comments in the space provided.
- Finally, evaluate the comprehensiveness of the entire measure by indicating items that should be deleted or added. Thank you for your time.

<p><b><u>Construct name:</u></b> Self-concept related to model minority stereotypes</p> <p><b><u>Theoretical definition:</u></b> Self-concept related to model minority stereotypes will be defined in the present study as the extent to which an individual believes they have the qualities that are considered to be qualities of success based on items that have been shown in extant literature to reflect achievement-related stereotypes about Asian Americans.</p> <p>In other words, the construct is defined as an individual’s perceived reality regarding model minority stereotypes, where “model minority stereotypes” have been identified based on previous studies and literature.</p> <p>In order to make ethnic identity salient for participants when answering these questions, the instructions for the measure will state “we are interested in learning about your experiences as a South Asian individual living in the United States.”</p>	<p><b><u>Representativeness</u></b></p> <p>1 = item is <u>not representative</u></p> <p>2 = item needs <u>major revisions</u> to be representative</p> <p>3 = item needs <u>minor revisions</u> to be representative</p> <p>4 = item is <u>representative</u></p>	<p><b><u>Clarity</u></b></p> <p>1 = item is <u>not clear</u></p> <p>2 = item needs <u>major revisions</u> to be clear</p> <p>3 = item needs <u>minor revisions</u> to be clear</p> <p>4 = item is <u>clear</u></p>	<p><b><u>Individual item notes</u></b></p>
<p><b>1. I have a strong work ethic</b></p>			
<p><b>2. I am a hard worker</b></p>			
<p><b>3. I am motivated to be successful</b></p>			

<b>4. I have a history of performing well in school</b>			
<b>5. I earn a high salary or I expect to earn a high salary in my future career</b>			
<b>6. I am good at math and science</b>			
<b>7. I persist through tough situations</b>			
<b>8. I am smart</b>			

**Additional notes, evaluation of the comprehensiveness of the measure, and suggestions for items to add or delete:**

## Appendix C

## Content Validity Index (CVI) for SCRMMS Measure

<b>Item</b>	<b>Expert 1 rating</b>	<b>Expert 2 rating</b>	<b>Expert 3 rating</b>	<b>CVI</b>
I have a strong work ethic	4	4	4	3/3 =100%
I am a hard worker	4	4	4	3/3 =100%
I am motivated to be successful	4	4	4	3/3 =100%
I have a history of performing well in school	4	3	4	3/3 =100%
I earn a high salary or I expect to earn a high salary in my future career	4	4	4	3/3 =100%
I am good at math and science	4	3	4	3/3 =100%
I persist through tough situations	4	4	4	3/3 =100%
I am smart	4	3	4	3/3 =100%

## Appendix D

### Recruitment Message

Hello!

My name is Priya Bansal and I am a current Ph.D. student at the University of Maryland – College Park. I am conducting research about the experiences of South Asian individuals living in the United States. I would like to invite you to participate in this online survey. This study is being conducted under the guidance of Dr. Clara E. Hill. This survey should take about 20-25 minutes of your time.

After reading below, if you are willing and eligible please click the link to begin the survey. Participation is completely voluntary and you may discontinue the survey at any time without penalty. Your answers will remain confidential.

Eligibility Criteria:

- \* You identify as South Asian American, South Asian, or of South Asian descent.
- \* You currently live in the United States.
- \* You are 18 years of age or older.

Upon completion of the survey, you will have the option to provide your email address to be entered into a drawing to win 1 of 4 \$25 Amazon gift cards.

If you meet the above eligibility criteria and are interested in participating, please follow the link below to begin the survey: [survey link]

\*\*\*This study has been approved by the University of Maryland-College Park Institutional Review Board. If you have any complaints, questions, concerns, or would like information about the results of the study upon completion, please feel free to contact me via e-mail at pbansal@umd.edu. You may also contact my advisor, Dr. Clara E. Hill, at cehill@umd.edu. Thank you!

## Appendix E

## Consent Form

<b>Project Title</b>	Study of Experiences of South Asian Individuals Living in the United States
<b>Purpose of the Study</b>	This research is being conducted by Priya Bansal at the University of Maryland, College Park. We are inviting you to participate in this research project because you may be eligible. The purpose of this research project is to work towards understanding the experiences of South Asian individuals living in the United States.
<b>Procedures</b>	The procedures involve completing a 20-25 minute confidential online survey and providing background information such as age, gender, etc. If you participate in this online survey, you will have the option of entering to win 1 of 4 \$25 Amazon gift cards.
<b>Potential Risks and Discomforts</b>	There may be some risks from participating in this research study, such as discomfort related to answering survey questions about your experiences and beliefs. You have the option of skipping questions you are uncomfortable answering. There are <u>no</u> known physical or medical risks associated with participating in this research project.
<b>Potential Benefits</b>	This research is not designed to benefit you directly or personally. However, we hope that, in the future, other people might benefit from this study through improved understanding of the experiences of South Asian individuals living in the United States.
<b>Confidentiality</b>	<p>Any potential loss of confidentiality will be minimized by utilizing a multi-password protected, cloud-based electronic storage system for data storage. Additionally, we will not ask for your name so no identifying information is attached to the data you provide.</p> <p>If we write a report or article about this research project, your identity will be protected to the maximum extent possible as we will report results for the group – not a specific individual – so that no one will know the identity of any one study participant. The data file will be stored on password-protected computers and no identifying information will be present in this dataset.</p> <p>The data will be retained for 10 years after the completion of the study, according to the University of Maryland policy on human subject files, and then will be destroyed. Your information may be shared with representatives of the University of Maryland, College Park or governmental authorities if you or someone else is in danger or if we are required to do so by law.</p>
<b>Compensation</b>	<p>You will have the option of entering into a random draw to win 1 of 4 \$25 Amazon gift cards.</p> <p>We will collect your email address for the purpose of contacting you if you win the raffle. This information will also be subject to confidentiality as described above, and will not be linked to the</p>

	survey data.
<b>Right to Withdraw and Questions</b>	<p>Your participation in this research is completely voluntary. You may choose not to take part at all. If you decide to participate in this research, you may stop participating at any time. If you decide not to participate in this study or if you stop participating at any time, you will not be penalized or lose any benefits to which you otherwise qualify.</p> <p>If you decide to stop taking part in the study, if you have questions, concerns, or complaints, or if you need to report any issues related to the research, please contact the investigator:</p> <p style="text-align: center;"><b>Priya Bansal</b>  <b>3214 Benjamin Building</b>  <b>University of Maryland, College Park, MD</b>  <b>pbansal@umd.edu</b></p> <p style="text-align: center;"><b>You may also contact the academic advisor, Clara E. Hill, at</b>  <b>cehill@umd.edu or at (301) 405-5791.</b></p>
<b>Participant Rights</b>	<p>If you have questions about your rights as a research participant or wish to report a research-related injury, please contact:</p> <p style="text-align: center;">University of Maryland College Park  Institutional Review Board Office  1204 Marie Mount Hall  College Park, Maryland, 20742  E-mail: <a href="mailto:irb@umd.edu">irb@umd.edu</a>  Telephone: 301-405-0678</p> <p style="text-align: center;">For more information regarding participant rights, please visit:  <a href="https://research.umd.edu/irb-research-participants">https://research.umd.edu/irb-research-participants</a></p> <p>This research has been reviewed according to the University of Maryland, College Park IRB procedures for research involving human subjects.</p>
<b>Statement of Consent</b>	<p>Clicking on the “CONTINUE” button below indicates that you are between 18 years or older; self-identify as South Asian American, South Asian, or of South Asian descent; are currently living in the United States; you have read this consent form or have had it read to you; your questions have been answered to your satisfaction and you voluntarily agree to participate in this research study. You may print a copy of this signed consent form for your records.</p> <p>If you agree to participate, please click the button below.</p>

## Appendix F

## Screening Questionnaire

Please indicate your ethnic identity:

- South Asian/South Asian American
- Asian/Asian American
- Indian/Indian American
- Pakistani/Pakistani American
- Bangladeshi/Bangladeshi American
- Bhutanese/Bhutanese American
- Nepali/Nepali American
- Sri Lankan/Sri Lankan American
- Afghani/Afghani American
- Maldivian/Maldivian American
- Multiethnic (please specify): \_\_\_\_\_

Please indicate your age: \_\_\_\_\_

Are you currently living in the United States?

- Yes
- No

## Appendix G

## Internalization of the Model Minority Myth Measure (IM-4)

**INSTRUCTIONS:** Using the scale below, indicate the extent to which you agree or disagree with each item. Please be open and honest in your responding.

For the purposes of this study, the term “South Asian Americans” refers to people in the United States who identify with any South Asian country, including India, Pakistan, Bangladesh, Bhutan, Nepal, Sri Lanka, Afghanistan, and Maldives.

<b>In comparison to other racial minorities (e.g., African Americans, Hispanics, Native Americans).....</b>	Strongly disagree	Disagree	Slightly disagree	Neither agree nor disagree	Slightly agree	Agree	Strongly agree
1. South Asian Americans generally perform better on standardized exams (i.e., SAT) because of their values in academic achievement.	○	○	○	○	○	○	○
2. South Asian Americans make more money because they work harder.	○	○	○	○	○	○	○
3. South Asian Americans are more likely to persist through tough situations.	○	○	○	○	○	○	○
4. South Asian Americans are more likely to be good at math and science.	○	○	○	○	○	○	○
5. South Asian Americans get better grades in school because they study harder.	○	○	○	○	○	○	○
6. South Asian Americans are harder workers.	○	○	○	○	○	○	○
7. Despite experiences with racism, South Asian Americans are more likely to achieve academic and economic success.	○	○	○	○	○	○	○
8. South Asian Americans are more motivated to be successful.	○	○	○	○	○	○	○
9. South Asian Americans have stronger work ethics.	○	○	○	○	○	○	○
10. South Asian Americans generally have higher grade point averages in school because academic success is more important.	○	○	○	○	○	○	○

*Note.* Permission for use obtained from Dr. Hyung Chol (Brandon) Yoo. Adapted from "A Preliminary Report on a New Measure: Internalization of the Model Minority Myth Measure (IM-4) and its Psychological Correlates among Asian American College Students" by H. C. Yoo, K. S. Burrola, & M. F. Steger, 2010, *Journal of Counseling Psychology*, 57, 114-127.



## Appendix I

## Model Minority Pride Questionnaire

**INSTRUCTIONS:** Using the scale below, please indicate the extent to which you agree or disagree with each item ABOUT YOURSELF. Please be open and honest in your responding.

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1. I am proud of being a member of an ethnic group that is considered a model minority.	<input type="radio"/>				
2. My own personal achievements in life are typical of the success of my ethnic group.	<input type="radio"/>				
3. I am proud of the fact that despite severe social discrimination, my ethnic group has emerged as one of the most successful ethnic minorities in the U.S.	<input type="radio"/>				
4. I often draw inspiration from the struggles and triumphs of the previous generations of my ethnic group.	<input type="radio"/>				
5. I feel inspired when I think about the high levels of achievement in my ethnic group.	<input type="radio"/>				
6. I am proud of the fact that my ethnic group has contributed greatly to American society.	<input type="radio"/>				
7. I am proud of coming from an ethnic group with a long history of achievements.	<input type="radio"/>				
8. I feel proud to be a member of an ethnic group that is more highly respected than other minority groups in the U.S.	<input type="radio"/>				

## Appendix J

## Model Minority Pressure Questionnaire

**INSTRUCTIONS:** Using the scale below, please indicate the extent to which you agree or disagree with each item ABOUT YOURSELF. Please be open and honest in your responding.

For the purposes of this study, the term “South Asian American” refers to people in the United States who identify with any South Asian country, including India, Pakistan, Bangladesh, Bhutan, Nepal, Sri Lanka, Afghanistan, and Maldives.

	Strongly disagree	Somewhat disagree	Neutral	Somewhat agree	Strongly agree
1. <b>Being a South Asian American, I feel the pressure to be high achieving.</b>	<input type="radio"/>				
2. <b>I do not mind making personal sacrifices to be a successful South Asian American.</b>	<input type="radio"/>				
3. <b>I feel pressure to work harder to be a successful South Asian American.</b>	<input type="radio"/>				
4. <b>I have to work harder because of high expectations from my family.</b>	<input type="radio"/>				
5. <b>I feel the pressure of living up the expectations people have of me as a “model minority.”</b>	<input type="radio"/>				
6. <b>I pursue my academic interests because I truly love them.</b>	<input type="radio"/>				
7. <b>I pursue my academic interests to make my parents happy.</b>	<input type="radio"/>				
8. <b>I do not compare my success with other South Asian Americans.</b>	<input type="radio"/>				

*Note.* Items 2, 6, and 8 are reverse-scored.

## Appendix K

## Hopkins Symptom Checklist 21 (HSCL-21)

**INSTRUCTIONS:** How have you felt during the past seven days including today? Use the following scale to describe how distressing you have found these things over this time.

	Not at all	A little	Quite a bit	Extremely
1. Difficulty in speaking when you are excited	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
2. Trouble remembering things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
3. Worried about sloppiness or carelessness	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
4. Blaming yourself for things	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
5. Pains in the lower part of your back	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
6. Feeling lonely	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
7. Feeling blue	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
8. Your feelings being easily hurt	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
9. Feeling others do not understand you or are unsympathetic	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
10. Feeling that people are unfriendly or dislike you	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
11. Having to do things very slowly in order to be sure you are doing them right	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
12. Feeling inferior to others	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
13. Soreness of your muscles	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
14. Having to check and double-check what you do	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
15. Hot or cold spells	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
16. Your mind going blank	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>
17. Numbness or tingling in parts of your body	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>	<input type="radio"/>

- |            |   |                       |                       |                       |                       |
|------------|---|-----------------------|-----------------------|-----------------------|-----------------------|
| <b>18.</b> | <b>A lump in your throat</b>                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>19.</b> | <b>Trouble concentrating</b>                | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>20.</b> | <b>Weakness in parts of your body</b>       | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |
| <b>21.</b> | <b>Heavy feelings in your arms and legs</b> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> | <input type="radio"/> |

## Appendix L

## Demographics Questionnaire

**INSTRUCTIONS:** Please answer the following questions ABOUT YOURSELF.

Gender: \_\_\_\_\_

How strongly do you identify with your ethnic group?

- Not at all
- A little bit
- Quite a bit
- Extremely

How important to you is your ethnic group identity?

- Not at all
- A little bit
- Quite a bit
- Extremely

Religion

- Atheist
- Buddhist
- Christian
- Hindu
- Jain
- Muslim
- Sikh
- Spiritual
- Other (please specify): \_\_\_\_\_

How important to you is your religious identity?

- Not at all
- A little bit
- Quite a bit
- Extremely

Which country were you born in? \_\_\_\_\_

What is your generational status?

- 1st generation (I was born outside of the United States and moved to the United States after the age of 18)
- 1.5 generation (I was born outside of the United States and moved to the United States before the age of 18)
- 2nd generation (I was born in the United States, and at least one of my parents was born outside of the United States)

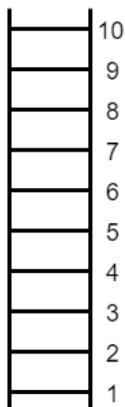
- 3rd generation or above (I was born in the United States, and both of my parents were born in the United States)
- Other: \_\_\_\_\_

Were you adopted and raised in a non-Asian household?

- Yes
- No

What is your highest level of education?

- Primary school
- Middle school
- Some high school
- High school or equivalent diploma
- Some college
- 2-year degree
- 4-year degree
- Some graduate school
- Master's degree
- Doctorate-level degree
- Other: \_\_\_\_\_



Please look at the ladder above. At the top of the ladder are the people who are the best off, those who have the most money, most education, and best jobs. At the bottom are the people who are the worst off, those who have the least money, least education, worst jobs, or no job. Please indicate the number that best represents where you think you stand on the ladder.

- 10
- 9
- 8
- 7
- 6
- 5
- 4

- 3
- 2
- 1

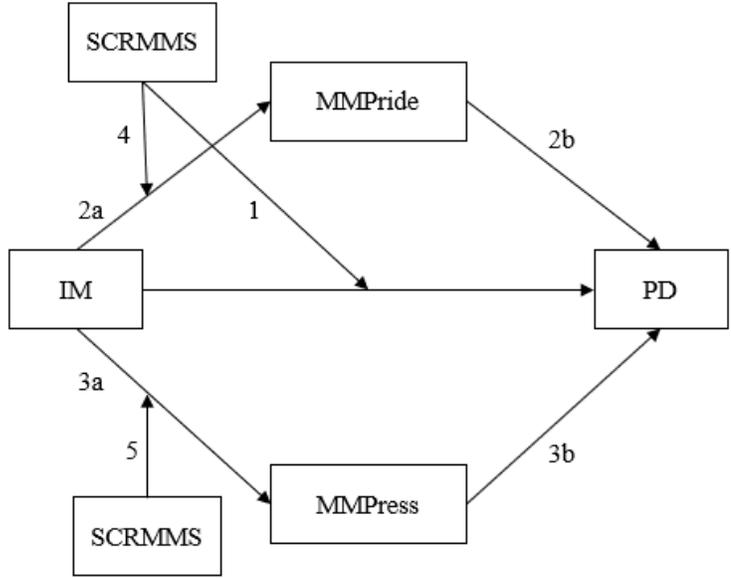
In the United States, South Asians and South Asian Americans are sometimes called “model minorities.” What do you know about model minorities or the model minority myth, or what do you think they mean?

How does the model minority myth impact you?

Appendix M

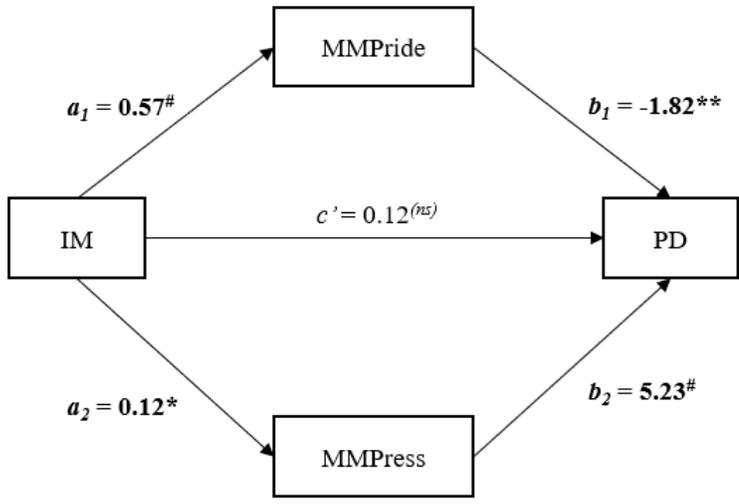
Figures

Figure 1



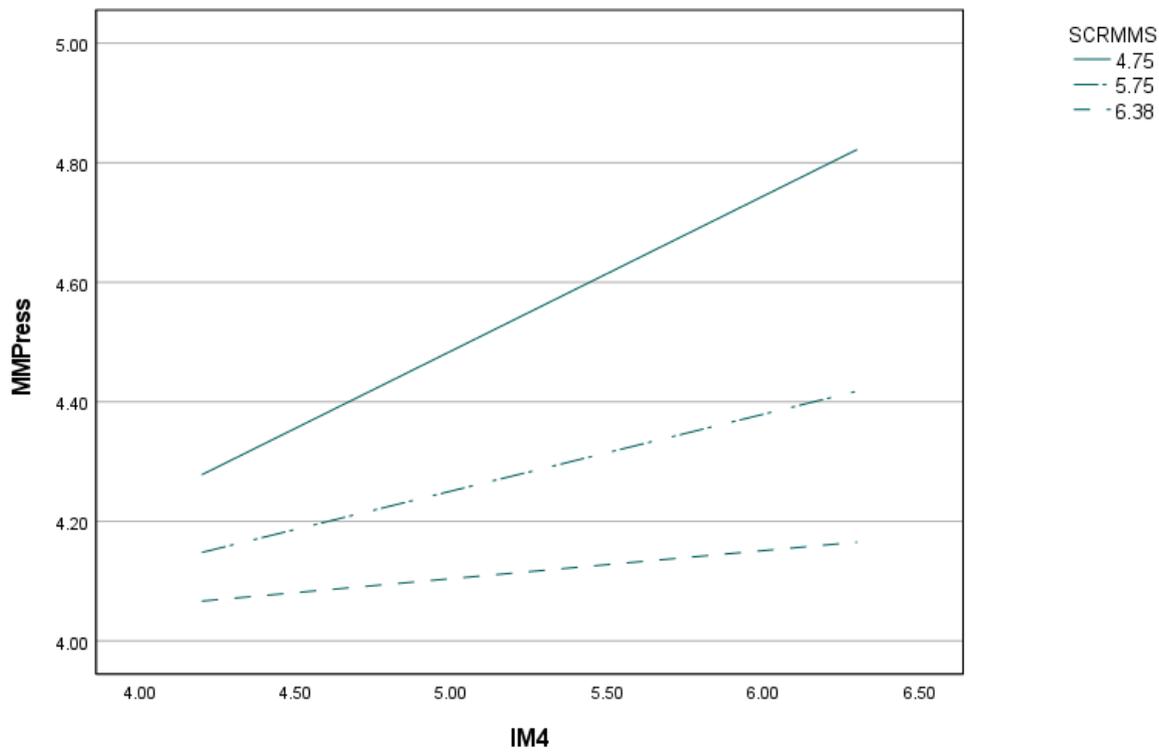
Note. Conceptual model of proposed relationship pathways between internalization of the model minority myth (IM) and psychological distress (PD). Hypotheses labeled by number.

Figure 2

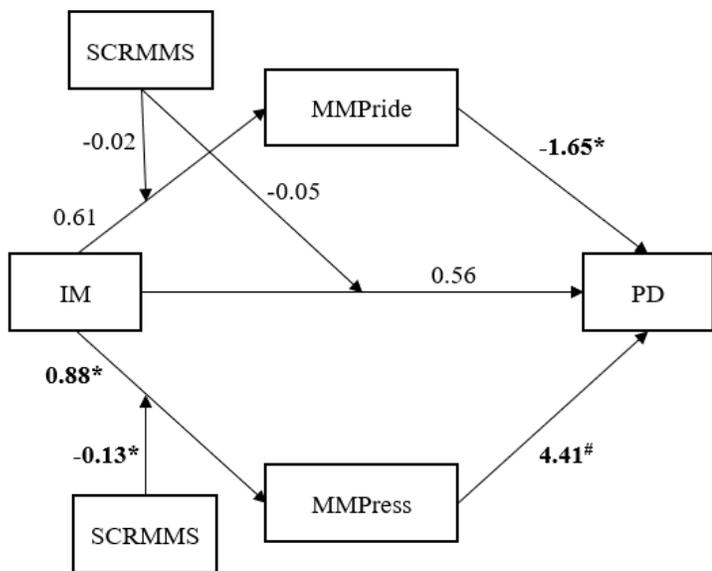


Note. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; #  $p < 0.001$ ; ns = nonsignificant

**Figure 3: SCRMMMS as a moderator of IM → MMPress for Indians/Indian Americans**



**Figure 4**



Note. \*  $p < 0.05$ ; \*\*  $p < 0.01$ ; #  $p < 0.001$

## Appendix N

## Tables

**Table 1***Correlations*

		IM4	MMPrude	MMPress	SCRMMS	HSCL
IM4	Pearson Correlation	1	.558**	.136*	.264**	-
	Sig. (2-tailed)		.000	.020	.000	
	N	295	295	295	295	
MMPrude	Pearson Correlation	.558**	1	.227**	.392**	-
	Sig. (2-tailed)	.000		.000	.000	
	N	295	295	295	295	
MMPress	Pearson Correlation	.136*	.227**	1	-.206**	.4
	Sig. (2-tailed)	.020	.000		.000	
	N	295	295	295	295	
SCRMMS	Pearson Correlation	.264**	.392**	-.206**	1	-.2
	Sig. (2-tailed)	.000	.000	.000		
	N	295	295	295	295	
HSCL	Pearson Correlation	-.032	-.082	.433**	-.246**	
	Sig. (2-tailed)	.583	.162	.000	.000	
	N	295	295	295	295	

\*\* Correlation is significant at the 0.01 level (2-tailed).

\* Correlation is significant at the 0.05 level (2-tailed).

*Note.* IM4 measures internalization of the model minority myth (IM); MMPrude measures pride related to the model minority myth; MMPress measures pressure related to the model minority myth; SCRMMS measures self-concept related to model minority stereotypes; HSCL measures psychological distress (PD).

**Table 2***Descriptive Statistics*

	N	Minimum	Maximum	Mean	Std. Deviation
IM4	295	1.00	7.00	5.0375	1.24727
MMPrude	295	1.00	7.00	4.9142	1.26365
MMPress	295	1.00	6.88	4.3616	1.05988
SCRMMS	295	2.25	7.00	5.5665	.88723
HSCL	295	20.00	76.00	38.4102	11.64722
Valid N (listwise)	295				

*Note.* IM4 measures internalization of the model minority myth (IM); MMPrude measures pride related to the model minority myth; MMPress measures pressure related to the model minority myth; SCRMMS measures self-concept related to model minority stereotypes; HSCL measures psychological distress (PD).

**Table 3: Descriptive statistics between groups***Descriptives*

Dependent Variable	Groups	Statistics			
		N	Mean	Std. Deviation	Std. Error
IM4	1	84	4.7793	1.38494	.15111
	2	211	5.1403	1.17583	.08095
	Total	295	5.0375	1.24727	.07262
MMPrude	1	84	4.7955	1.31514	.14349
	2	211	4.9615	1.24260	.08554
	Total	295	4.9142	1.26365	.07357
MMPress	1	84	4.5789	1.08014	.11785
	2	211	4.2751	1.04171	.07171
	Total	295	4.3616	1.05988	.06171
SCRMMS	1	84	5.4568	.81438	.08886
	2	211	5.6102	.91279	.06284
	Total	295	5.5665	.88723	.05166
HSCL	1	84	42.1548	13.11717	1.43120
	2	211	36.9194	10.68056	.73528
	Total	295	38.4102	11.64722	.67813

*Note.* Group 1 includes all ethnic subgroups in the present study except Indian/Indian Americans. Group 2 includes only Indian/Indian Americans.

<b>Table 4: Categories for each of the domains</b>	<b>Proportion (n)</b>
<b>DOMAIN 1: Stereotypes Associated with the Myth</b>	<b>56.58% (86)</b>
A. Generally successful/high achieving	23.68% (36)
B. Financially successful	13.82% (21)
C. Good citizen, not criminal	13.16% (20)
D. Educated/academically successful	12.5% (19)
E. Hardworking	11.18% (17)
F. Submissive, quiet, nonconfrontational	10.53% (16)
G. Strong cultural values/stable family structure	10.53% (16)
H. Intelligent	7.89% (12)
I. Excel in STEM fields	7.89% (12)
J. Conform to societal/American expectations	7.24% (11)
<b>DOMAIN 2: Navigating the Racial Hierarchy</b>	<b>51.32% (78)</b>
<b>DOMAIN 3: Harm of the Myth</b>	<b>48.03% (73)</b>
A. High standards and pressure to achieve	28.95% (44)
B. Homogenization (erasure of individuality, success, and hardship)	16.45% (25)
C. Harmful to those who don't fit the mold	11.18% (17)
D. Perpetuation of mental health concerns/stigma against help	10.53% (16)
<b>DOMAIN 4: Myth Has No Impact on Personal Life</b>	<b>25.66% (39)</b>
<b>DOMAIN 5: Positive Aspects of the Myth</b>	<b>19.08% (29)</b>
A. A positive stereotype to strive for or take advantage of	13.82% (21)
B. A positive image reflective of truth	5.92% (9)
<b>DOMAIN 6: Myth is Perpetuated by Immigration and its After-Effects</b>	<b>14.5% (22)</b>
<b>DOMAIN 7: Unfamiliar with the Term or its Impact</b>	<b>11.84% (18)</b>
<b>DOMAIN 8: Other (unrelated or undeterminable response)</b>	<b>5.26% (8)</b>

## Appendix O

### Extended Literature Review

While many researchers have explored manifestations of psychological distress and its correlates among Asian American subgroups, the impact of internalization of the model minority myth is just beginning to be understood. Further, literature regarding both mental health outcomes and internalization of myth stereotypes is greatly limited for South Asians. A review of current literature sets the framework for illustrating the importance of understanding the different ways that South Asians' psychological distress could be an outcome of internalizing the model minority myth.

The present literature review will establish precedent for a study focusing specifically on South Asians by addressing the gaps between the experiences of South Asians in the United States and research focusing broadly on Asian Americans. First, this review will present literature regarding psychological distress among South Asians, and the limited current research establishing the connection between the model minority myth and psychological distress will be presented for South Asians in the United States and for Asian Americans broadly. The development of the model minority myth will be discussed in the context of South Asian immigration, and a theoretical framework for understanding internalization of model minority myth messages will be presented. Conceptual models explaining the direct and indirect relationships between internalization of the model minority myth and psychological distress will be presented and critiqued, and the goals of the present study in addressing the gaps in extant literature will be highlighted.

#### **Focus on South Asians in the United States**

Literature suggests that the pan-ethnic Asian American group is too heterogeneous to study meaningfully as a single, general group (Tran & Curtin, 2017). This heterogeneity could warrant the argument that South Asians should be studied separately from other Asian subgroups in the United States due to their potentially unique experiences. The heterogeneity of Asian Americans is tied to the differential immigration history of Asian subgroups to the United States. For example, East Asian individuals began immigrating to the United States long before South Asians did. Thus, East Asian immigrants had already established experiences of racism and trauma in the United States prior to the first major wave of South Asian immigration. In addition, the model minority myth was tied first to stereotypes of East Asians when the term “model minority” was coined in 1966, while the largest wave of South Asian immigrants to the United States began only in 1965 with the reform of the Immigration Act. South Asians are the largest and fastest growing racial group in the United States (SAALT, 2015). Due to the high and increasing prevalence of South Asians in the United States, it is important that research be devoted specifically to understanding this group.

### **Psychological Distress in the South Asian Population**

Although the correlates and predictors of psychological distress among South Asians in the United States may not be well understood, the actual prevalence of psychological distress in this population is well established in extant literature (Burr, 2002; Ahmad et al., 2004; Rastogi et al., 2014). South Asians face stressors that are unique to their experiences as ethnic minorities in the United States, such as race-related stress and immigration experiences (Kaduvettoor-Davidson & Inman, 2012; Inman et al., 2014). In a focus group study with South Asian women aiming to understand their health

concerns after immigration to the United States, Ahmad et al. (2004) found that mental health was the overarching theme across health concerns. Many researchers are making efforts to understand how psychological distress manifests for South Asians in the United States. Kaduvettoor-Davidson & Inman (2012) reported that in a sample of South Asian Americans, the perception of discrimination was significantly correlated with perceived stress, and that perceived discrimination was significantly inversely related to psychological well-being. In a content analysis of articles spanning three decades, Inman et al. (2014) found trends in extant literature exploring “psychological health, interpersonal dynamics, acculturative stress, identity, and domestic violence” in South Asian groups (p. 364). Research has found acculturative stress to be a salient factor for South Asians (Tummala-Narra, Deshpande, & Kaur, 2016), and one study found severe mental illness to be particularly salient for South Asians over the age of 40 living in the United States (Rastogi et al., 2014).

Related to their experiences with immigration to the United States, South Asians have a long history of exposure to the model minority myth (Mahalingam, 2006; Bhatia & Ram, 2008). While little research exists regarding the connection between the model minority myth and outcomes of psychological distress for South Asians, there is research establishing this connection for broader Asian American populations. In their critical review of extant literature about the model minority myth, Poon et al. (2016) noted a theme in literature about college student development describing the model minority myth as the endorsement of academic achievement stereotypes resulting in “psychological pressures that produced negative mental health consequences” (p. 483). Museus & Park (2015) provided insight into the perpetuation and maintenance of

psychological distress for Asian Americans with their findings that the model minority myth fuels stereotypes that Asian individuals are “genetically predisposed” to success, and that they therefore do not need help and should not ask for it (p. 565).

Addressing findings regarding the academic success of Asian Americans compared with other racial subgroups in the United States, Hsin & Xie (2014) published research examining potential correlates of the relative academic success of Asian American students compared with White students, as well as the psychological costs of this success. They claim that despite the implications of academic success in the context of the model minority myth, Asian American students demonstrated lower overall psychological adjustment and social engagement compared with their peers. Qin, Way, & Mukherjee (2008) found through qualitative interviews with Chinese American students that feelings of alienation from parents due to their high academic expectations was related to poor psychological adjustment. Similarly, Yoon et al. (2017) found that the model minority myth was related to feelings of stress and pressure for East Asian adolescents in the United States when their parents had high expectations of success in academics and in occupational aspirations. Chen (1995) related model minority myth expectations with cultural assimilation, asserting that if Asian cultures place more value on education and achievement than Western cultures, then the conflict between Asian American students and their parents’ expectations could arise when students participate in the process of assimilation to Western culture.

### **Development of the Model Minority Myth**

The term “model minority” was first introduced in an article in the New York Times, which referred to Japanese Americans as success stories relative to other,

“problem minorities” (Petersen, 1966). Petersen (1966) described the discrimination that Japanese Americans experienced, especially related to their incarceration in concentration camps during WWII, and then praised them for their “success” despite this discrimination. The “success” that Petersen described was the essence of what have since become achievement-related stereotypes of Asian Americans, such as work ethic, academic and economic success despite racism, motivation to be successful, and income (Yoo, Burrola, & Steger, 2010). Further, the “success” was limited to the areas in which Japanese Americans were legally allowed to succeed at the time, such as running small businesses. Petersen (1966) claimed that there were limited negative effects of marginalization for Japanese Americans demonstrated by their relative success compared with other racial minorities; he speculated about the qualities that Japanese Americans had that made them successful, and coined the term “model minority” to illustrate that Japanese Americans should set an example for other marginalized racial minorities. Since then, the term and the stereotypes that it endorses have been extended to include other Asian American subgroups.

The model minority myth is also tied to immigration regulation by the United States government, especially for the South Asian subgroup. Historically, only highly educated and highly skilled professionals from South Asian countries were allowed entry into the United States. This immigration policy skewed the characteristics of the population of South Asians in the United States and contributed to model minority stereotypes regarding their education, social class, and overall success. Like other Asian American subgroups, subsequent generations of South Asians in the United States have been held to the same societal expectations of success despite marginalization.

When these societal expectations are internalized, such as when individuals hold these expectations for themselves, they have the potential to be experienced as pressure to live up to “model minority” stereotypes or as pride related to embodying a “model” status in society. Since these experiences of pressure and pride are both tied to stereotypes generated against a background of racial bias, internalization of the myth carries racist implications regardless of which experience is most salient. In order to understand what these implications mean with regard to the conflicting relationships between internalization and psychological distress, it is necessary to explore the history of the model minority myth through theoretical frameworks of race and identity. Critical Race Theory (CRT) and Social Identity Theory (SIT) are excellent and relevant frameworks through which to conceptualize the myth and to understand how and why it relates to psychological distress.

### **Critical Race Theory**

Critical Race Theory (CRT) aims to examine how systems of oppression maintain a hierarchy of race, and to challenge ideologies such as meritocracy and colorblindness as a means of dismantling these systems of oppression. Meritocracy is the belief that people succeed because of their individual excellence and abilities, and colorblindness is the belief that racial classifications do not pose barriers to success based on meritocracy. Through its challenges of these beliefs, CRT becomes a fitting theory through which to understand the model minority myth and psychological distress among Asian Americans (Poon et al., 2016).

Conceptualizing the model minority myth through the lens of CRT involves understanding the racial dynamics within the United States that formed the background

for the construction of the myth. The term “model minority” was invented by a White individual to illustrate a “superiority” of Asian Americans in comparison to other racial minorities, while simultaneously establishing their inferiority to White people (Petersen, 1966). The basis of the construct is a set of stereotypes about Asian Americans that are grounded in their successes as tailored by White America through racist policies and regulations such as the Naturalization Act of 1790, the Immigration Act of 1924 (also called the Asian Exclusion Act), and the Immigration Act of 1965. These policies regulated which Asian people were allowed to live and work under which conditions in the United States; thus, the history of how Asian immigrants established their lives in the United States was influenced by the limited ways in which they were allowed to succeed (Sheth, 1995; Kaduvettoor-Davidson & Inman, 2012). The myth of the model minority was developed through this tailoring of Asian American success stories by White America and the subsequent application of expectations of success to broader Asian American groups.

The consequences of the racist ideology and systems underlying the development of the model minority myth include the triangulation of Asian Americans in the racial hierarchy in the United States. According to the theory of racial triangulation (Kim, 1999), the racial hierarchy in the United States can be represented by two spectrums, the inferiority-superiority spectrum, and the foreigner-insider spectrum. Since the model minority myth positions Asian Americans against other racial minorities by endorsing stereotypes about them that place them closer to Whiteness than other racial minorities, the myth places Asian Americans higher than other racial minorities and lower than Whites on the inferiority-superiority scale. Concurrently, the model minority myth

contributes to the perpetual foreigner status of Asian Americans by othering them from Whites and other racial minorities. While both Whites and other racial minorities are considered “insiders” in the United States, Asian Americans are consistently identified as foreigners and expected to match model minority stereotypes. The conflict created for Asian Americans by the seemingly positive connotation of the “model minority” framing of racial stereotypes in contrast with the ostracization and marginalization they experience can manifest in confusion about how Asian Americans interpret and relate to the model minority myth. In particular, this conflict could result in symptoms of psychological distress, and Asian Americans may internalize model minority messages as a defense mechanism against their own marginalization.

### **Social Identity Theory**

Social identity theory (SIT) posits that individuals seek to maintain positive views of their identities or use mechanisms of social mobility to achieve positive identities. Thus, when there are threats to the positivity of group identities, social groups seek to positively differentiate themselves from other groups (Tajfel & Turner, 1986).

Experiencing ostracization or marginalization can be seen as a threat to the positivity of someone’s group identity. Specifically, the marginalization of Asian Americans triangulated against the marginalization of other racial minorities such as Blacks may be seen as a threat to Asian Americans’ positive group identity. In order to cope with these threats, Asian Americans might be motivated to internalize model minority messages as a way to distance themselves from other racial minorities in an attempt to regain or maintain “positive” messages about their group. Internalization of these beliefs can present as prideful feelings about identifying with a group that is

considered to be a “model minority.” Since social identity theory states that positive differentiation from other groups is a mechanism for building or maintaining positive own-group views, internalization can be understood through the theory of social identity to serve the function of distancing Asian Americans from all other racial groups through acceptance of the positionality of their racial group as separate from both Whites and other racial minorities (Tajfel and Turner, 1986). Thus, although internalization of the model minority myth is problematic because of its racist ideology, SIT explains why some Asian Americans may be motivated to internalize the myth.

Regarding the conflict related to the seemingly positive and negative connotations associated with the model minority myth, Asian Americans may have differential experiences with internalizing the messages endorsed by the myth. For example, as a coping mechanism, internalization of the myth may be associated with an alleviation of symptoms of psychological distress. However, due to the unreasonable expectations for Asian Americans that are presented by the myth, internalization may also be associated with more symptoms of psychological distress.

### **Internalization of the Model Minority Myth**

While much research on the model minority myth has focused primarily on endorsement of achievement-related stereotypes of Asian Americans (Ho & Jackson, 2001; Kim & Lee, 2014), other work has uncovered two factors that represent the internalization of myth messages. Specifically, this research has illustrated two dimensions of internalization of the model minority myth; one incorporates achievement-related stereotypes, while the other incorporates stereotypes about unrestricted mobility (Yoo, Burrola, & Steger, 2010). In the development of their measure capturing the

construct of internalization of the model minority myth, Yoo, Burrola, & Steger (2010) described items in the achievement subscale to represent endorsement of the myth that Asian Americans are more successful than other racial minorities due to their hard work and drive for achievement. The researchers described the unrestricted mobility subscale to represent endorsement of the myth that Asian Americans experience less racism, discrimination, and other social barriers to success than other racial minorities.

Research about internalization of the model minority myth is highly limited for South Asians in the United States. However, such research exists to a slightly less limited capacity for broader Asian American populations. Researchers have reported differential results regarding the relationship between internalization of the model minority myth and psychological distress. For example, Chen (1995) found internalization of model minority stereotypes to be positively correlated with depression in a sample of Chinese American college students. Regarding the two separate dimensions of internalization, Yoo, Burrola, & Steger (2010) found that unrestricted mobility was more likely to be positively correlated with psychological distress than the achievement subscale, but Daga & Raval (2018) provided evidence illustrating a positive relationship between the achievement subscale and psychological distress.

Gupta, Szymanski, & Leong (2011) found that internalization of the model minority myth was an inverse predictor of psychological distress when assessed in relation to the self. Specifically, the authors transformed a measure of endorsement of model minority stereotypes to refer to the self rather than to Asian Americans in order capture a construct they termed “internalized racialism.” They found that internalized racialism negatively predicted outcomes of psychological distress. Based on the measure

the researchers used (Ho & Jackson, 2001) and the method they used to transform the items, the new measure for internalized racialism seems conceptually closer to self-esteem than to internalization of the model minority myth; thus, the inverse relationship found here may not be an accurate representation of how internalization of the model minority myth relates to psychological distress. However, Chang (2017) also found an inverse relationship between internalization of the model minority myth and the psychological outcome of depression in a broadly Asian American sample, using both subscales of the Internalization of the Model Minority Myth measure (IM-4) developed by Yoo, Burrola, & Steger (2010).

Yoo, Burrola, & Steger (2010) are the only researchers to have found that unrestricted mobility stereotypes were related to psychological distress symptoms. Other researchers either tested only achievement-related stereotypes (Chen, 1995; Gupta, Szymanski, & Leong, 2011), or they have found unrestricted mobility to be unrelated to outcomes of psychological distress (Daga & Raval, 2018). Thus, the present study will utilize only the achievement subscale of the IM-4 to assess this construct for South Asians (Yoo, Burrola, & Steger, 2010).

### **Self-Concept Related to Model Minority Stereotypes**

Researchers have speculated about the potential influence of a moderating variable on the differential relationships between internalization of the model minority myth and psychological distress. Specifically, some researchers have theorized that a measure of individual success may moderate the relationship such that greater success may predict a positive relationship between internalization of myth messages and

psychological distress, while lower success may predict an inverse relationship (Chen, 1995; Chu, 2002; Yim, 2009; Shetty, 2015; Daga & Raval, 2018).

Academic success has been conceptualized in numerous ways in the literature. For example, Chu (2002) tested the potential moderating influence of academic success on the relationship between internalization of the model minority myth and depression, using grade point average as the measurement of academic success. Statistical analysis did not provide support for this moderation hypothesis; considering the broader stereotype-related conceptualizations of the construct of individual success by other researchers (Daga & Raval, 2018; Yim, 2009), it is possible that the academic nature of this definition was too narrow to adequately capture the value of the construct in predicting psychological distress. Furthermore, a limitation of utilizing grade point average to measure the construct of individual success is that it does not capture self-concept or self-perception of success.

In terms of moderating the relationship between internalization of the model minority myth and psychological distress, self-concept may be more important than the numerical or systematic representation of academic success. Chen (1995) found an overall positive correlation between internalization of the myth and depression; however, she also hypothesized that a factor of internalization termed “performance congruence” would inversely relate to depression. Chen (2017) described performance congruence as “self-perception and feelings about [one’s] actual academic performance” (p. 140). Although data illustrated a trend of a negative relationship, statistical analysis did not support this hypothesis, suggesting again that perhaps the definition of the construct in this study was too narrow to adequately reflect its importance. Daga & Raval (2018) did

not measure a moderating variable in their study assessing the relationship between internalization of the model minority myth, adjustment problems, and life satisfaction; however, they speculated that a measure of participants' "own success" may have been important in explaining the differential results across the two dimensions of the internalization measure. Since their sample was South Asian Americans, the researchers described this hypothetical variable as viewing oneself as "living up to the portrayal of South Asian Americans" (Daga & Raval, 2018, p. 27).

Based on speculations in extant literature about the how the construct of individual success as a moderator of the relationship between internalization of the model minority myth and psychological distress should be conceptualized, as well as in acknowledgement of the limitations of prior research that has attempted to define and measure such a construct, the construct in the present study was termed "self-concept related to model minority stereotypes." This construct was defined as the extent to which a person believes they have the qualities that are considered to be qualities of success based on items that have been shown in extant literature to reflect achievement-related stereotypes about Asian Americans (Chen, 1995; Ho & Jackson, 2001; Gupta, Szymanski, & Leong, 2011; Yoo, Burrola, & Steger, 2010).

### **Idealized Cultural Identity (ICI) Model**

A dual-pathway model examining how idealization or internalization of certain beliefs relates to both positive and negative psychological outcomes through feelings of pride and pressure was proposed by Mahalingam (2006), who called it the idealized cultural identity model. Regarding Asian Americans and the model minority myth, this model provides a framework to examine whether internalization of the model minority

myth could be related to various outcome variables through the dual pathways of model minority pride and model minority pressure. Model minority pride refers to feelings of pride specifically related to being part of a group that is considered a “model minority.” Model minority pressure refers to experiences of pressure to meet the stereotypes endorsed by the model minority myth. Mahalingam (2006) hypothesized that greater internalization of stereotypes would lead to greater feelings of both pride and pressure, and that pride and pressure would be differentially related to psychological distress variables. Specifically, pride would inversely predict distress, while pressure would positively predict distress.

In conceptualizing these constructs in this way, it is important to keep in mind the racialized and racist context in which model minority beliefs emerged. Pride, taken out of context, can seem like a positive predictor, especially when predicting a positive outcome such as less psychological distress. However, it is important to recall why a construct such as pride might be present for Asian Americans internalizing the model minority myth (a form of internalized oppression). Internalization of the myth is rooted in racist ideology; therefore, pride in relation to the myth is either malicious or it is a coping mechanism for racism. While differentiating between these two speculations is beyond the scope of most research studies, the problematic nature of pride in the context of the model minority myth must nonetheless be noted. This groundwork becomes especially important when conceptualizing the different pathways through which internalization of the model minority myth predicts psychological distress for Asian Americans, and particularly why it sometimes predicts less distress. The hypothesis that internalization can predict less distress is grounded in the theory that this phenomenon is a manifestation

of a coping mechanism for marginalization. For individuals who perceive themselves to match the stereotypes of success that are endorsed by the myth, feelings of pride related to being a “model minority” could counter or cover feelings related to marginalization, thus predicting less psychological distress. This phenomenon may not be true for individuals who do not perceive themselves to match achievement stereotypes; the mismatch could negate any feelings of pride related to being a “model minority” and instead follow a pathway of model minority pressure, predicting more psychological distress.

### **Critique of the ICI Model**

Although the ICI model provides a clear conceptualization of the multiple ways in which internalization of the model minority myth may present for Asian Americans, it is not without its limitations. While variable relationships are conceptually apparent in the descriptions and framework of the model, there is no explicit examination of the direct relationships between pride or pressure and outcome variables. Additionally, there is no examination of the direct relationship between internalization and outcome variables. Based on the lack of clarity about internalization of the model minority myth in extant literature and the relative novelty of the dual pathways in this model, testing these direct pathways bears importance.

Mahalingam (2006, 2012b) seems to conflate identity with belief, in that internalizing certain stereotypes about a group is equal to constructing an identity made up of those beliefs. However, understanding internalization of the model minority myth as a predictor of psychological outcomes for Asian Americans is different from claiming that Asian Americans identify as model minorities. As established through the conceptual

frameworks described in this literature review, model minority myth messages are inherently racist; however, endorsing these messages may be a reaction to experiences of racism rather than an active practice of racism. Based on the complicated history that Asian Americans have with racial triangulation that can lead to internal conflicts about their status within the racial hierarchy in the United States, it is unfair to assert that Asian Americans adopt the model minority myth as an “idealized identity.” Framing internalization of myth messages as the formation of an “identity” is a strong claim that paints Asian Americans as racists who use the myth as a means to move up in the racial hierarchy at the expense of other minorities; this effectively ignores Asian Americans’ own experiences of marginalization and how these experiences can lead to internalization of problematic messages, much like Petersen (1966) did in his article inventing the term “model minority.” As such, and especially with research grounded in theories of critical race and social identity, a more appropriate terminology for the construct of “idealization of cultural identity” would be “internalization of myths or stereotypes.” For research specifically regarding the model minority myth, I assert that the terminology should be “internalization of the model minority myth.”

The ICI model has been used in some prior research studies to explore model minority phenomena for a variety of Asian American subsamples, including South Asian Americans. Kanukollu (2010) conducted a study examining endorsement of model minority ideology, gender stereotype ideology, and level of acculturation as predictors of perceptions of child sexual abuse and attitudes toward help-seeking in a sample of South Asian Americans. Endorsement of model minority ideology was measured using the Model Minority Pride measure developed by Mahalingam & Haritatos (2007). In

measuring endorsement of the model minority myth in this way, Kanukollu (2010) conflates what the present study establishes as two separate constructs, which are internalization of the model minority myth and pride related to being part of a “model minority” group. Further, this study did not measure outcomes of psychological distress.

Yim (2009) conducted a mixed-methods research study with Asian American male college students, testing the ICI model as a predictor of psychological and academic outcomes. In this study, model minority pride and model minority pressure were measured as variables independent of internalization of the myth. Further, the results provided empirical evidence to support that pride and pressure relate differentially to outcomes of psychological distress. Specifically, Yim (2009) found that model minority pride significantly inversely predicted stress and depressive symptoms, while model minority pressure significantly positively predicted stress and depressive symptoms. Further, the idealized cultural identity in the model was significantly positively related to stress, depressive symptoms, and anxiety. A limitation of this particular study is that the idealized cultural identity in the model was measured as “model minority male ideal” instead of internalization of the model minority myth, and thus there remains a gap in the present literature regarding how the ICI model could represent the relationship between internalization of the myth and psychological distress. Moreover, this study was conducted in a general sample of Asian Americans, and thus does not capture any nuances that may be unique to South Asians.

Daga & Raval (2018) recently completed a mixed-methods research project based on the ICI model. Using a South Asian American sample for the quantitative and an Indian American sample for the qualitative studies, they examined intercorrelations

between parental ethnic-racial socialization, ethnic identity, model minority stereotype, and psychological well-being. The researchers conceptualized the model minority stereotype as internalization of the myth messages, which they measured using the two subscales of the IM-4 (Yoo, Burrola, & Steger, 2010). Bivariate correlations revealed a nonsignificant relationship between internalization of the model minority myth, adjustment problems, and life satisfaction. However, model minority pride and pressure were positively correlated, and model minority pressure was significantly associated with adjustment problems in the expected positive direction. Interestingly, researchers found that internalization of the model minority myth was unrelated to model minority pressure. However, authors note that the achievement subscale of the IM-4 was positively associated with model minority pride, raising questions about the characteristics of their sample that may have influenced the salience of pride over pressure. Specifically, authors speculate that participants' "own success may serve as a moderator, such that those who view themselves as living up to the portrayal of South Asians may experience pride, whereas those who view themselves as struggling to live up to the stereotype may experience pressure" (p. 27). Though their research has its limitations, Daga & Raval (2018) create a compelling basis for further research on the topic of internalization of the model minority myth and psychological outcomes using the ICI framework. For example, the authors conducted only a zero-order correlation analysis; therefore, although the ideas from the ICI model were used as a framework, the model was not actually tested in the study. Future research extending this study by using regression analysis to test the model is warranted.

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