

Associations Between Perceived Discrimination and Relationship Quality among Asian  
and Pacific Islander Parent-Adult Child Dyads: Stress as a Mediator

By

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A Dissertation Presented in Partial Fulfillment  
of the Requirements for the Degree  
Doctor of Philosophy

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ARIZONA STATE UNIVERSITY

August 2021

## ABSTRACT

Experiences of perceived racial discrimination are all too common for Asian Americans living in the United States. While there is research demonstrating the negative impact of discrimination on individual well-being, there is a scarcity of literature addressing the potential associations between discrimination and family relationships outcomes, particularly the relationships between Asian American emerging adults and their parents. Drawing from family and stress theories, it was hypothesized that perceived discrimination, including blatant and subtle forms of discrimination, would be negatively associated with various aspects of relationship quality and that these associations would be mediated by general stress. The present study collected data from 137 Asian American parent-adult children dyads to examine the associations between discrimination, general stress, and parent-child relationship quality. Actor and partner associations were also tested in order to account for the interdependence of dyadic data. Results showed support for the negative direct association between discrimination and relationship quality for both children and parents, as well as the mediator role of stress. Findings from this study also have important implications for counseling to promote the mental health of Asian American emerging adults and families.

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## Introduction

Asian Americans, used here to describe the collective group of Asian, Asian American, Pacific Islander, and Pacific Islander American individuals living in the United States, make up one of the fastest growing groups in the United States (U.S.). Indeed, the Asian American population in the U.S. is projected to increase from 22.6 million in 2018 to 39.0 million by 2060 (Colby & Ortman, 2014). Despite the growing population, Asian Americans often experience racial/ethnic discrimination, defined by unfair treatment due to prejudice based on their race and/or ethnicity. Indeed, approximately 60% of Asian Americans in a nationally represented survey reported that they have experienced racial discrimination (Harvard T. H. Chan School of Public Health, 2017). Further, the frequency and intensity of anti-Asian discrimination have increased during the COVID-19 pandemic, with the number of reported hate crimes rising by 149% compared to the previous year (Jeung, Yellow Horse, Popoic, & Lim 2021).

Reports of discrimination have been associated with various mental health issues for Asian Americans, including anxiety (Chen, Szalacha, & Menon, 2014; Gee, Spencer, Chen, Yip, & Takeuchi, 2007), depression (Chen et al., 2014; Lam, 2007; Noh & Kaspar, 2003), trauma-related symptoms (Pieterse et al., 2010), and alcohol and drug use disorders (Gee, Delva, & Takeuchi, 2007; Yoo, Gee, Lowthrop, & Robertson, 2010). While the existing literature has documented the negative associations between discrimination and individual well-being among Asian Americans, there is a call for research to examine the impact of discrimination on family relationships, as discrimination appears to be placing families at risk of negative outcomes, such as higher



levels of family conflict (Cheng, Lin, & Cha, 2015; Riina & McHale, 2010) and lower levels of family relationship quality (Murry et al., 2001; Riina & McHale, 2012).

According to family and stress theories (e.g., Bolger, DeLongis, Kessler, & Wethington, 1989; Bowen, 1966; Harrell, 2000), racial/ethnic discrimination may be associated with experiences of stress, which, over time, can detrimentally impact one's own mental health (intrapersonal) as well as their relationship with family members (interpersonal). From an intrapersonal perspective, the minority stress model (Meyer, 2003) posits that stressors associated with one's minority status, such as discrimination, can create a hostile environment that deteriorates one's mental health. In support of this perspective, one study examining ethnic minority, immigrant adolescents found that stress related to mainstream American culture positively predicted depressive symptoms over the course of two years (Sirin, Ryce, Gupta, & Rogers-Sirin, 2013). From an interpersonal perspective, research based on same-gender couples have found that experiences of minority stress are negatively associated with relationship quality (Randall & Bodenmann, 2017; Randall, Totenhagen, Walsh, Adams, & Tao, 2017; Totenhagen, Randall, Cooper, & Tao, 2017). Together, this research supports family systems theories that conceptualize individual experiences within the larger family unit, highlighting the notion that stressful experiences, such as experiences of discrimination, may not only affect the individual experiencing the stress directly, but also the individual's family members.

In accord with family systems theories, experiences of discrimination are likely to negatively impact all members of the family, irrespective of who directly experienced the discrimination (e.g., DeSantis & Ugarriza, 1995; Dinh, Sarason, & Sarason, 1994).

Several studies have found that Asian American parents' experiences of discrimination are positively associated with their children's well-being, such as ethnic-related stress (Benner & Kim, 2009) and mental health symptoms (Cheah, Wang, Ren, Zong, Cho, & Xue, 2020). Likewise, there is some evidence of children's experiences of discrimination affecting parents' health outcomes. For instance, a 5-year longitudinal study of 341 parent-adolescent dyads found that adolescents' reports of discrimination predicted both their own and parents' marijuana use (Huynh, Rahal, Mercado, Irwin, McCreath, Seeman, & Fuligni, 2019). While research has primarily focused on examining the associations between one's own experiences and behaviors, these findings highlight the importance of investigating the bidirectional associations of discriminatory experiences and outcomes among family members, which calls for the use of dyadic data including paired responses from children and their parents (Cook & Kenny, 2005).

Given Asian Americans' vulnerability to racial/ethnic discrimination (Okazaki, 1997; Tiwari, 2002) it is critical that researchers and mental health clinicians understand how discrimination may be associated with Asian Americans' individual and relational well-being, specifically stress and relationship quality. Whereas family conflicts tend to decline when the child reaches approximately 18 years of age, conflict persists into adulthood in Asian American families (Chung, 2001; Tinto, 1988). Importantly, family conflict can be exacerbated by experiences of discrimination, which are common challenges experienced by Asian American emerging adults (i.e., adults ranging from ages 18 to roughly 29; Kiang, Yip, & Fuligni, 2008). Indeed, experiences of discrimination have been found to be positively associated with conflicts with parents among Asian American emerging adults (Cheng et al., 2015).

Taken together, this study examined the associations between perceived discrimination and relationship quality among Asian American emerging adults and their parents, as mediated by self-reported general stress. This study accounted for the interdependence of dyadic data by examining actor associations (i.e., associations between one dyad member's predictor variable and own outcome variable) and partner associations (i.e., associations between one dyad member's predictor variable and the other dyad member's outcome variable). Understanding these associations can contribute to the literature on Asian Americans' experiences of discrimination and inform counseling psychologists' development of treatment plans and interventions addressing issues related to discrimination and family concerns for Asian American clients.

### **Discrimination against Asian Americans in the U.S.**

Racial/ethnic discrimination may be defined as differential and unfair treatment of a racial/ethnic group and its members based on prejudice, which can manifest at the individual, cultural, and institutional levels and across multiple domains of life (Dion, 2002; Jackson et al., 1998; National Research Council, 2004). Historically, research on discrimination has largely focused on Black/White relations (e.g., Damico & Sparks, 1986; Feagin, Hernan, & Imani, 1996; McClelland & Auster, 1990), while reviews have noted the limited research on discrimination among Asian Americans (National Research Council, 2004; Paradies, 2006; Williams, Neighbors, & Jackson, 2003). Given recent sociopolitical events in the U.S. resulting from the ongoing COVID-19 pandemic, there is an even greater call to understand Asian Americans' experiences of discrimination and their harmful effects on well-being (Jeung et al., 2021).

### ***Brief history of Asian American discrimination in the U.S.***

Asian Americans have endured many instances of discrimination throughout U.S. history (Okihoro, 2001; Zia, 2000). Discrimination against Asian Americans are, unfortunately, well-documented across all branches of the U.S. government. Stemming back to 1882, the U.S. Congress passed the Chinese Exclusion Act, which prohibited the immigration of all Chinese laborers (Gyory, 1998). This was the first law to bar all members of a specific racial/ethnic group from immigrating to the U.S., and it separated many Chinese families. Following this, in 1942, President Franklin D. Roosevelt signed and issued the Executive Order 9066, which ordered for the relocation of Japanese Americans to internment camps (Young & Takeuchi, 1998). Japanese Americans' lives were disrupted as they found themselves incarcerated and confined in small camps until 1946. After the war, Japanese Americans spent years recovering the homes, businesses, property, and savings they lost due to the internment, and individuals who were born in Japan and immigrated to the U.S. were not permitted to become naturalized citizens until 1952. Further, the *United States v. Bhagat Singh Thind* case in 1923, the U.S. Supreme Court unanimously ruled that Asian Indians were ineligible for citizenship on the basis of race (Gee et al., 2007). Due to this ruling, Asian Indians were unable to become naturalized citizens for over 20 years and endured financial and other forms of hardships. In the past year, political figures, including President Donald Trump, have spread xenophobic attitudes against Asian Americans by using phrases such as “kung flu” and blaming Asian Americans for COVID-19 (Schild, Ling, Blackburn, Stringhini, Zhang, & Zannettou, 2020).

More recently, there are current sociopolitical and legal developments in the U.S. in response to the increase in hate crimes against AAPI individuals, which have increased

during the current COVID-19 pandemic (Jeung et al., 2021). Following these events, the Biden administration has denounced AAPI discrimination, which led to President Biden signing the COVID-19 Hate Crimes Act designed to increase the accessibility of hate crime reports and resources for AAPI individuals who have been impacted by the discrimination (Sprunt, 2021). These may be small, yet important steps in addressing the long history of AAPI discrimination in the U.S.

According to Chan (1991), anti-Asian American sentiments may have emerged due to fears of a “yellow peril,” that groups of unscrupulous individuals would threaten the “American” way of life. In addition to the instances of systemic discrimination outlined above, these attitudes and prejudices also led to a surge in hate crimes, racial profiling by police, and discrimination in employment in the late 1990s and early 2000s (Lai & Arguelles, 2003; Lien, 2002; Umemoto, 2000; Young & Takeuchi, 1998). While instances of blatant discrimination, in the form of physical violence, have appeared to diminish in recent years (Bobo, 2000), subtle forms of discrimination, such as stereotypes, remain prominent (National Research Council, 2004). For instance, teachers have reported holding high expectations for Asian American students’ achievement and behavior due to the false assumption that all Asian Americans are “quiet” and “hardworking” (Goto, 1997; Lee, 1994). In addition, Asian Americans experience systematic discrimination in home buying at the same level as African Americans due to the belief that Asian Americans are untrustworthy (Turner, Ross, Bednarz, Herbig, & Lee, 2003). Furthermore, despite being born and raised in the U.S., Asian Americans are also likely to be perceived as foreigners (Armenta et al., 2013; Huynh, Devos, & Smalarz, 2011).

The *model minority myth*, popularized by a *New York Times* article in 1966 (Peterson, 1996), contributes to the belief that Asian Americans do not experience or experience minimal discrimination (Wu, 2002). The model minority myth assumes that Asian Americans are quiet, hardworking, successful, and that they are somehow free from discrimination and struggles that other racial/ethnic minorities face (Young & Takeuchi, 1998). While this stereotype may appear positive, in reality, this belief undermines the difficulties faced by Asian Americans (Kagawa-Singer, 2000), which in turn may provide “reason to ignore the problem of discrimination against Asian Americans and can be used as a convenient rationale to neglect them in research and intervention programs” (Sue et al., 2007, p. 78). As pseudo-positive messages about Asians are dispersed, other racial/ethnic minority groups may resent Asians for being “successful” and perceive them as outsiders who do not truly understand what it means to be a minority in the U.S. Furthermore, this myth may lead to tension between Asian Americans and other racial/ethnic minority groups (Conchas & Noguero, 2004). Research has shown that Asian American adolescents frequently experienced physical and verbal harassment by their Black and Latino peers (Greene, Way, & Pahl, 2006; Rosenbloom & Way, 2004). As such, Asian Americans may encounter discrimination not only from the majority group, but also from other minority groups. Discrimination against Asian Americans has evolved from openly hostile acts to subtle biases over the decades, and now, blatant discrimination has become more prominent once again due to COVID-19-related xenophobia. As such, it is important to distinguish between blatant and subtle forms of discrimination and understand how each type of discrimination may be associated with different outcomes for Asian Americans.

## **Blatant and Subtle Forms of Racial Discrimination**

### ***Blatant Discrimination***

Blatant discrimination refers to overt physical and verbal harassment (Yoo, Steger, & Lee, 2010). Blatant discrimination was very prominent during the initial period of Asian immigration to the U.S. (Bobo, 2000), and decreased over time until recently. During the current COVID-19 pandemic, physical bullying, hate crimes, and other overt assaults fueled by race-based prejudice towards Asian Americans are all too prevalent. Additionally, examples of blatant discrimination against Asian Americans include university admission policies implemented in the late 1990s that excluded Asian Americans due to beliefs that Asian American students were over-represented in post-secondary education (Wang, 1995). During this time, Asian American students were also faced with acts of bigotry and violence (Kiang & Lee, 1993). For instance, student leaders at Boston College received hate e-mails that stating that, “College is for ‘White men’” and that minority students should “go back to where [they] came from” (Chronicle of Higher Education, 1998). Throughout the COVID-19 pandemic, blatant discrimination against Asian Americans has risen again due to xenophobic beliefs that Asian Americans are responsible for the virus (Pew Research Center, 2020). Some examples include the physical assaults on Asian American elders and the deadly Atlanta-area spa shootings in which eight individuals were killed (American Psychological Association, 2021; Jeung et al., 2021). COVID-19-related discrimination has been associated with negative health outcomes among Asian Americans (Lee & Waters, 2020; Yang, Tsai, & Pan, 2020).

### ***Subtle Discrimination***

Subtle racial discrimination are defined as indirect attacks against one's racial/ethnic identity (Yoo et al., 2010). Examples of subtle discrimination include stereotypes (e.g., Asians are good at math, Asian women are exotic and sensual) and microaggressions (e.g., Asians are treated as foreigners in the U.S., even if they are citizens or born in the U.S.) This form of discrimination can be detrimental to the racial minority groups, such as the Asian American population (Wu, 2002), possibly because subtle discrimination insidiously threatens one's identity and self-esteem (DuBois, Burk-Braxton, Swenson, Tevendale, & Hardesty, 2002; Williams & Williams-Morris, 2000) and sense of control and safety (Perlow, Danoff-Burg, Swenson, & Pugliano, 2004). Specifically, findings based on a sample of Asian American college students suggest that subtle discrimination is positively associated with anger, anxiety, depression, and overall psychological distress (Juang et al., 2016).

Subtle discrimination may pose a greater threat to Asian Americans' well-being than blatant discrimination given more cognitive appraisal may be needed to interpret the ambiguity in the former type of discrimination (e.g., "Was that racism or am I being paranoid?"), thus causing the individual experiencing the discrimination to ruminate on the situation (Sue et al., 2007). Research by Noh and colleagues (2007) supports this perspective; using a sample of 180 Korean immigrants, they found that subtle, but not blatant, discrimination was positively associated with depressive symptoms. Based on this literature, in the present study, it was expected that subtle discrimination may have stronger associations with stress and relationship quality compared to blatant discrimination. However, given recent trends of blatant discrimination and hate crimes against Asian Americans, blatant discrimination may have stronger associations with



stress and relationship quality for participants in the current study. One of the goals of the present study was to explore whether the types of discrimination may have different associations with outcomes for Asian Americans.

### **Asian American Families: Impact of Discrimination**

Family systems theory (Bowen, 1966) posits that members of a family unit are interdependent, wherein each family member's experiences influence one another as the "whole is greater than the sum of its parts" (Cox & Paley, 2003, p. 193). When studying Asian American families, it is important to take into consideration cultural factors that may impact family members' interactions. For instance, Asian immigrant parents have been found to emphasize children's compliance with parental expectations (Chao, 1994; Gorman, 1998), while children tend to negatively perceive traditional family roles and expectations (Chao & Aque, 2009). Additionally, it is common for parents to practice a demanding and controlling style of parenting that emphasizes the importance of academic achievement and family obligations (i.e., *tiger parenting*; Kim, 2013). Tiger parenting has been found to be positively associated with children's reported academic pressure and depressive symptoms (Kim et al., 2012). These differences in cultural values and beliefs can lead to misunderstanding, miscommunications, and conflicts (CITATIONS).

Based on notions of family systems theory (Bowen, 1996), as noted above, one's experiences of discrimination may not only be associated with their own well-being but also with their family members' well-being. Indeed, there is evidence supporting this systemic view. For instance, one study found that when Asian immigrant parents experienced stressors related to minority status (e.g., perceived discrimination), they were more likely to become aggressive towards their children (Lau, Takeuchi, and Alegría,

2006). It is critical to study discrimination at the systemic or interpersonal level to demonstrate how far-reaching the effects of discrimination can be. Even when it is not experienced directly, discrimination can still have negative associations with Asian Americans' well-being.

To date, few studies have examined interpersonal associations between Asian Americans' experiences of discrimination and well-being. The studies that have utilized this systemic approach have largely focused on young children or adolescents and their parents (e.g., Benner & Kim, 2009; Cheah et al., 2020; Huynh et al., 2019; Tran, 2014) while neglecting the relationships between emerging adults and their parents. Further, no studies have specifically examined the association between discrimination and perceptions of the parent-child relationship. Emerging adulthood is also an important period to study because discrimination can threaten Asian Americans' identity development at this age (Kiang et al., 2008), and Asian American emerging adults commonly seek mental health care to address concerns related to their parents (Lee et al., 2009). This study aimed to fill an important gap in the literature by examining the associations between Asian American emerging adults' and their parents' perceptions of discrimination and relationship quality.

Relationship quality refers to how positively or negatively one feels about their relationships (Morry, Reich, & Keito, 2010) and has been argued to include several dimensions, including *conflict* (i.e., the degree to which the relationship is perceived as a source of conflict and ambivalence), *depth* (i.e., the extent to which the relationship is perceived as positive, important, and secure), and *support* (i.e., the amount of perceived availability of social support from the relationship; Pierce, Sarason, & Sarason, 1991).

In addition, relationship *satisfaction* (i.e., one's satisfaction towards their relationship with another individual and towards the individual themselves; Hendrick, 1988) may be another critical component of relationship quality. There is some research highlighting the associations between discrimination and these components of relationship quality. For instance, Cheng and colleagues (2015) found that perceived racial discrimination was positively associated with parent-child conflicts for Asian American emerging adults and a meta-analysis summarizing results from 23 studies found that racial discrimination was negatively correlated with social support (Lee & Ahn, 2011). While the associations between discrimination and relationship depth and satisfaction have not been examined in Asian American parent-child relationships, a study found negative associations between discrimination and relationship warmth for African American youths and their parents (Riina & McHale, 2012), and there is well-documented research on the negative association between discrimination and relationship satisfaction for same-sex romantic partners (Randall & Bodenmann, 2017). Taken together, discrimination would likely have negative associations with the dimensions of relationship quality for Asian American emerging adults and parents. In addition to examining the direct associations between discrimination and components of relationship quality, it is also important to consider the process by which these associations take place, such as stress.

Stress refers to one's reactions to situations that may be challenging or threatening to their well-being (Bernard & Krupat, 1994). Individuals who encounter discrimination may experience increases in stress levels because discrimination can "traumatize, hurt, humiliate, enrage, confuse, and ultimately prevent optimal growth and functioning of individuals and communities" (Harrell, 2000, p. 1). Indeed, there is extensive research

demonstrating the link between discrimination and stress for Asian Americans (e.g., Kaduvettoor-Davidson & Inman, 2013; Wei et al., 2010). There is also evidence showing the negative association between stress and parent-child relationship quality in Asian American families (e.g., Dinh & Nguyen, 2006). It has been suggested that the stress (e.g., tension, negative affect, conflict) experienced outside of one's relationships can be transferred to their relationships (i.e., stress spillover; Bolger et al., 1989). Given the above research, experiences of discrimination may be positively associated with stress, which could then be negatively associated with relationship quality. While these specific associations have not been examined in past literature, there are some studies demonstrating the mediational role of stress in the associations between discrimination and different forms of well-being. For instance, in a study examining a sample of Asian international college students, masculinity-related stress was found to be a significant mediator between perceived racial discrimination and psychological distress (Wong, Tsai, Liu, Zhu, & Wei, 2014). Another study found that perceived stress mediated the association between ethnic discrimination and depression for Latinx youths (Lorenzo-Blanco & Unger, 2015). As such, in the present study, children's and parents' perceived general stress was hypothesized to mediate the negative associations between experiences of discrimination and relationship quality.

### **Present Study**

Despite the documented negative associations between Asian Americans' experiences of discrimination and individual well-being, such as self-esteem and depressive symptoms (e.g., Chen et al., 2014; Tummala-Narra, Inman, & Ettigi, 2011), there is little to no research examining how discrimination may be associated with

perceived relationship quality among emerging adults and their parents. Examining these associations with dyadic data is an important extension to current research given that discrimination has been positively associated with family conflict (Cheng et al., 2015; Riina & McHale, 2010) and negatively associated with family relationship quality (Murry et al., 2001; Riina & McHale, 2012). As such, it is important to understand the possible negative association between discrimination and relationship well-being in Asian American families, in particular the relationships between Asian American emerging adults and their parents, given that emerging adulthood is an important period for identity development (Kiang et al., 2008) and discrimination may be especially impactful at this age.

Given that discrimination and family conflict are common experiences for Asian Americans (Chung, 2001; Tiwari, 2002), it is imperative for counseling psychologists and other mental health professionals to understand how these experiences are linked in order to develop culturally appropriate treatments for this population. As more Asian Americans encounter discrimination, they are also experiencing lower levels of mental health and well-being (e.g., Lee & Waters, 2020), which calls for a greater need of culturally sensitive mental health care.

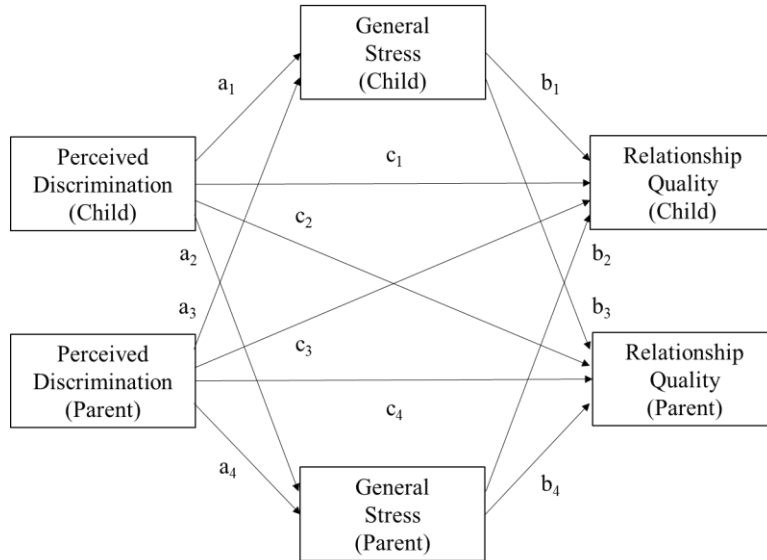
This study focused explicitly on two types of discrimination: *blatant* and *subtle discrimination*. Blatant discrimination includes openly negative and discriminatory acts and attitudes (e.g., using derogatory terms to address Asian Americans), while subtle racism refers to indirect and passive forms of discrimination (e.g., perpetuating stereotypes, such as Asians being quiet and submissive). Given that both forms of discrimination have detrimental effects on Asian Americans' well-being (Jones, Peddie,

Gilrane, King, & Gray, 2016), this study examined the associations between blatant, subtle, and total discrimination and relationship quality.

In addition to the possible negative associations between discrimination and relationship quality, it is also important to understand the process by which discrimination may be associated with Asian American parent-child relationship quality. Consistent with the minority stress theory (Meyer, 2003) and stress spillover theory (Bolger et al., 1989), it was hypothesized that experiences of discrimination may be associated with higher levels of stress, which in turn may be associated with lower levels of relationship quality among Asian American parent-adult children dyads.

Based on the concept of interdependence (i.e., family members' experiences often influence each other; Bowen, 1966), it was important to understand the experiences and perspectives of emerging adult children as well as their parents. As such, this study collected data from children and parents and utilized dyadic data analyses, which allowed for the testing of actor associations (i.e., associations between one's experiences of discrimination and one's own perceptions of relationship quality) and partner associations (i.e., associations between one's experiences of discrimination and the other individual's perceived relationship quality). In sum, the purpose of this study was two-fold: 1) to examine the actor and partner associations between discrimination and relationship quality among Asian American adult children (hereby referred to as children) and their parents, and 2) to test whether perceptions of general stress would mediate these associations. See Figure 1 for a conceptual model of the study's hypotheses.

Figure 1  
*Actor-Partner Interdependence Mediation Model*



*Note.* Actor associations include paths  $a_1$ ,  $a_4$ ,  $b_1$ ,  $b_4$ ,  $c_1$ , and  $c_4$ ; partner associations include: paths  $a_2$ ,  $a_3$ ,  $b_2$ ,  $b_3$ ,  $c_2$ , and  $c_3$ .

### Hypotheses (H)

While most existing research examining discrimination and family outcomes has focused on African American families (e.g., Murray et al., 2001; Riina & McHale, 2012), authors suggest that discrimination has comparable negative effects on health across African American and Asian American groups (e.g., Choi et al., 2013). As such, the following hypothesis (H) will be tested.

H1: Discrimination will be significantly associated with the different components of relationship quality, specifically relationship conflict, depth, support, and satisfaction (see specific hypotheses below). Both actor and partner associations were examined (see Figure 1, Paths  $c_1$ ,  $c_2$ ,  $c_3$ , and  $c_4$ ).

H1a: Discrimination will be positively associated with relationship conflict.

H1b: Discrimination will be negatively associated with relationship depth.

H1c: Discrimination will be negatively associated with relationship support.

H1d: Discrimination will be positively associated with relationship satisfaction.

H1e: Given that subtle racism may have more lasting effects on Asian Americans' mental health than blatant racism (e.g., Noh, Kaspar, & Wickrama, 2007), it was hypothesized that subtle racism will be a stronger predictor of relationship quality than blatant racism (i.e. accounting for more variance in parent-college student relationship quality).

H2: It was hypothesized that perceived general stress would mediate the negative association between discrimination and relationship quality. Specifically, discrimination will be positively associated with stress, which will in turn be negatively associated with relationship quality.

H2a: Actor-actor mediation will take place. Specifically, children's experiences of discrimination will be positively associated with their own stress (actor association; see Figure 1, Path  $a_1$ ), which will be significantly associated with their own perceived relationship quality (actor association; see Figure 1, Path  $b_1$ ). Similar results are hypothesized for parents' associations (see Figure 1, Paths  $a_4$  and  $b_4$ ).

H2a1: Discrimination will be positively associated with stress, which will be positively associated with relationship conflict.

H2a2: Discrimination will be positively associated with stress, which will be negatively associated with relationship depth.

H2a3: Discrimination will be positively associated with stress, which will be negatively associated with relationship support.



H2a4: Discrimination will be positively associated with stress, which will be positively associated with relationship satisfaction.

H2b: Actor-partner mediation will take place. Specifically, children's experiences of discrimination will be positively associated with their own stress (actor association; see Figure 1, Path a<sub>1</sub>), which will be negatively associated with their parents' perceived relationship quality (partner association; see Figure 1, Path b<sub>3</sub>). Similar results are hypothesized for parents' associations (see Figure 1, Paths a<sub>4</sub> and b<sub>2</sub>).

H2b1: Discrimination will be positively associated with stress, which will be positively associated with relationship conflict.

H2b2: Discrimination will be positively associated with stress, which will be negatively associated with relationship depth.

H2b3: Discrimination will be positively associated with stress, which will be negatively associated with relationship support.

H2b4: Discrimination will be positively associated with stress, which will be positively associated with relationship satisfaction.

H2c: Partner-actor mediation will take place. Specifically, children's experiences of discrimination will be positively associated with their parents' stress (partner association; see Figure 1, Path a<sub>2</sub>), which will be negatively associated with parents' perceived relationship quality (actor association; see Figure 1, Path b<sub>2</sub>). Similar results are hypothesized for parents' associations (see Figure 1, Paths a<sub>3</sub> and b<sub>1</sub>).

H2c1: Discrimination will be positively associated with stress, which will be positively associated with relationship conflict.

H2c2: Discrimination will be positively associated with stress, which will be negatively associated with relationship depth.

H2c3: Discrimination will be positively associated with stress, which will be negatively associated with relationship support.

H2c4: Discrimination will be positively associated with stress, which will be positively associated with relationship satisfaction.

H2d: Partner-partner mediation will take place. Specifically, children's experiences of discrimination will be positively associated with their parents' stress (partner association; see Figure 1, Path a<sub>2</sub>), which will be negatively associated with students' perceived relationship quality (partner association; see Figure 1, Path b<sub>2</sub>). Similar results are hypothesized for parents' associations (see Figure 1, Paths a<sub>3</sub> and b<sub>3</sub>).

H2d1: Discrimination will be positively associated with stress, which will be positively associated with relationship conflict.

H2d2: Discrimination will be positively associated with stress, which will be negatively associated with relationship depth.

H2d3: Discrimination will be positively associated with stress, which will be negatively associated with relationship support.

H2d4: Discrimination will be positively associated with stress, which will be positively associated with relationship satisfaction.

## Method

### Recruitment and Participants

Participants were recruited via advertisements posted on various websites and social media platforms (e.g., Facebook, Reddit) as well as electronic mailing lists in a multitude of professional organizations and educational institutions across the United States. Participating dyads had to meet the following criteria in order to participate: 1) each dyad must consist of one parent and one adult child aged 18-29; and 2) both individuals must identify as Asian and/or Pacific Islander. In the case of multiracial families (i.e., families in which parents are of different races), only the parent who identified as Asian and/or Pacific Islander was eligible to participate. Each individual could only participate in this study once. Data collection took place from March to October 2020.

According to the power analysis application APIMPowerR (Ackerman & Kenny, 2016) and using projected actor and partner effect sizes of .25, a sample size of 121 dyads ( $N = 242$  individuals) was necessary in achieving a desired power of .80. A total of 1,364 participants expressed interest in the study. Of those, 168 dyads ( $N = 336$  individuals) were eligible. The final sample consisted of 137 dyads ( $N = 274$  individuals), wherein both the child and the parent completed the study survey and answered the validation questions correctly. The mean age of children was approximately 23 year ( $SD = 5.91$ ) and the mean age of parents was 52.7 years ( $SD = 7.82$ ). In regards to ethnicity, approximately 21% of the participants identified as Chinese ( $n = 57$ ), 15.0% Vietnamese ( $n = 41$ ), 13.1% Indian ( $n = 36$ ), 11.7% Filipinx ( $n = 32$ ), 4.4% Korean ( $n = 12$ ), 2.9% Japanese ( $n = 8$ ), 1.1% Cambodian ( $n = 3$ ), 1.1% Indonesian ( $n = 3$ ), 1.1%

Taiwanese ( $n = 3$ ), 0.7% Bangladeshi ( $n = 2$ ), 0.7% Malaysian ( $n = 2$ ), 0.7% Nepali ( $n = 2$ ), 0.7% Pakistani ( $n = 2$ ), 0.4% Thai, 25.2% Multiracial or Multiethnic, and 0.4% did not identify their ethnicity ( $n = 1$ ).

For gender, 73.4% of participants identified as cisgender women ( $n = 201$ ), 25.5% cisgender men ( $n = 70$ ), 0.7% gender-non-binary ( $n = 2$ ), and 0.4% transgender man ( $n = 1$ ). In terms of sexual orientation, 84.3% of participants identified as heterosexual or straight ( $n = 231$ ), 7.3% bisexual ( $n = 20$ ), 3.6% asexual ( $n = 10$ ), 2.2% pansexual ( $n = 6$ ), 1.5% gay or lesbian ( $n = 4$ ), and 1.1% denoted “other” (e.g., “do not believe in labels,” queer;  $n = 3$ ).

In terms of highest educational level attained, 6.2% of participants reported that they received less than high school education ( $n = 17$ ), 17.5% earned high school diplomas or equivalent degrees (e.g., GED;  $n = 48$ ), 3.3% attended professional trade or technical schools ( $n = 9$ ), 21.2% received some college or university education ( $n = 58$ ), 6.9% earned Associate’s degrees ( $n = 19$ ), 27.7% completed Bachelor’s degrees ( $n = 76$ ), and 17.2% attained graduate degrees (e.g., M.D., Ph.D.;  $n = 47$ ). Most of the participants (90.5%;  $n = 248$ ) indicated having citizenship in the U.S., while 9.5% ( $n = 26$ ) reported that they were not U.S. citizens. In regard to generational status, 49.6% of participants indicated that they are first-generation U.S. citizens or residents (i.e., born outside of the U.S.), 24.5% second-generation (i.e., born in the U.S. with at least one first-generation American parent), and 25.9% third-generation and beyond (i.e., born in the U.S. with U.S.-born parents). In regards to birth order, 25.9% of participants indicated that they have no older siblings ( $n = 71$ ), 17.2% had 1 older sibling ( $n = 47$ ), 4.0% had 2 older siblings ( $n = 11$ ), 2.6% had 3 or more older siblings ( $n = 7$ ). On the other hand, 19.3%

reported having no younger siblings ( $n = 53$ ), 21.2% had 1 younger sibling ( $n = 58$ ), 7.3% had 2 younger siblings ( $n = 20$ ), and 2.2% had 3 or more younger siblings ( $n = 6$ ).

A majority of the parent-child dyads indicated that they lived together (67.9%;  $n = 93$  dyads), and, on average communicated with each other close to 5 hours per week (296.9 minutes). For frequency of communication, 23.0% of the dyads reported communicating with their parent/child every day ( $n = 63$ ), 10.6% two to three times per week ( $n = 29$ ), 8.0% almost every day ( $n = 22$ ), 4.7% once per week ( $n = 13$ ), 2.9% more than half of the week ( $n = 8$ ), and 0.7% less than once per week ( $n = 2$ ).

Variable	Children	Parents
<b>Ethnicity</b>		
Bangladeshi	1	2
Cambodian	2	2
Chinese	24	32
Filipinx	13	19
Indian	17	19
Indonesian	1	2
Japanese	1	5
Korean	4	7
Malaysian	2	0
Nepali	1	1
Pakistani	1	1
Taiwanese	1	2
Thai	0	1
Vietnamese	18	22
Multiracial/Multiethnic	51	21
<b>Gender</b>		
Cisgender man	36	34
Cisgender woman	98	103
Non-binary	2	0
Transgender man	1	0
<b>Sexual Orientation</b>		
Asexual	6	4
Bisexual	18	2
Gay/Lesbian	4	0

Variable	Children	Parents
Heterosexual/Straight	102	129
Pansexual	5	1
Queer	1	0
Other (e.g., “do not believe in labels”)	1	1
<b>Highest Education</b>		
Less than high school	2	15
High school or GED	32	16
Professional trade or technical school	3	6
Some college/university	43	15
Associate’s degree	11	8
Bachelor’s degree	36	40
Graduate degree	10	37
<b>U.S. Citizen</b>		
Yes	131	117
No	6	20
<b>Generational Status</b>		
First generation	29	107
Second generation	53	14
Third generation and beyond	55	16

## Procedure

Data for this study were collected using an online survey via Qualtrics. Interested participants either completed a Google Form or contacted the primary investigator at the study’s email address (AAPACS2020@gmail.com), who then provided a brief overview of the study. Once both members of the dyad indicated their interest, they were asked to complete the screening survey (Appendix B) using an ID that reflected their respective roles (e.g., Dyad 1: Child 001, Parent 501) to ensure they fulfill the eligibility criteria described above.

If eligible, the child and parent were sent separate links to the study survey, which contained measures of standard demographic variables, perceived discrimination, relationship quality, and general perceptions of stress. Dyads were instructed to complete

the surveys separately and to avoid discussing answers with each other. The survey took approximately 20 minutes to complete. At the end of the survey, participants had the opportunity to enter in a raffle for 1 of 80 gift cards for Amazon.com (\$25). Research incentives were funded by the *Graduate and Professional Student Association* at Arizona State University.

## **Measures**

### ***Demographic Information***

Participants were asked to provide the following information in the demographic questionnaire: age, ethnic identity, gender identity, sexual orientation, level of education, birth order, citizenship/immigration status, generational status, whether the child and parent lived together, and communication between child and parent (Appendix C).

### ***Perceived Discrimination***

The Subtle and Blatant Racism Scale for Asian American College Students (SABR-A<sup>2</sup>; Yoo, Steger, & Lee, 2010; Appendix D) was used to assess the frequency of perceived subtle and racist incidents within the past year. Participants responded to 8 items on a 5-point Likert-type scale, ranging from 1 (*almost never*) to 5 (*almost always*). There were two subscales: *blatant racism* and *subtle racism*. A sample item from the *blatant racism* subscale is, “In American, I am told ‘you speak English so well’ because I am Asian,” and a sample item from the *subtle racism* subscale is, “In America, I am treated differently because I am Asian.”

Although this scale was designed for use with college students, the items assess general experiences of racial/ethnic discrimination and can be applied to the general Asian American population (e.g., Szymanski & Sung, 2010). In the current study, internal

reliability estimates were .75 for children and .70 for parents on the blatant racism subscale, .80 for children and .90 for parents on the subtle racism subscale, and .83 for children and .88 for parents on the total scale.

### ***Relationship Quality***

The Quality of Relationships Inventory (QRI; Pierce, Sarason, & Sarason, 1991; Appendix E) was used to measure the perceived quality of the relationship between children and their parents in three domains: *conflict* (e.g., “How much do you argue with this person?”), *depth* (e.g., “How significant is this relationship to you?”), and *support* (e.g., “To what extent could you count on this person for help with a problem?”). The QRI consisted of 25 items rated on a 4-point Likert-type scale, ranging from 1 (*not at all*) to 4 (*very much*). The developers of this survey recommended examining the subscales separately rather than as an aggregate sum as they measure different constructs (Pierce et al., 1991).

Two separate versions were provided to children and parents. In the parent version, some items were modified to more accurately reflect their parental role (e.g., changing “To what extent could you count on this person for help with a problem?” to “To what extent could this person count on your for help with a problem?”). In the current study, internal reliability estimates were .91 for children and .88 for parents on the conflict subscale, .79 for both children and parents on the depth subscale, and .86 for children and .79 for parents on the support subscale.

### ***Relationship Satisfaction***

Relationship satisfaction was measured using a modified version of the Relationship Assessment Scale (RAS; Hendrick, 1988). Participants rated 7 items on a 5-



point Likert-type scale. Examples of items on this questionnaire include, “How well does your parent/child meet your needs?” and “How much do you love your parent/child?” In the current study, internal reliability estimates were .87 for children and .89 for parents.

### ***General Stress***

The Perceived Stress Scale (PSS; Cohen, Kamarck, & Mermelstein, 1983; Appendix F) was used to assess perceptions of general stress in the past month. The PSS consists of 10 items rated on a 5-point Likert-type scale, ranging from 0 (*never*) to 4 (*very often*). A sample item from this measure is, “In the last month, how often have you felt nervous and ‘stressed’?” In the current study, internal reliability estimates were .86 for children and .82 for parents.

### ***Control Variables***

Nativity, birth order, number of children in the family, cohabitation, and frequency of communication were entered into analyses as covariates. There is evidence suggesting that immigrant and U.S.-born Asian Americans may experience different types and levels of stress (e.g., acculturative stress; Hwang & Ting, 2008). As such, nativity status, measured by the questions, “Are you a citizen of the United States?” and “If you are a citizen of the United States, what generation Asian/Pacific Islander American are you?” on the demographic questionnaire, will be controlled for in the analyses. Additionally, parent-child relationships may vary based on birth order and number of children in the family (e.g., “How many children are there in your family?”; Martin & Colbert, 1997; Someya, Uehara, Kadowaki, Tang, & Takahashi, 2000). Lastly, reports of relationship conflict may depend on a number of factors, such as whether or not parents and children are living together and their frequency of communication (e.g.,

“How often do you communicate with your parent/child each week?” “How many minutes per week do you communicate with your parent/child?”).

### **Analytic Plan**

The term dyadic data refers to data collected from two individuals in a given system (e.g., family members, romantic partners, counselor and client). These data are interdependent in nature, meaning one individual’s variables will likely be associated with the other’s; thus, it is important to control for this interdependence to ensure that significant effects can be attributed to the independent variables (Cook & Kenny, 2005). The Actor-Partner Interdependence Mediation Model (APIMeM; Ledermann, Macho, & Kenny, 2011) is a dyadic data analytic approach that allows for the testing of associations between variables. The model allows one to: 1) account for variability due to the interdependence between dyad members (i.e., child and parent); 2) assess the impact of one’s own predictor as well as the other dyad member’s outcomes (actor and partner associations); and 3) measure the residual covariance between the variable pairs (Ledermann et al., 2011). Structural Equation Modeling (SEM) is the suggested method to test the APIMeM as it estimates all model parameters within a single equation (Cook & Kenny, 2005; Ledermann, Macho, & Kenny, 2011).

The APIMeM simultaneously estimates actor and partner effects between the three sets of variables:  $X$  (predictor),  $Y$  (outcome), and  $M$  (mediator). Direct effects (i.e., associations between the predictor and outcome variables) and indirect effects (i.e., associations between the predictor and mediator and between the mediator and outcome variables) from the standard mediation model are also included, resulting in a total of 12 paths (see Figure 1). In this study, perceived discrimination was entered into the model as

the predictor, the dimensions of relationship quality as the outcome, and perceived general stress as the mediator.

## **Results**

### **Preliminary Analyses**

#### ***Data Screening***

Prior to the analyses, it is important to check the distribution of the dataset for normality, as fitting standard SEMs on non-normal data can result in inflated model test statistics and underestimated standard errors (Curran, West, & Finch, 1996). In the event that the distribution is not normal, SEM was conducted with MLR estimation, which is robust to non-normality (Byrne, 2013). Four indices were assessed to determine the model fit using criteria outlined by Hu and Bentler (1999): model chi-square statistic, root mean square error of approximation (RMSEA; .08 or less), comparative fit index (CFI; .95 or more), and the standardized root mean square residual (SRMR; .08 or less). Analyses were carried out using Mplus 7.11 (Muthén & Muthén, 2013).

In the final sample ( $N = 137$  dyads or 274 individuals), there was less than .01% missing data. Most of the study variables appeared to approximate symmetrical, or normal, distributions (skewness indices ranging between -.50 to .50; Bulmer, 1979). Exceptions included measures of blatant discrimination (SABR-A<sup>2</sup>, Blatant Discrimination Subscale) for both children and parents (skewness indices of .91 and .67, respectively, indicating moderate skew), relationship depth (QRI, Depth Subscale) children and parents (skewness indices of -.67 and -1.58, respectively, which indicate moderate to high skew), relationship support (QRI, Support Subscale) for parents only (skewness index of -.64, indicating moderate skew), and relationship satisfaction (RAS)

for both children and parents (skewness indices of -.66 and -1.47, indicating moderate to high skew).

In regards to kurtosis, most of the study variables had platykurtic distributions, defined as distributions with fewer values at the tails and close to the mean, resulting in flatter curves (kurtosis indices ranging from -1.07 to -.03; DeCarlo, 1997). Exceptions included the measures of blatant discrimination (SABR-A<sup>2</sup>, Blatant Discrimination Subscale) for children only (kurtosis index of .15), relationship depth (QRI, Depth Subscale) for parents only (kurtosis indicator of 3.08), relationship satisfaction (RAS) for parents only (kurtosis index of 4.53), and general stress (PSS) for parents only (kurtosis index of .18), which indicate leptokurtic distributions (i.e., distributions with more values in the tails and close to the mean, resulting in sharper peaks) wherein non-normal distributions may create issues with standard error underestimations and Type I errors (Yuan et al, 2005). To account for potential biases in standard errors, maximum likelihood with robust standard errors (MLR) was used as it is robust to non-normality and non-independence of observations (Byrne, 2013).

### ***Item Parceling***

Prior to hypothesis testing, parcels for the latent variables were created to enhance model parsimony (Little, 2013). Using a balancing approach, items with low and high item-scale correlations were aggregated to form parcels. Specifically, the item with the highest item-scale correlation was combined with the item with the lowest item-scale correlation to create the first parcel, the item with the second-highest item-scale correlation was combined with the item with the second-lowest item-scale correlation to create the second parcel, and so forth. This procedure resulted in three parcels for the

Conflict Subscale of the QRI (Pierce et al., 1991), the Support Subscale of the QRI (Pierce et al., 1991), the RAS (Hendrick, 1988), and the PSS (Cohen et al., 1983). The SABR-A<sup>2</sup> (Yoo et al., 2010) latent variable was formed using the Blatant and Subtle Racism subscales, and parcels could not be created for these subscales as they contained only four items each. In addition, the Depth Subscale of the QRI (Pierce et al., 1991) was not parceled, as it contained only six items. The factor loadings of the parcels can be found in Table 2.

Table 2  
*Parcels and Factor Loadings for Primary Study Variables*

Child		Parent	
Parcel	Factor Loading	Parcel	Factor Loading
SABR-A <sup>2</sup> (Subtle)	.59	SABR-A <sup>2</sup> (Subtle)	.74
SABR-A <sup>2</sup> (Blatant)	.88	SABR-A <sup>2</sup> (Blatant)	.94
QRIC1	.83	QRIC1	.80
QRIC2	.92	QRIC2	.89
QRIC3	.83	QRIC3	.79
QRIS1	.85	QRIS1	.58
QRIS2	.85	QRIS2	.85
QRIS3	.77	QRIS3	.64
RAS1	.83	RAS1	.82
RAS2	.85	RAS2	.90
RAS3	.87	RAS3	.86
PSS1	.88	PSS1	.93
PSS2	.83	PSS2	.79
PSS3	.89	PSS3	.61

*Note.* SABR-A<sup>2</sup> = Discrimination; QRIC = Relationship conflict; QRIS = Relationship support; RAS = Relationship satisfaction; PSS = General stress.

### *Descriptive Statistics*

Means and standard deviations for the study variables are presented in Table 3. Significant mean differences between children and parents were found for perceived total discrimination ( $t(272) = 2.32, p = .02$ ), subtle discrimination ( $t(272) = 2.21, p = .03$ ), relationship conflict ( $t(272) = -3.34, p < .01$ ), relationship depth ( $t(272) = 2.93, p < .01$ ), relationship satisfaction ( $t(272) = 4.17, p < .001$ ), and general stress ( $t(272) = -5.90, p < .001$ ). Specifically, parents tended to rate higher on perceived total discrimination, subtle discrimination, relationship depth, and relationship satisfaction, whereas children tended to rate higher on relationship conflict and general stress.

Table 3  
*Descriptive Statistics of Primary Study Variables*

Variable	Children		Parents	
	<i>M</i>	<i>SD</i>	<i>M</i>	<i>SD</i>
Total Discrimination	<b>2.05</b>	.70	<b>2.26</b>	.82
Subtle Discrimination	<b>2.26</b>	.83	<b>2.51</b>	1.00
Blatant Discrimination	1.83	.77	2.01	.79
Relationship Quality – Support	2.88	.69	3.00	.60
Relationship Quality – Conflict	<b>2.30</b>	.63	<b>2.05</b>	.56
Relationship Quality – Depth	<b>3.17</b>	.57	<b>3.37</b>	.53
Relationship Satisfaction	<b>3.98</b>	.69	<b>4.30</b>	.60
General Stress	<b>2.98</b>	.71	<b>2.50</b>	.63

*Note.* Bolded values denote significant mean differences at  $p < .05$ .

Table 4 provides correlations for the study variables. Significant correlations between children and parents were found for all of the variables except for general stress. In addition, relationship satisfaction was significantly correlated with all other study variables for both children and parents, and general stress was significantly correlated with all other study variables for children only.

Table 4  
*Correlations for Primary Study Variables*

Variable	1	2	3	4	5	6	7	8
1. Total Discrimination	.46**	.93**	.89**	-.01	.28**	-.10	-.37**	.37**
2. Subtle Discrimination	.88**	.34**	.68**	-.04	.26**	-.04	-.25**	.34**
3. Blatant Discrimination	.86**	.53**	.45**	.04	.25**	-.14	-.45**	.33**
4. Relationship Quality – Support	-.23**	-.15	-.26**	.26**	-.25**	.60**	.40**	-.20*
5. Relationship Quality – Conflict	.38**	.29**	.37**	-.40**	.53**	-.13	-.59**	.29**
6. Relationship Quality – Depth	-.15	-.07	-.20*	.72**	-.23	.47**	.55**	-.23**
7. Relationship Satisfaction	-.35**	-.29**	-.33**	.72**	-.66**	.67**	.46**	-.38**
8. General Stress	.27**	.35**	.12	-.11	.39**	.11	-.37**	.11

*Note.* SABR-A<sup>2</sup> = Discrimination; QRIC = Relationship conflict; QRIS = Relationship support; RAS = Relationship satisfaction; PSS = General stress. This table presents bivariate correlations for children (above the diagonal), parents (below the diagonal), and between children and parents (on the diagonal).

\*  $p < .05$ . \*\*  $p < .01$



## Hypothesis Testing<sup>1</sup>

### *Direct Associations between Discrimination and Relationship Quality*

The first hypothesis pertained to actor and partner associations between discrimination and relationship quality (see Figures 2a, 2b, and 2c). All models had good fit based on the normative values recommended by Hu and Bentler (1999). Specifically, the CFI ranged from .93 to 1.00, the TLI ranged from .92 to 1.00, the RMSEA ranged from .00 to .07, and the SRMR ranged from .03 to .07.

**Discrimination and relationship conflict.** It was hypothesized that discrimination would be positively associated with relationship conflict (H1a).

**Actor associations.** Significant actor associations were found between total discrimination and relationship conflict for both children ( $b = .45, p < .01$ ) and parents ( $b = .32, p < .05$ ). Similarly, significant actor associations were found between subtle discrimination and relationship conflict for both children ( $b = .33, p < .01$ ) and parents ( $b = .23; p < .05$ ). Finally, significant actor associations were found between blatant discrimination for both children ( $b = .38, p < .01$ ) and parents ( $b = .37, p < .05$ ). These results suggested that discrimination was positively associated with relationship conflict, which was consistent with the study hypothesis (H1a).

**Partner associations.** There were no significant partner associations found between discrimination and relationship conflict, which was not consistent with the study hypothesis (H1a).

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<sup>1</sup> The following models did not include covariates. When the covariates (i.e., nativity, birth order, number of children in the family, cohabitation, frequency of communication) were entered into the analyses, model fit decreased.

**Discrimination and relationship depth.** It was hypothesized that discrimination would be negatively associated with relationship depth (H1b).

*Actor associations.* There were no significant actor associations found between discrimination and relationship depth, which was not consistent with the study hypothesis (H1b).

*Partner associations.* A significant negative partner association was found with children's total discrimination as the predictor ( $b = -.39, p < .01$ ), such that children's total discrimination score was negatively associated with parents' relationship depth. Thus, this hypothesis (H1b) was partially supported.

**Discrimination and relationship support.** It was hypothesized that discrimination would be negatively associated with relationship support (H1c).

*Actor associations.* Significant actor associations were found between children's total discrimination and own relationship support ( $b = -.37, p < .05$ ) and between children's blatant discrimination and own relationship support ( $b = -.42, p < .01$ ). This suggested that children's experiences of discrimination, particularly blatant discrimination, and their own perceptions of relationship support from parents share a strong association. Thus, this hypothesis was partially supported (H1c).

*Partner associations.* No significant partner associations were found between discrimination and relationship support, which was not consistent with the study hypothesis (H1c).

**Discrimination and relationship satisfaction.** It was hypothesized that discrimination would be negatively associated with relationship satisfaction (H1d).

**Actor associations.** Significant actor associations were found for the following: children's total discrimination and own relationship satisfaction ( $b = -.38, p < .01$ ); parents' total discrimination and own relationship satisfaction ( $b = -.28, p < .05$ ); parents' blatant discrimination and own relationship satisfaction ( $b = -.40, p < .01$ ); and children's subtle discrimination and own relationship satisfaction ( $b = -.34, p < .01$ ). These results suggested that discrimination was negatively associated with relationship satisfaction for both children and parents, which was consistent with the study hypothesis (H1d).

**Partner associations.** Children's total discrimination had a significant association with parents' relationship satisfaction ( $b = -.38, p < .01$ ). In addition, child's subtle discrimination was significantly associated with parents' relationship satisfaction ( $b = -.30, p < .01$ ). These results suggested that children's experiences of discrimination, particularly subtle discrimination, has significant partner associations with parents' satisfaction with their relationships with their children. This partially supported the study hypothesis (H1d).

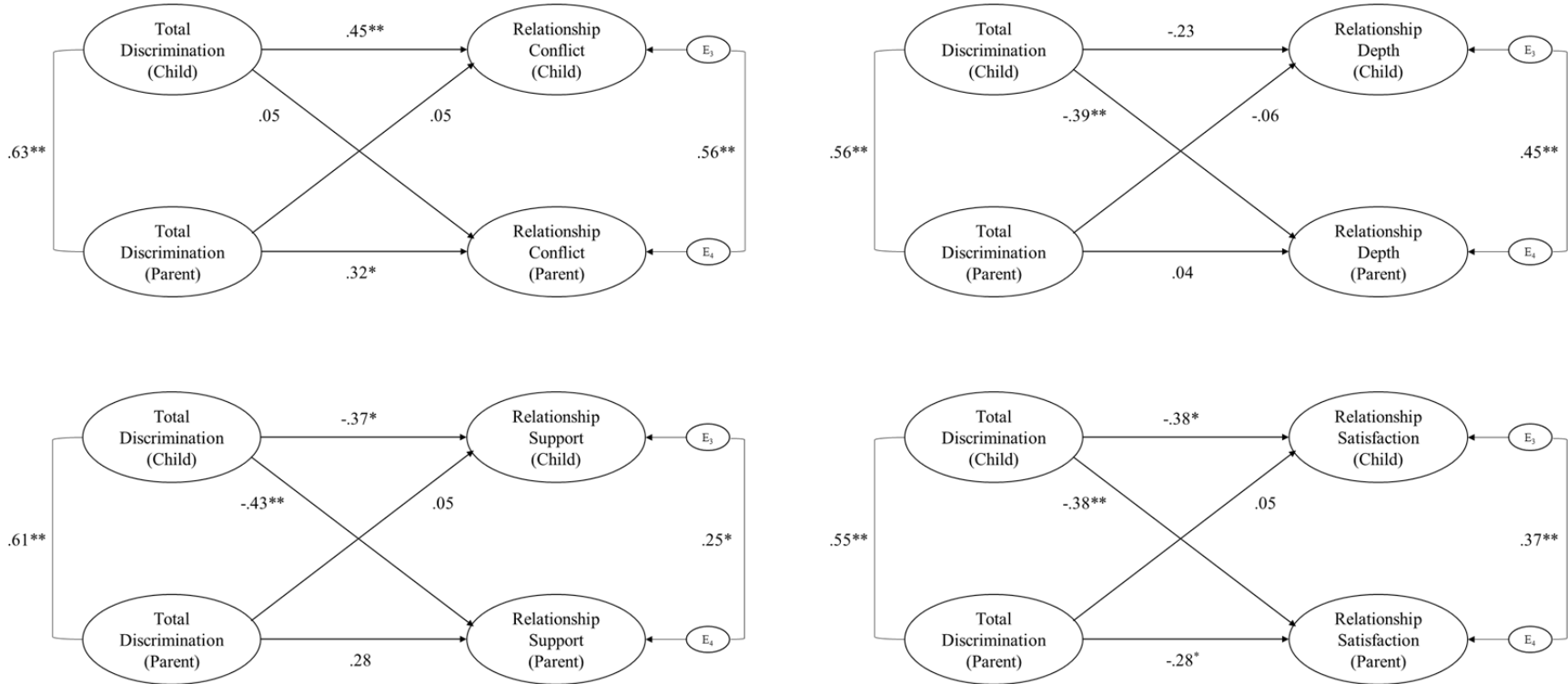
In sum, Hypothesis 1a (i.e., discrimination is significantly associated with relationship quality) was partially supported. There was some evidence to suggest that discrimination was associated with various components of relationship quality (i.e., negative association with relationship conflict; positive association with relationship depth, support, and satisfaction). Only significant actor associations were found between discrimination and relationship conflict and between discrimination and relationship support, while only one significant partner association was found between discrimination and relationship depth. Significant actor and partner associations were found between discrimination and relationship satisfaction, which suggested that one's experiences of

discrimination were associated with their own perceptions of the parent-child relationship as well as their parent's/child's perceptions.

There was little to no evidence supporting Hypothesis 1b (i.e., subtle discrimination would have stronger associations with relationship quality as opposed to blatant discrimination). There were comparable numbers of significant associations between subtle discrimination and relationship quality and between blatant discrimination and relationship quality. In examining the  $R^2$  values, subtle discrimination accounted for small amounts of variance in the various aspects of relationship quality, ranging from 1.5% to 13.4%. On the other hand, blatant discrimination accounted for small to moderate amounts of variance in relationship quality, ranging from 7.4% to 33.8%.

Figure 2a

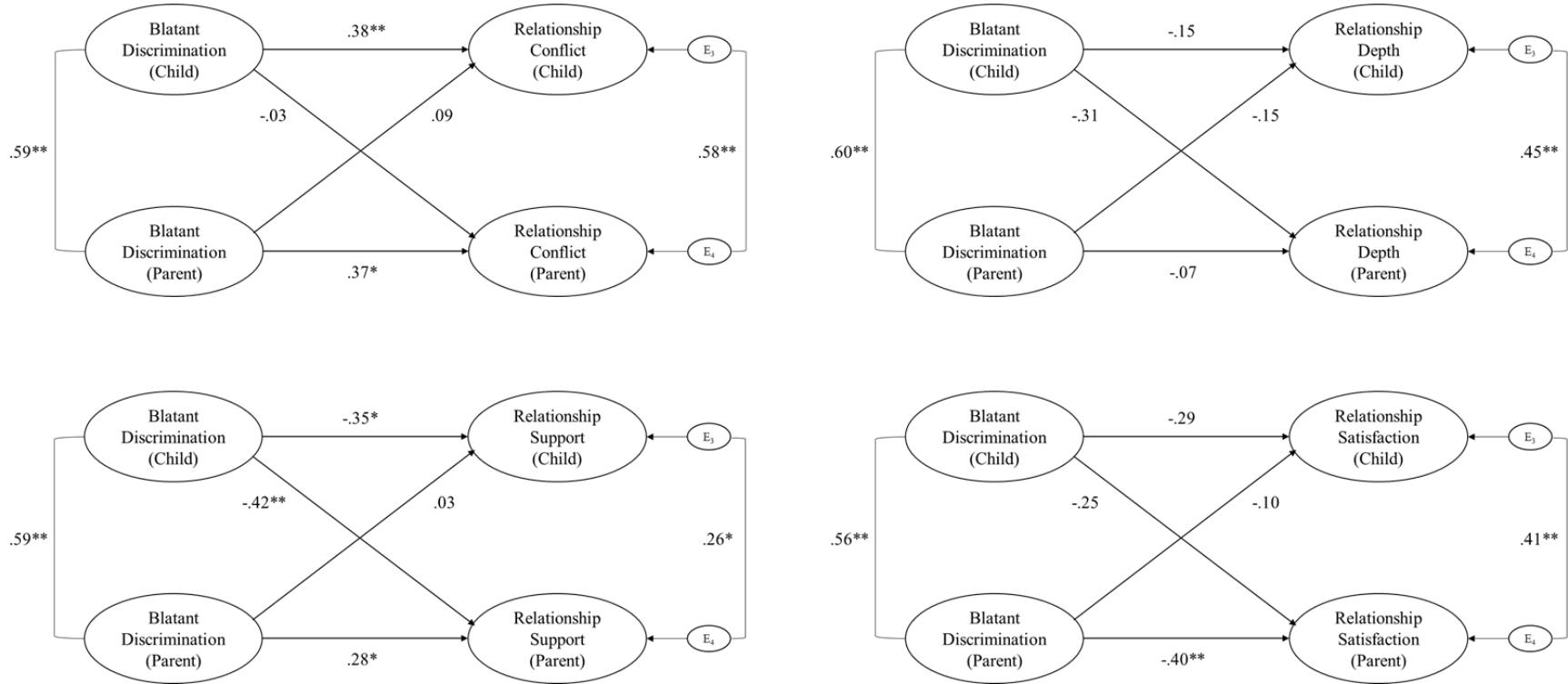
Actor-Partner Interdependence Model of Total Discrimination, Stress, and Relationship Quality



Note. The models display standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 2b

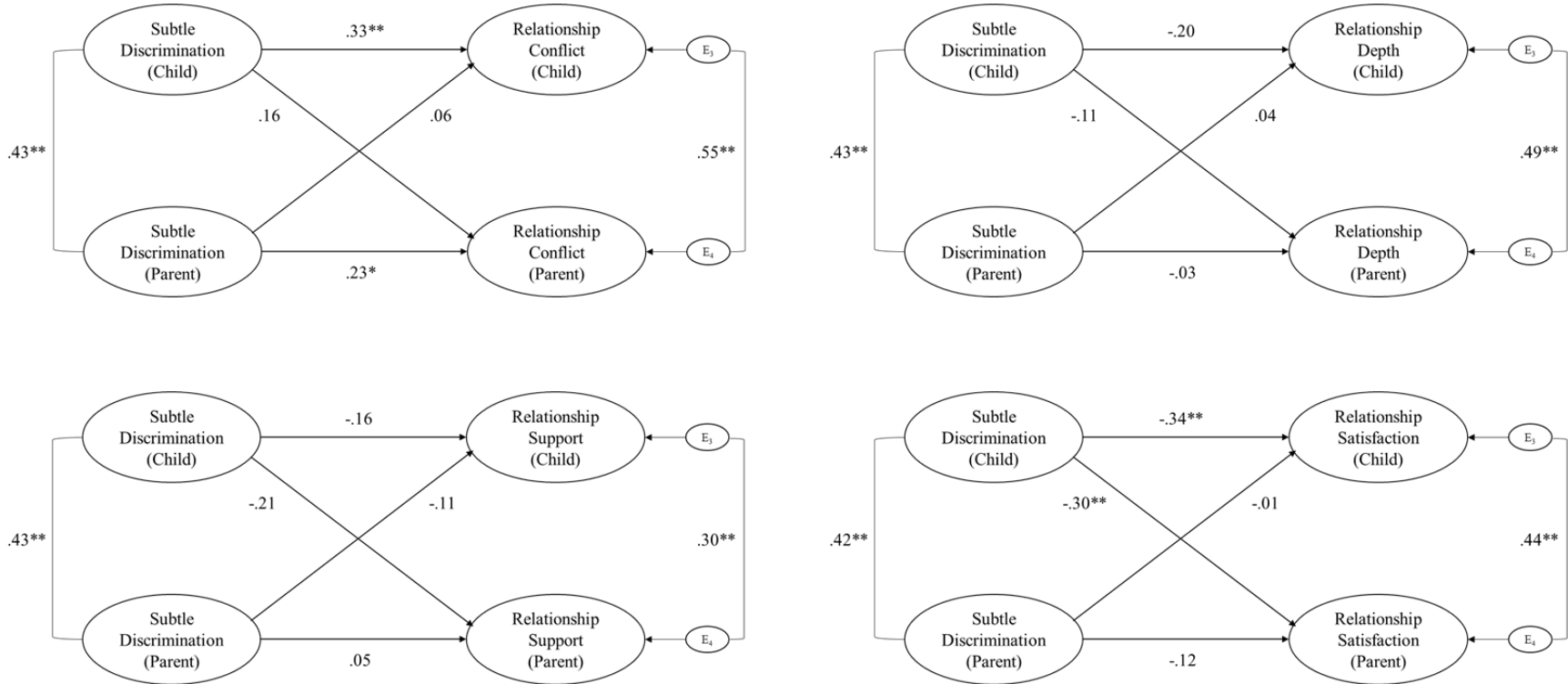
*Actor-Partner Interdependence Model of Blatant Discrimination, Stress, and Relationship Quality*



Note. The models display standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 2c

Actor-Partner Interdependence Model of Subtle Discrimination, Stress, and Relationship Quality



Note. The models display standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

### ***Indirect Associations between Discrimination and Relationship Quality Mediated by General Stress***

There were a total of 12 mediation models used to test Hypothesis 2, which examined whether perceived general stress mediated the hypothesized negative association between discrimination and relationship quality. All models fitted the data well (see Table 5). Indirect actor and partner associations were examined to determine whether mediation was significant (see Table 6).

**Discrimination, stress, and relationship conflict.** The first models examined the mediating effect of general stress on the associations between discrimination and relationship conflict (H2a; see Figures 3, 4, and 5).

**Actor associations.** There were direct actor associations found between the children's total discrimination and own relationship conflict ( $b = .36, p < .05$ ) and between their blatant discrimination and relationship conflict ( $b = .31, p < .01$ ). Children's subtle discrimination also significantly associated with their own general stress ( $b = .42, p < .01$ ). Across all three models with the different types of discrimination as predictor variables (i.e., total discrimination, blatant discrimination, and subtle discrimination), children's stress was positively associated with own relationship conflict ( $b = .34-.40, p < .01$ )

There was a direct association between parents' blatant discrimination and own relationship conflict ( $b = .31, p < .05$ ). All three types of discrimination were found to be positively associated with general stress ( $b_{total} = .34, p < .05$ ;  $b_{subtle} = .33, p < .01$ ;  $b_{blatant} = .35, p < .01$ ). Parents' general stress also positively predicted their own perceptions of relationship conflict ( $b = .23, p < .05$ ).



**Partner associations.** In the models with total discrimination and blatant discrimination as predictor variables, children's general stress was significantly positively associated with parents' relationship conflict ( $b = .20-.22, p < .05$ )

**Mediation.** There was significant mediation between subtle discrimination and relationship conflict for children ( $b = .15, p < .01$ ), which suggested that subtle discrimination was positively associated with stress, which then was positively associated with relationship conflict. This mediation was consistent with the study hypothesis (H2a1). There was no support for the hypotheses regarding actor-partner mediation (H2b1), partner-actor mediation (H2c1), or partner-partner mediation (H2d1).

**Discrimination, stress and relationship depth.** The second set of models examined the mediating effect of general stress on the negative association between discrimination and relationship depth (H2b; see Figures 6, 7, and 8).

**Actor associations.** There was a significant positive association between children's subtle discrimination and own general stress ( $b = .42, p < .01$ ).

For parents, all three types of discrimination (i.e., total discrimination, blatant discrimination, and subtle discrimination) were significantly associated with own general stress ( $b = .33-.36, p < .01$ ). In addition, parents' general stress was significantly associated with own relationship depth across all three models with different types of discrimination as the predictor variable ( $b = -.37-.46, p < .01$ ).

**Partner associations.** There was a significant negative association between children's total discrimination and parents' relationship depth ( $b = -.44, p < .01$ ).

**Mediation.** Significant actor-actor mediation was found between total discrimination and relationship depth for parents ( $b = -.14, p = .06$ ), between blatant

discrimination and relationship depth for parents ( $b = -.13, p < .05$ ), and between subtle discrimination and relationship depth for parents ( $b = -.15, p < .05$ ). Although the  $p$ -value for the mediation between parents' total discrimination and their own relationship depth was above .05, the 95% confidence interval indicated significance ( $[-.26, -.02]$ ). These results suggested that parents' own experiences of discrimination were associated with their own perceptions of relationship depth through general stress, which provides support for the hypothesis about actor-actor mediation (H2a2). There was no support for the hypotheses regarding actor-partner mediation (H2b2), partner-actor mediation (H2c2), or partner-partner mediation (H2d2).

**Discrimination, stress, and relationship support.** The third set of models examined the mediating effect of general stress on the negative association between discrimination and relationship support (H2c; see Figures 9, 10, and 11).

**Actor associations.** There were significant direct negative associations between children's total discrimination and own relationship support ( $b = -.37, p < .05$ ) and between children's blatant discrimination and own relationship support ( $b = -.33, p < .05$ ). In addition, children's subtle discrimination significantly positive predicted own general stress ( $b = .42, p < .01$ ).

Significant direct positive associations were found between parents' total discrimination and own relationship support ( $b = .45, p < .05$ ) and between parents' blatant discrimination and own relationship support ( $b = .41, p < .05$ ). All three types of discrimination were positively associated with general stress for parents ( $b_{total} = .33, p < .05$ ;  $b_{subtle} = .33, p < .01$ ;  $b_{blatant} = .37, p < .01$ ). Across all three models with different types of discrimination (i.e., total discrimination, blatant discrimination, and subtle

discrimination) as the predictor variables, parents' stress and relationship support were significantly associated in the negative direction ( $b = -.31-.35, p < .01$ )

**Partner associations.** Significant direct associations were found between children's total discrimination and parents' relationship support ( $b = -.47, p < .05$ ) and between children's blatant discrimination and parents' relationship support ( $b = -.38, p < .05$ ).

**Mediation.** There was significant mediation between blatant discrimination and relationship support for parents ( $b = -.13, p < .05$ ), suggesting that parents' experiences of blatant discrimination was positively associated with their own stress, which was in turn negatively associated with their own relationship support. There was partial support for the actor-actor mediation hypothesis (H2a3) but no support for the hypotheses regarding actor-partner mediation (H2b3), partner-actor mediation (H2c3), or partner-partner mediation (H2d3).

**Discrimination, stress, and relationship satisfaction.** The fourth set of models examined the mediating effect of general stress on the negative associations between discrimination and relationship satisfaction (H2d; see Figures 12, 13, and 14).

**Actor associations.** There were significant direct associations between children's total discrimination and own relationship satisfaction ( $b = -.32, p < .05$ ) and between children's blatant discrimination and own relationship satisfaction ( $b = .38, p < .01$ ). Across all three models with different types of discrimination as predictor variables, children's general stress was associated with own relationship satisfaction ( $b = -.32-.36, p < .01$ ).

There was a direct association between parents' blatant discrimination and own relationship satisfaction ( $b = -.34, p < .05$ ). All three types of discrimination were associated with general stress for parents ( $b_{total} = .32, p < .05$ ;  $b_{subtle} = .32, p < .01$ ;  $b_{blatant} = .35, p < .01$ )

**Partner associations.** Children's total discrimination as well as blatant discrimination were significantly associated with own relationship satisfaction ( $b_{total} = -.35, p < .01$ ;  $b_{blatant} = -.23, p < .05$ )

**Mediation.** Significant mediations were found between subtle discrimination and relationship satisfaction for children ( $b = -.12, p < .01$ ) and for parents ( $b = -.11, p < .05$ ), which suggested that stress mediated the associations between subtle discrimination and relationship satisfaction for both children and parents. There was partial support for the hypothesis about actor-actor mediation (H2a4) but no support for the hypotheses regarding actor-partner mediation (H2b4), partner-actor mediation (H2c4), or partner-partner mediation (H2d4).

In sum, hypotheses 2 was partially supported. There was evidence showing that stress mediates the association between different types of discrimination and the various components of relationship quality; however, results were not consistent across all models.

Table 5

*Model Fit Indices of Examined Structural Models*

Model	$R^2$	$\chi^2$	RMSEA	CFI	TLI	SRMR
Total Discrimination → General Stress → Relationship Conflict	20.2 – 35.4%	$p = .28$	.03	.99	.99	.05
Total Discrimination → General Stress → Relationship Depth	10.8 – 29.1%	$p < .001$	.06	.92	.91	.08
Total Discrimination → General Stress → Relationship Support	12.1 – 22.8%	$p = .09$	.04	.98	.97	.06
Total Discrimination → General Stress → Relationship Satisfaction	29.2 – 37.8%	$p < .01$	.06	.96	.95	.05
Subtle Discrimination → General Stress → Relationship Conflict	18.4 – 25.8%	$p = .03$	.04	.97	.97	.05
Subtle Discrimination → General Stress → Relationship Depth	7.4 – 19.8%	$p < .001$	.06	.91	.90	.08
Subtle Discrimination → General Stress → Relationship Support	6.1 – 11.9%	$p < .001$	.06	.94	.93	.06
Subtle Discrimination → General Stress → Relationship Satisfaction	23.9 – 24.4%	$p < .001$	.07	.94	.93	.05
Blatant Discrimination → General Stress → Relationship Conflict	21.1 – 34.8%	$p = .17$	.03	.99	.98	.06
Blatant Discrimination → General Stress → Relationship Depth	8.2 – 23.8%	$p < .001$	.06	.91	.90	.08
Blatant Discrimination → General Stress → Relationship Support	11.8 – 21.0%	$p = .01$	.05	.95	.94	.06
Blatant Discrimination → General Stress → Relationship Satisfaction	27.1 – 37.8%	$p = .04$	.05	.96	.95	.06

Table 6  
*Results of Examined Mediation Models*

Predictor	Mediator	Criterion	Association	Children			Parents		
				$\beta$	Standard Error of $\beta$	95% CI of Indirect Association	$\beta$	Standard Error of $\beta$	95% CI of Indirect Association
Total Discrimination	General Stress	Relationship Conflict	Actor-Actor	.12	.08	[-.01, .24]	.07	.05	[-.01, .14]
			Partner-Partner	.00	.02	[-.03, .04]	-.02	.04	[-.09, .04]
			Actor-Partner	-.04	.06	[-.13, .06]	.04	.04	[-.03, .09]
			Partner-Actor	.01	.04	[-.05, .07]	.07	.07	[-.04, .18]
Total Discrimination	General Stress	Relationship Depth	Actor-Actor	.04	.06	[-.06, .14]	<b>-.14</b>	<b>.07</b>	<b>[-.26, -.02]</b>
			Partner-Partner	-.02	.03	[.07, .02]	-.02	.04	[-.09, .05]
			Actor-Partner	-.01	.03	[-.06, .03]	-.07	.06	[-.16, .02]
			Partner-Actor	-.05	.05	[-.13, .04]	.07	.07	[-.05, .19]
Total Discrimination	General Stress	Relationship Support	Actor-Actor	.00	.04	[-.07, .07]	<b>-.11</b>	<b>.07</b>	<b>[-.22, -.00]</b>
			Partner-Partner	-.01	.03	[-.05, .03]	-.02	.04	[-.08, .04]
			Actor-Partner	.00	.02	[-.03, .03]	-.06	.05	[-.14, .02]
			Partner-Actor	-.02	.05	[-.10, .06]	.06	.07	[-.05, .17]

Predictor	Mediator	Criterion	Association	Children			Parents		
				$\beta$	Standard Error of $\beta$	95% CI of Indirect Association	$\beta$	Standard Error of $\beta$	95% CI of Indirect Association
Total Discrimination	General Stress	Relationship Satisfaction	Actor-Actor	-.09	.06	[-.19, .02]	-.07	.05	[-.15, .02]
			Partner-Partner	-.02	.02	[-.06, .02]	.00	.01	[-.01, .02]
			Actor-Partner	.01	.05	[-.07, .09]	-.04	.03	[-.09, .01]
			Partner-Actor	-.04	.04	[-.10, .03]	-.01	.02	[-.05, .02]
Blatant Discrimination	General Stress	Relationship Conflict	Actor-Actor	.07	.08	[-.07, .20]	-.01	.04	[-.00, .14]
			Partner-Partner	.00	.02	[-.03, .03]	.07	.05	[-.07, .05]
			Actor-Partner	-.02	.07	[-.13, .09]	.03	.03	[-.02, .09]
			Partner-Actor	.01	.04	[-.06, .07]	.04	.05	[-.05, .12]
Blatant Discrimination	General Stress	Relationship Depth	Actor-Actor	.01	.02	[-.03, .04]	<b>-.13</b>	<b>.06</b>	<b>[-.23, -.03]</b>
			Partner-Partner	-.02	.03	[-.06, .02]	-.01	.02	[-.04, .03]
			Actor-Partner	-.00	.01	[-.02, .02]	-.06	.04	[-.13, .01]
			Partner-Actor	-.04	.05	[-.12, .04]	.02	.04	[-.04, .08]
Blatant Discrimination	General Stress	Relationship Support	Actor-Actor	-.01	.02	[-.04, .02]	<b>-.13</b>	<b>.07</b>	<b>[-.24, -.02]</b>
			Partner-Partner	-.01	.02	[-.05, .03]	-.00	.01	[-.03, .02]
			Actor-Partner	.00	.01	[-.02, .02]	-.06	.04	[-.12, .01]
			Partner-Actor	-.02	.05	[-.11, .06]	.01	.03	[-.03, .05]

Predictor	Mediator	Criterion	Association	Children			Parents		
				$\beta$	Standard Error of $\beta$	95% CI of Indirect Association	$\beta$	Standard Error of $\beta$	95% CI of Indirect Association
Blatant Discrimination	General Stress	Relationship Satisfaction	Actor-Actor	-.04	.06	[-.14, .07]	-.06	.05	[-.14, .01]
			Partner-Partner	-.02	.02	[-.06, .02]	-.00	.02	[-.03, .03]
			Actor-Partner	-.01	.06	[-.10, .08]	-.03	.03	[-.08, .01]
			Partner-Actor	-.04	.04	[-.10, .02]	-.01	.02	[-.04, .02]
Subtle Discrimination	General Stress	Relationship Conflict	Actor-Actor	<b>.15</b>	<b>.05</b>	<b> [.08, .23]</b>	.07	.05	[-.00, .15]
			Partner-Partner	.02	.02	[-.02, .05]	-.01	.02	[-.04, .02]
			Actor-Partner	-.02	.03	[-.08, .04]	.03	.03	[-.02, .08]
			Partner-Actor	.04	.04	[-.02, .10]	.07	.04	[.00, .14]
Subtle Discrimination	General Stress	Relationship Depth	Actor-Actor	.05	.05	[-.03, .12]	<b>-.15</b>	<b>.07</b>	<b>[-.26, -.04]</b>
			Partner-Partner	-.03	.03	[-.07, .01]	-.01	.01	[-.03, .02]
			Actor-Partner	-.01	.01	[-.03, .02]	-.07	.05	[-.15, .02]
			Partner-Actor	-.07	.05	[-.15, .02]	.05	.04	[-.01, .12]
Subtle Discrimination	General Stress	Relationship Support	Actor-Actor	-.02	.04	[-.09, .06]	<b>-.10</b>	<b>.06</b>	<b>[-.19, -.01]</b>
			Partner-Partner	-.02	.02	[-.05, .02]	-.01	.01	[-.02, .01]
			Actor-Partner	.00	.01	[-.01, .01]	-.05	.04	[-.11, .02]
			Partner-Actor	-.04	.05	[-.11, .04]	.04	.05	[-.04, .12]

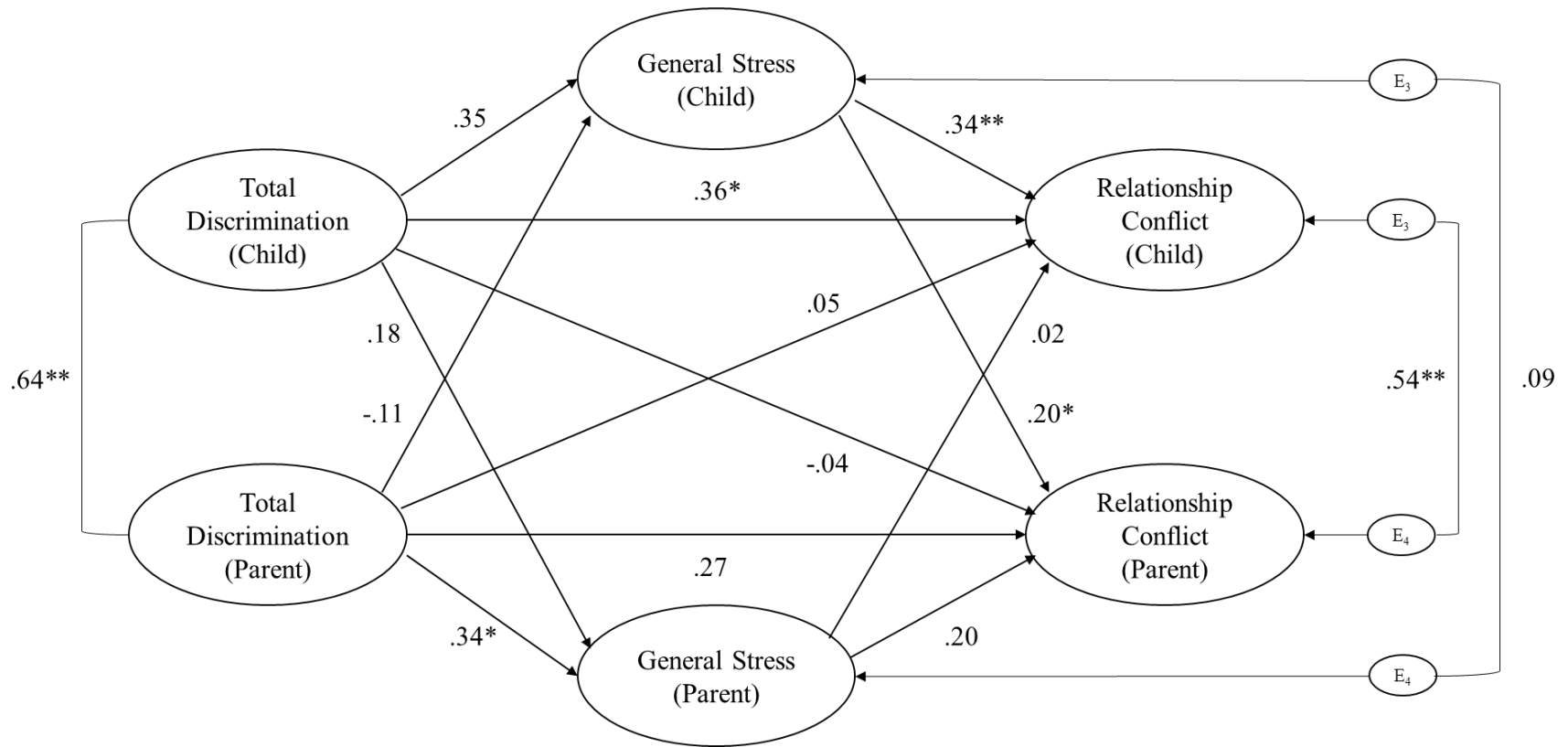


Predictor	Mediator	Criterion	Association	Children			Parents		
				$\beta$	Standard Error of $\beta$	95% CI of Indirect Association	$\beta$	Standard Error of $\beta$	95% CI of Indirect Association
Subtle Discrimination	General Stress	Relationship Satisfaction	Actor-Actor	<b>-.12</b>	<b>.05</b>	<b>[-.20, -.04]</b>	<b>-.11</b>	<b>.05</b>	<b>[-.20, -.03]</b>
			Partner-Partner	-.03	.02	[-.06, .01]	.00	.01	[-.01, .01]
			Actor-Partner	.01	.03	[-.04, .06]	-.05	.04	[-.11, .02]
			Partner-Actor	-.06	.05	[-.13, .01]	-.02	.03	[-.07, .03]

*Note.* This table displays standardized coefficients. The indirect associations whose 95% confidence intervals (CIs) do not contain zero are in boldface to denote a significant level at  $p < .05$ . The actor-actor indirect association represents a mediational path involving two actor associations (i.e., actor predictor on actor mediator and actor mediator on actor criterion). Similarly, the partner-partner indirect association involves two partner associations, the actor-partner indirect association involves an actor association followed by a partner association, and the partner-actor indirect association involves a partner association followed by an actor association.

Figure 3

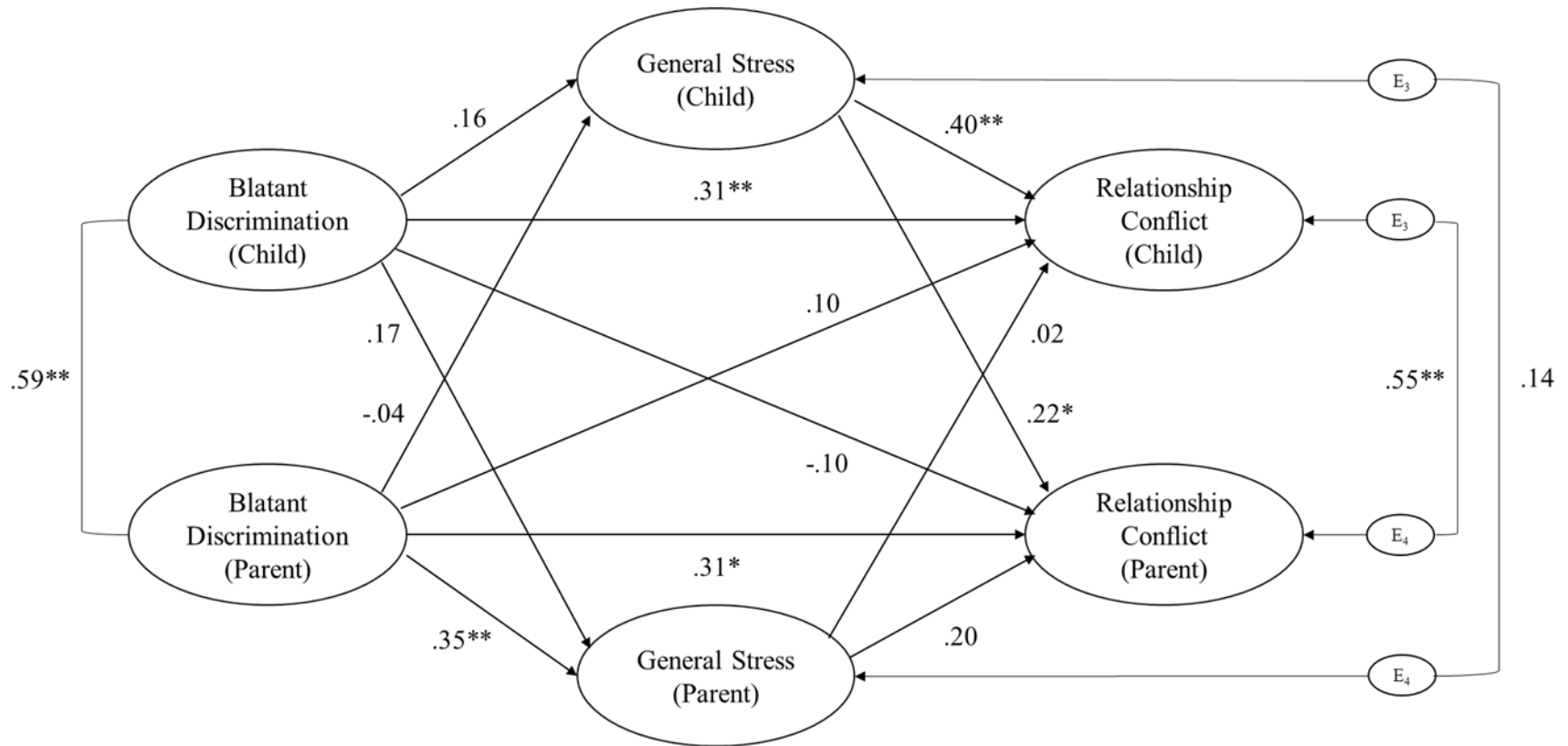
*Actor-Partner Interdependence Mediation Model of Total Discrimination, Stress, and Relationship Conflict*



*Note.* This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 4

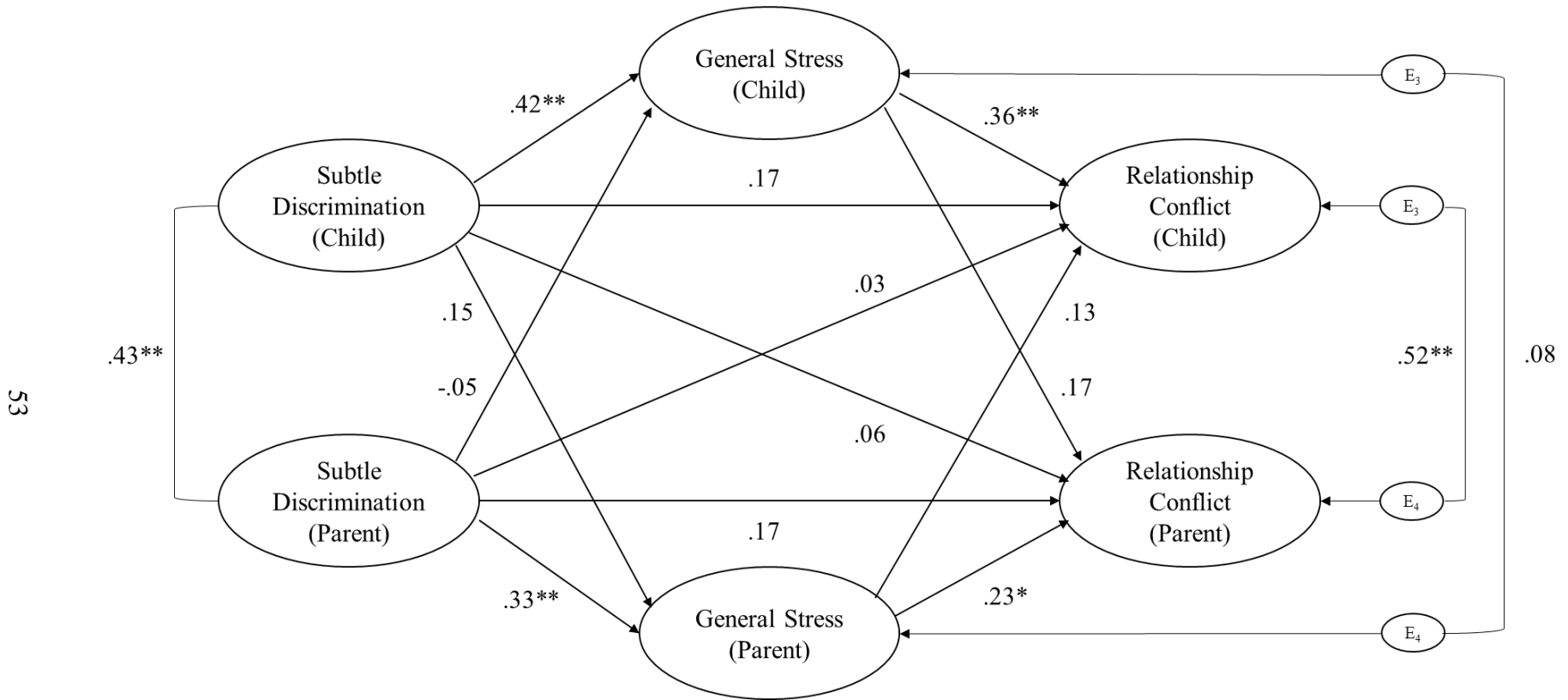
*Actor-Partner Interdependence Mediation Model of Blatant Discrimination, Stress, and Relationship Conflict*



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 5

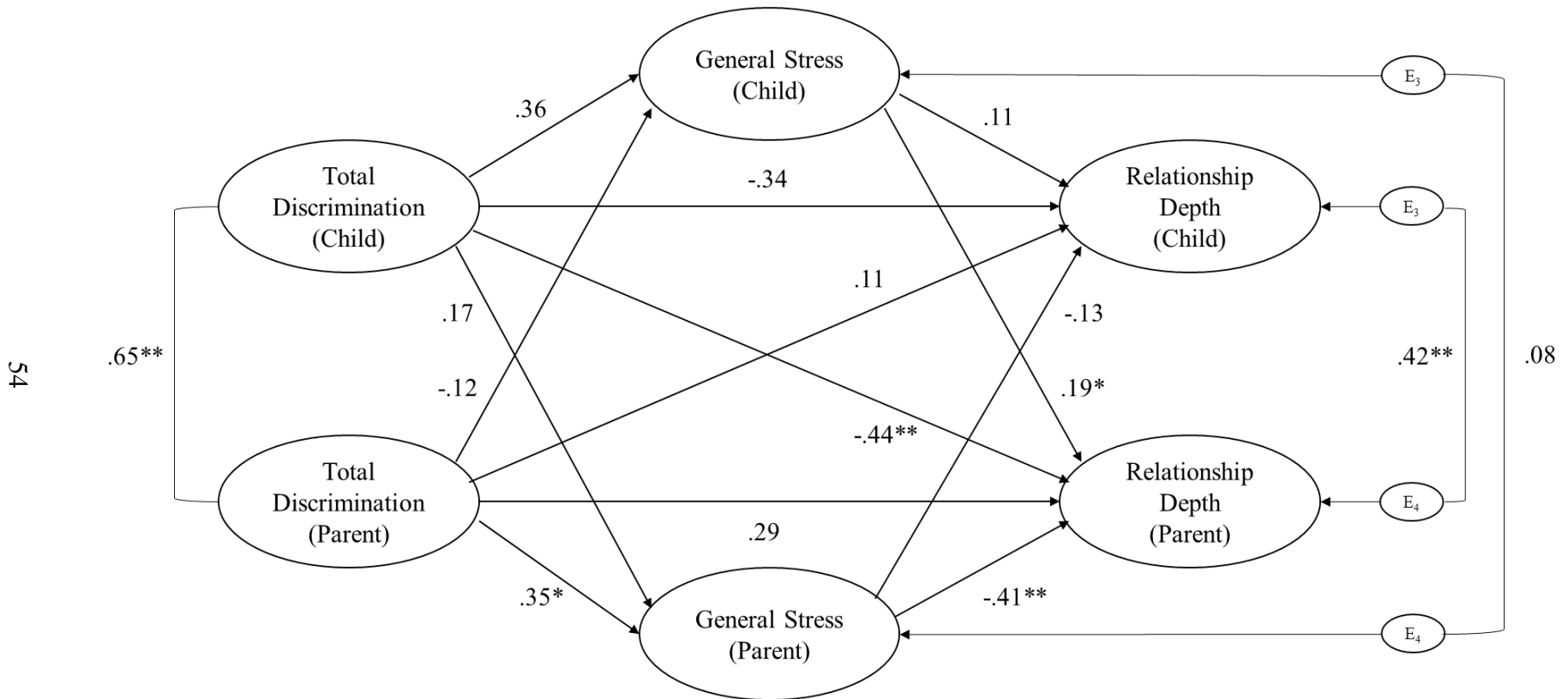
*Actor-Partner Interdependence Mediation Model of Subtle Discrimination, Stress, and Relationship Conflict*



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 6

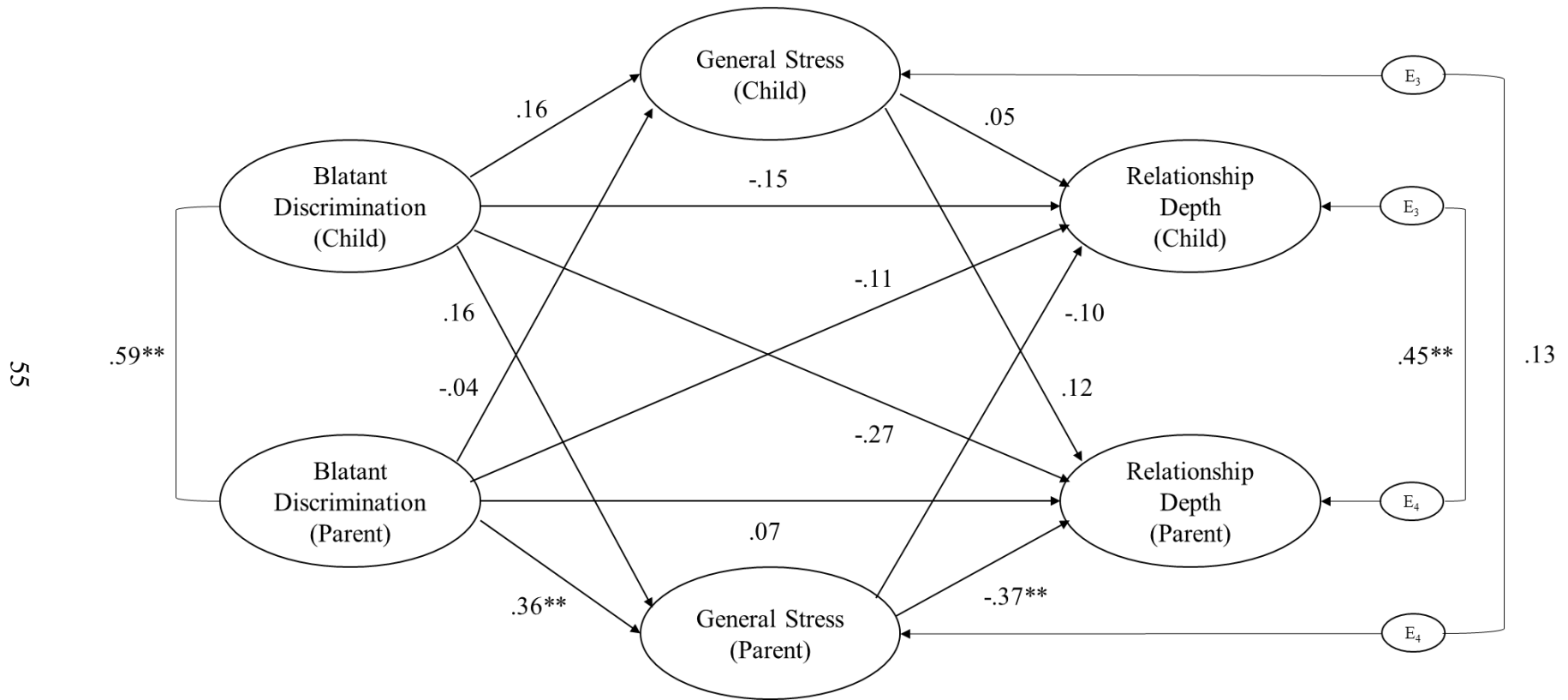
Actor-Partner Interdependence Mediation Model of Total Discrimination, Stress, and Relationship Depth



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 7

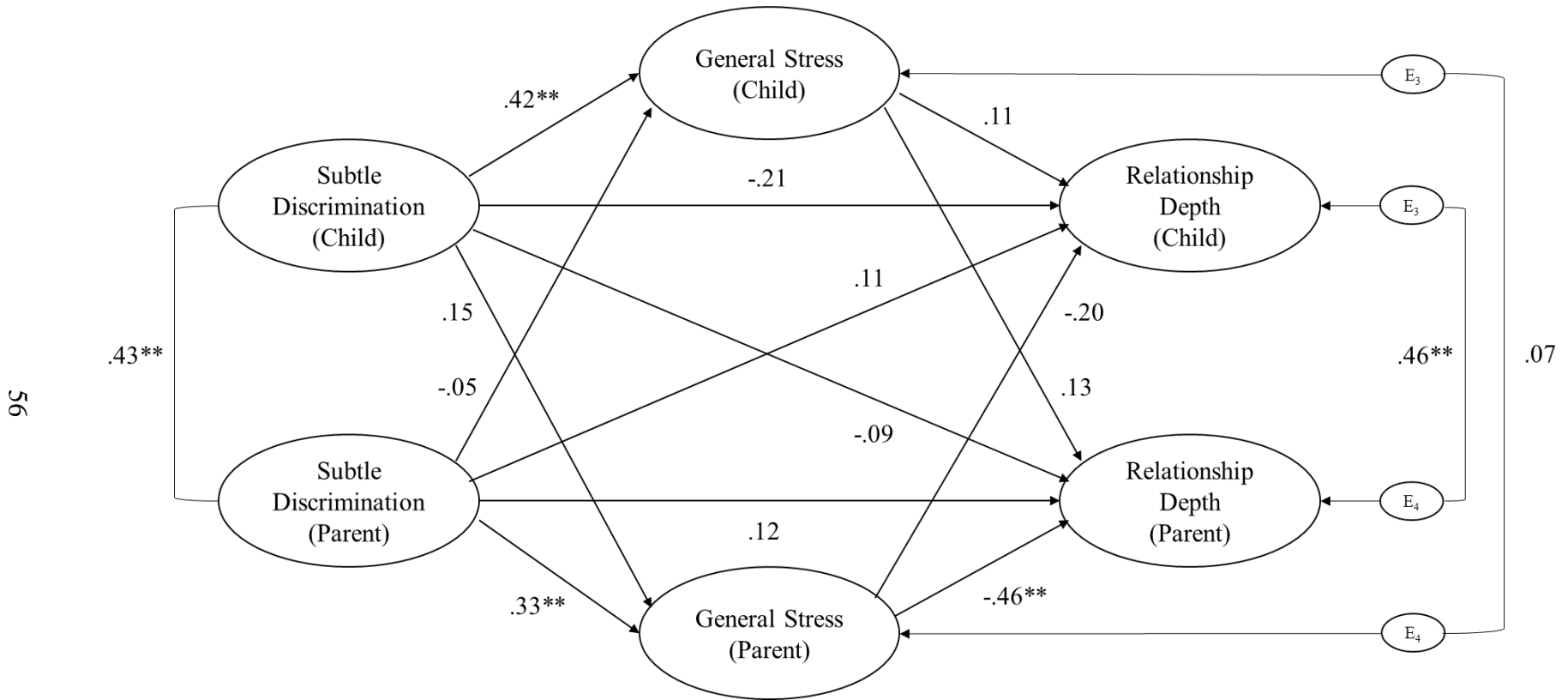
Actor-Partner Interdependence Mediation Model of Blatant Discrimination, Stress, and Relationship Depth



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 8

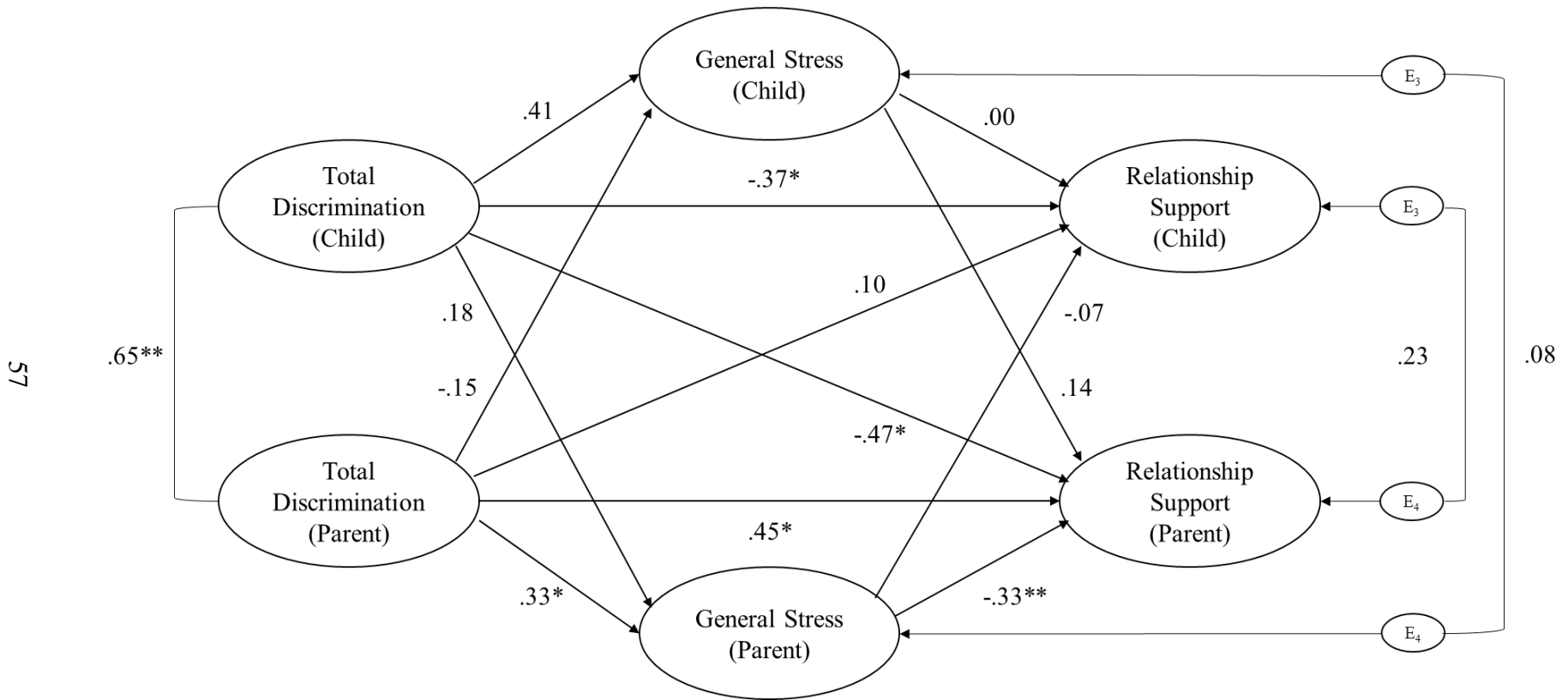
*Actor-Partner Interdependence Mediation Model of Subtle Discrimination, Stress, and Relationship Depth*



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 9

Actor-Partner Interdependence Mediation Model of Total Discrimination, Stress, and Relationship Support

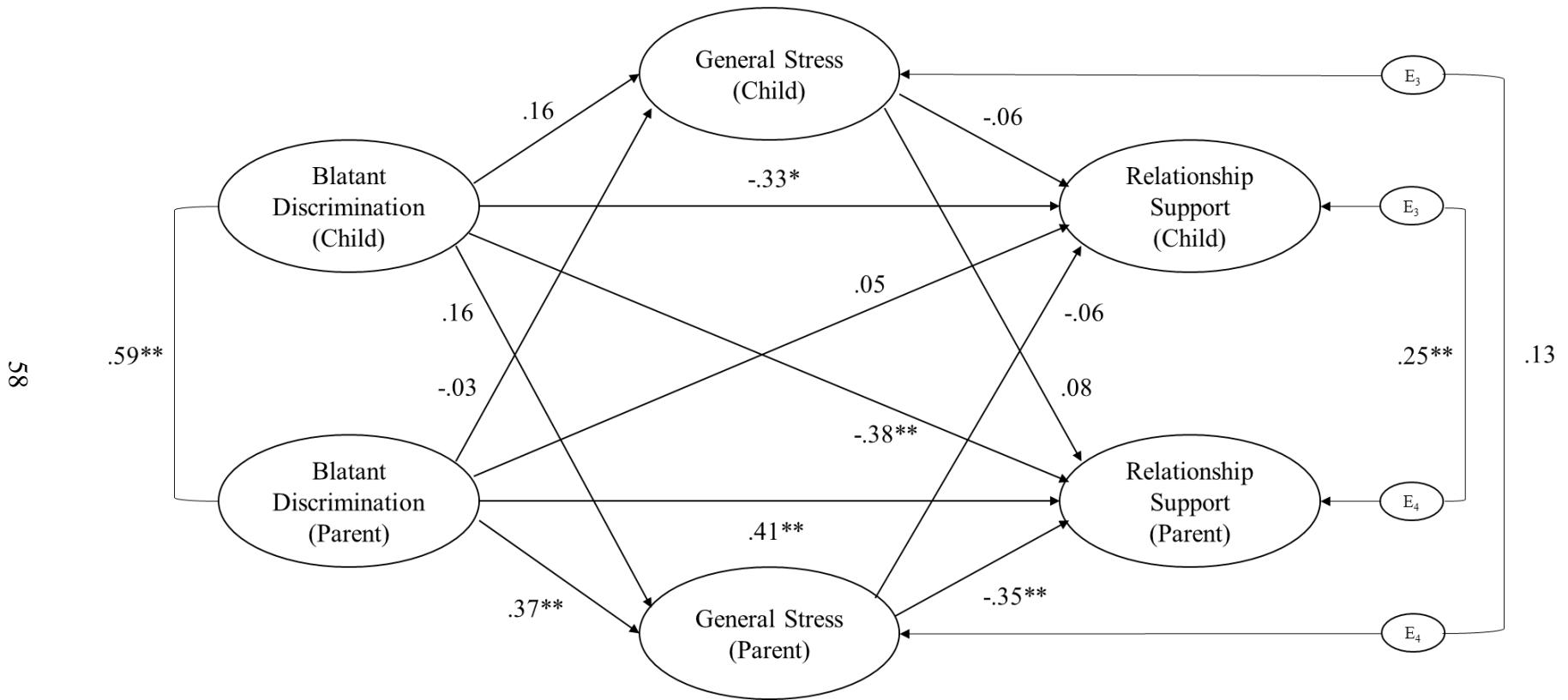


Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .



Figure 10

*Actor-Partner Interdependence Mediation Model of Blatant Discrimination, Stress, and Relationship Support*

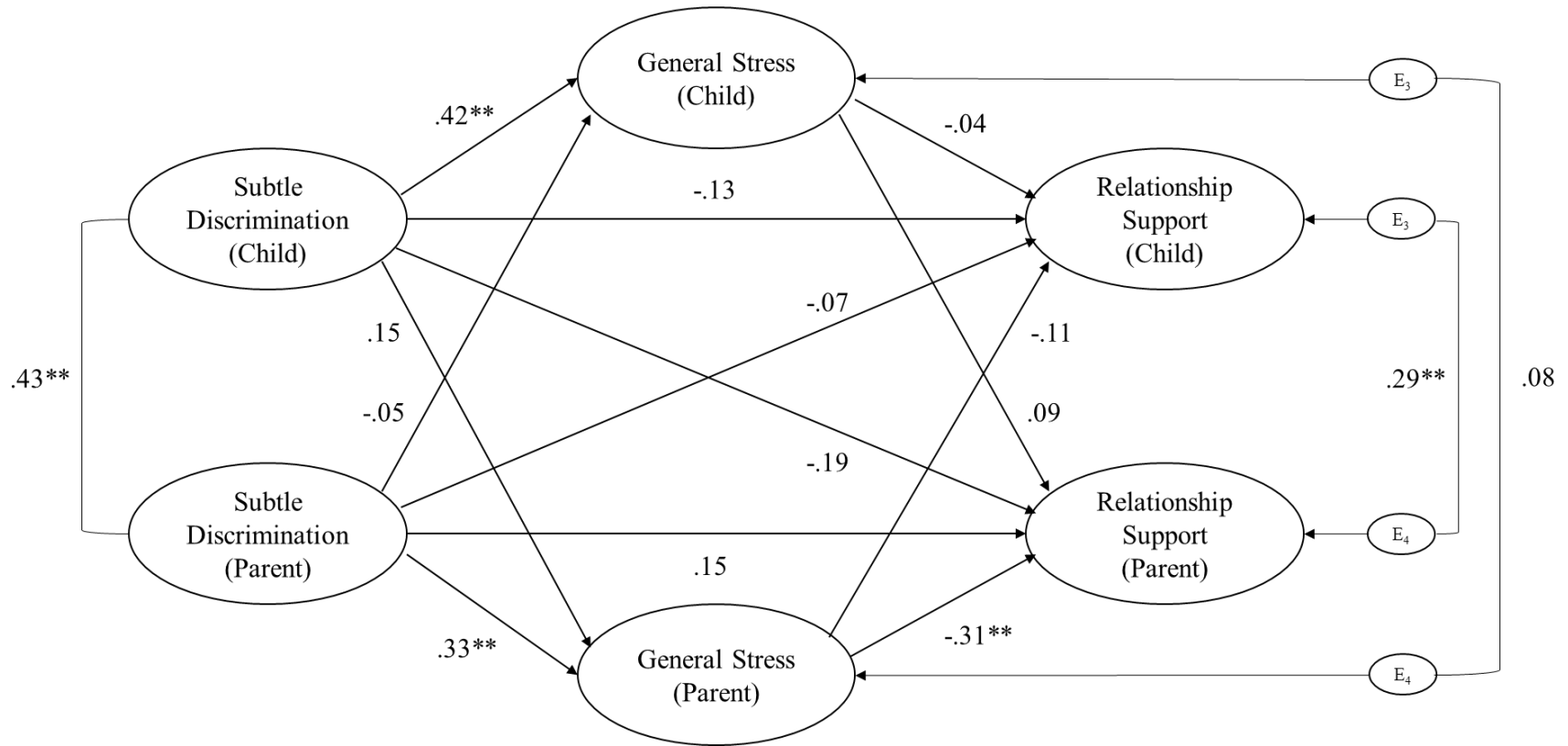


Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 11

*Actor-Partner Interdependence Mediation Model of Subtle Discrimination, Stress, and Relationship Support*

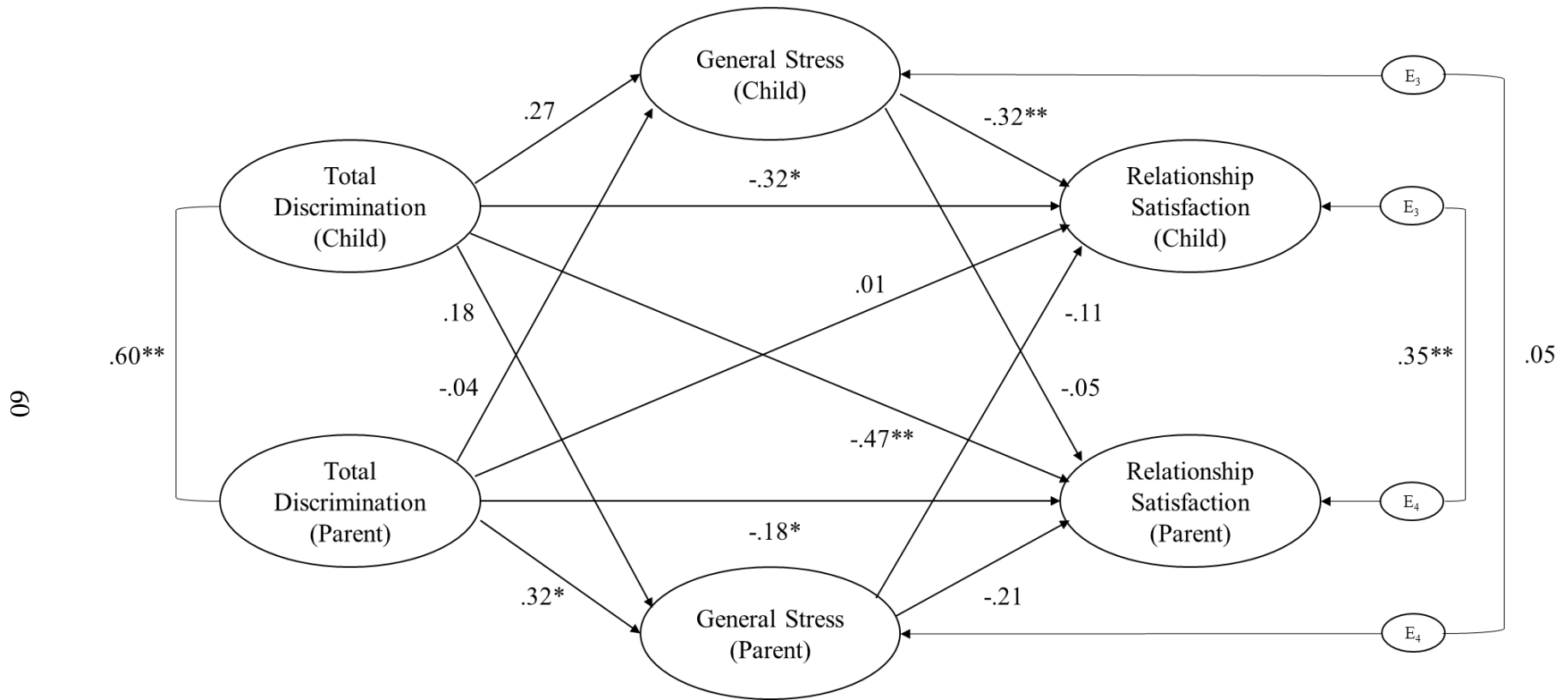
59



*Note.* This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 12

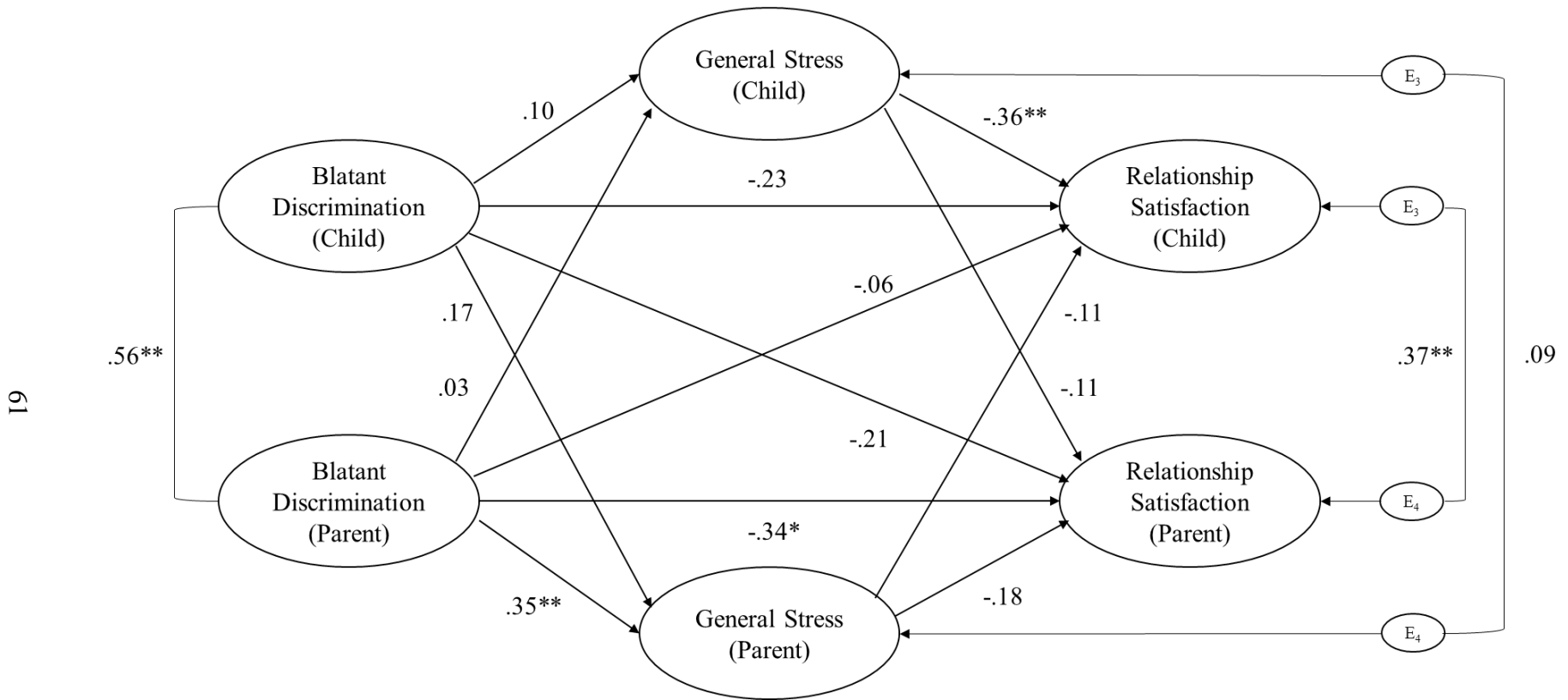
*Actor-Partner Interdependence Mediation Model of Total Discrimination, Stress, and Relationship Satisfaction*



*Note.* This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 13

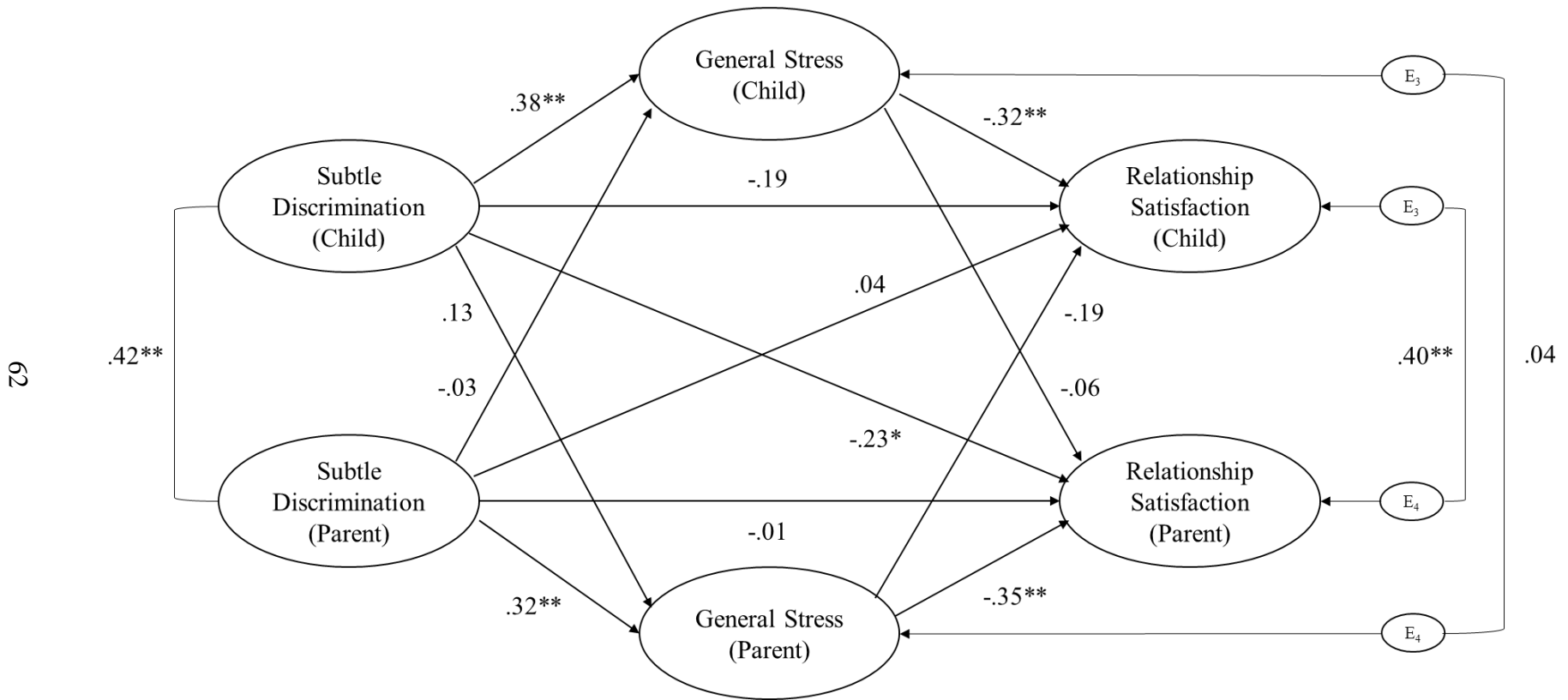
*Actor-Partner Interdependence Mediation Model of Blatant Discrimination, Stress, and Relationship Satisfaction*



*Note.* This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

Figure 14

*Actor-Partner Interdependence Mediation Model of Subtle Discrimination, Stress, and Relationship Satisfaction*



Note. This figure displays standardized coefficients. \*  $p < .05$ . \*\*  $p < .01$ .

## Discussion

Since the COVID-19 pandemic began in 2020, there has been an influx of anti-Asian hate crimes (Stop AAPI Hate National Report, 2021). Based on the American Psychological Association's Stress in America Report (2020), 41% of the surveyed Asian individuals reported discrimination as a significant stressor. Prior to COVID-19, research in counseling psychology and related fields have highlighted the detrimental effects of discrimination on the well-being of Asian Americans (e.g., Chen et al., 2014; Gee et al., 2007). The extant research primarily focuses on how discrimination affects the individual (e.g., Gee et al., 2007), however, does not take into consideration the systems in which these individuals are embedded. Taking a systemic approach allows researchers to examine the roles of relationships and interpersonal dynamics is important as parent-child conflicts are prominent even in adulthood for Asian Americans (Cheng et al., 2015). Examining both an intra (within-individual) and interpersonal (between-dyad) perspectives are increasingly important especially in the era of COVID-19, given the increasing number of discrimination and hate crimes against Asian Americans may place relationships at further risk for conflicts and deterioration. Bearing this in mind, the goal of the present study was to investigate how discrimination (subtle and blatant) may be associated with relationship outcomes for Asian American adult children and parents. This study addressed the gap in the Asian American discrimination literature by testing the associations between different forms of discrimination and different components of relationship quality (i.e., conflict, depth, support, satisfaction) in Asian American parent-adult child relationships using dyadic data collected from March to October of 2020, in a time that spanned the early phases of the COVID-19 pandemic.

Overall, results from this study showed strong associations between Asian American emerging adult children's and parents' experiences of racial/ethnic discrimination and the quality of their relationships. Furthermore, this study revealed general stress as a mediator between discrimination and relationship quality. In particular, there was evidence showing that discrimination was positively associated with general stress, which was then positively associated with relationship conflict and negatively associated with relationship depth, support, and satisfaction. Results provided important insight about the direct and indirect associations between discrimination and relationship quality, which are expanded upon below.

### **General Trends in the Data**

#### ***Significant Correlations for Children***

Children participants, defined as the emerging adult children in the parent-child dyads recruited in the present study, reported discrimination and relationship quality scores consistent with participants from the original measures development studies (Hendrick, 1988; Pierce et al., 1991; Yoo et al., 2010). Higher reports of relationship quality, broadly defined, are common in the literature due to self-selection in the research (e.g., Nilsen et al., 2009). Additionally, there were significant correlations between the three scores of discrimination (total, subtle, and blatant) their own ratings of relationship conflict (positive correlation), satisfaction (negative correlation), and stress (positive correlation). These correlations were consistent with research showing that discrimination can lead to more aggression and conflict in Asian American families (e.g., Lau, Takeuchi, & Alegría, 2006) and lower levels of relationship satisfaction among Asian American parent-child relationships (e.g., Dinh & Nguyen, 2006). Further, the positive correlation

between discrimination and stress aligns with the minority stress theory (Meyer, 2003), which posits that experiences related to one's minority status, such as discrimination, can increase one's stress levels (Williams, Neighbors, & Jackson, 2003). Additionally, perceptions of general stress was also significantly correlated with all of the relationship quality variables in the expected directions (i.e., positive correlation with relationship conflict, negative correlations with depth, support, and satisfaction). These correlations were consistent with the construct of stress spillover, which suggests that one's individual experiences of stress could be carried into one's relationships and have detrimental effects on relationship outcomes (Bolger et al., 1989).

### ***Significant Correlations for Parents***

Parent participants, defined as the parents in the parent-child dyads recruited in the present study, reported scores of discrimination and relationship quality that were consistent with participants from the original measures development studies (Hendrick, 1988; Pierce et al., 1991; Yoo et al., 2010). For parents, total discrimination was correlated with relationship conflict (positive correlation), support (negative correlation), satisfaction (negative correlation), and stress (positive correlation) in the expected directions. The associations between these variables are consistent with the literature on the associations between discrimination, relationship outcomes, and stress (e.g., Dinh & Nguyen, 2006; Lau et al., 2006; Meyer, 2003), which has found negative associations between acculturative stress, including experiences of discrimination, and relationship quality in Asian American parent-child dyads. There were also significant bivariate correlations between parent's subtle discrimination and relationship conflict (positive correlation), satisfaction (negative correlation), and stress (positive correlation) in the



expected directions. Blatant discrimination was, however significantly correlated with relationship support (negative correlation), depth (negative correlation), and satisfaction (negative correlation), in the expected directions. While these correlations were consistent with extant literature that has found negative associations between discrimination and relationship quality (e.g., Dinh & Nguyen 2006; Riina & McHale, 2010), it was interesting to find that subtle and blatant forms of discrimination were correlated with different relational constructs.

The correlations between subtle discrimination and relationship conflict and satisfaction could be explained by research showing that subtle discrimination been associated with rumination (Sue et al., 2007), which, in turn, has been found to be negatively associated with one's perceptions of themselves and others (Rae, Hermans, & Williams, 2006; Yoo et al., 2010; Zou & Abbott, 2012). Thus, children participants' experiencing subtle discrimination may be more likely to be sensitive to conflict, which is also reflected in lower reports of satisfaction with their parents. Further, blatant discrimination has been associated with more immediate effects and could cause one to withdraw from other people (Chang, Chen, & Alegria, 2014), which may explain its negative correlations with relationship depth and support in the present study.

### ***Significant Correlations between Children's and Parents' Reports***

There were significant bivariate correlations between children's and parents' reports on matching variables (e.g., correlation between child's total discrimination and parent's total discrimination) except for stress. These correlations were consistent with the interdependence theory (Kelley, Holmes, Kerr, Reis, Rusbult, & Van Lange, 2003; Kelley & Thibaut, 1978), such that two individuals in a close relationship are likely to

have similarities in experiences, beliefs, emotions, etc. The only variable that was not correlated between children and parents was stress; specifically, parents reported significantly lower stress than children. While beyond the scope of the current study, the difference in perceived stress between children and parents was consistent with research showing that stress tends to decline with age, possibly due older adults having more coping resources than younger adults (e.g., Hamarat, Thompson, Zabrocky, Steele, Matheny, & Aysan, 2001).

### **Direct Effects between Discrimination and Relationship Quality**

Based on research that demonstrate the negative association between discrimination and relationship quality (e.g., Dinh & Nguyen, 2006), it was first hypothesized that there would be positive associations between the three types of discrimination (i.e., total, blatant, subtle) and relationship conflict as well as negative associations between the types of discrimination and relationship depth, support, and satisfaction. Both actor (i.e., within person) and partner (i.e., between people) associations were examined.

### ***Discrimination and Relationship Conflict***

For the purpose of this study, relationship conflict was defined as the amount of disagreement, tension, and negative feelings within a relationship (Pierce et al., 1991). It was expected that there would be positive actor and partner associations between discrimination and relationship conflict for both children and parents. There were significant positive actor associations between all types of discrimination and relationship conflict for both children and their parent. There were only significant actor associations between discrimination and relationship conflict, which suggests that one's experiences

of discrimination were associated to their one's own perceptions of relationship conflicts; however, these experiences did not impact their parent's (or child's) perceptions. This may suggest that experiences of discrimination could be associated with sensitivity to conflicts. According to the rejection sensitivity theory (Downey & Feldman, 1996), individuals of minority status may experience heightened awareness and vigilance towards social rejection cues due to realistic concerns about stigmatization. As such, when an Asian American individual experiences discrimination, they may become more anxious such that the effects of further conflicts, even with loved ones, may be amplified.

### ***Discrimination and Relationship Depth***

For the purpose of this study, relationship depth was defined as the degree of closeness and trust within a relationship (Pierce et al., 1991). It was hypothesized that there would be negative actor and partner associations between discrimination and relationship depth for both children and parents. While results did not show significant actor associations between discrimination and relationship depth, results did show one significant partner association between child's total discrimination and parent's reports of relationship depth. However, the results were not present when examining the different types of discrimination (subtle and blatant), which is important to note as discrimination can be complex, and it can be difficult to distinguish between blatant and subtle types (Yoo et al., 2010). Results showed that when the child experiences discrimination, the parent reports lower relationship depth. This negative association between discrimination and relationship depth was consistent with existing research showing the negative association between discrimination and social well-being (Lee, 2003). It was interesting to find that the partner association was significant, but not the actor association,

suggesting that parents feel less closeness rather than the children who experience the discrimination directly. The significant partner association may point to children's behavioral responses to the discrimination that are more observable by parents and not themselves, such as social withdrawal (Chang, 2001), which can be harmful as the children may not be aware of the impact of discrimination and thus may not seek help for their concerns.

### ***Discrimination and Relationship Support***

For the purpose of this study, relationship support was defined as the amount of support and assistance that one individual in a relationship perceives from the other individual (Pierce et al., 1991). It was expected that there would be negative actor and partner associations between discrimination and relationship support for both children and parents. There were significant negative associations between child's total and blatant discrimination and child's (actor association) and parent's relationship support (partner association). The negative associations suggested that when the child experiences discrimination, the child may perceive less support from the parent, and vice versa. It was not expected that only blatant discrimination, but not subtle discrimination, was associated with relationship support. As stated above, subtle discrimination tends to impact an individual slowly (Sue et al., 2007), so subtle discrimination may not be associated with short-term support seeking. On the other hand, blatant discrimination tends to have more immediate and obvious effects, so the child may have more pressing needs for support from parents. However, because the child may feel more anxious and negative after experiences of discrimination, they may view support from the parent as inadequate and therefore rate it lower.

### ***Discrimination and Relationship Satisfaction***

For the purpose of this study, relationship satisfaction was defined as the degree to one individual in a relationship feels satisfied with the other individual as well as their shared relationship (Hendrick, 1988). It was expected that there would be negative actor and partner associations between discrimination and relationship support for both children and parents. Similar to relationship support, significant negative associations were found between the child's total discrimination and both child's (actor association) and parent's relationship satisfaction (partner association). In other words, when the child experiences discrimination, both the child and the parent are less satisfied in their relationship, which is consistent with the little existing research on the negative association between discrimination and relationship satisfaction in Asian American parent-child relationships (Dinh & Nguyen, 2006). The significant partner association expands upon the current literature by demonstrating that, although the parent does not directly experience the discrimination, the child's discrimination still has negative associations with the parent's well-being.

Further, the parent's ratings of total and blatant discrimination were negatively associated with their own perceived relationship satisfaction. Unlike the child, there were no significant partner associations for parents. As discussed above, parents may have more coping resources than children (Hamarat et al., 2001). These coping skills may allow parents to show consistent behavior with their children, even in the face of discrimination, thus maintaining their children's satisfaction in their relationships.

In sum, there is strong evidence demonstrating the associations between discrimination and the different aspects of relationship quality for Asian American children and parents.

### **Mediation Effects of Stress in the Associations between Discrimination and Relationship Quality**

The second objective of the current study was to examine whether stress mediates the association between discrimination and stress.

#### ***Discrimination, Stress, and Relationship Conflict***

It was hypothesized that stress would mediate the positive actor and partner associations between discrimination and relationship conflict, given the notions of minority stress (Meyer, 2003) and stress spillover (Bolgers et al., 1989). Contrary to the hypothesis, the only significant mediation effect found was the actor-actor association between the child's subtle discrimination, stress, and conflict. Said differently, children's reports of subtle discrimination, general stress, and perceived relationship conflict were all positively associated. These results are consistent with minority stress theory (Meyer 2003) and the notion of stress spillover (Bolger et al., 1989), which suggests that discrimination can be a significant stressor for people of minority status and that stress experienced by an individual can be carried into a relationship and increase the likelihood for conflicts. It is interesting that this mediation is only significant for subtle discrimination, but not blatant discrimination. One possible explanation may be that subtle discrimination is more likely to be associated with stress for the child. According to Yoo and colleagues (2010), subtle discrimination can potentially be more damaging to Asian Americans than blatant discrimination because the former can lead to

internalization of failure (e.g., “Something is wrong with me”) and low self-esteem, whereas the latter is associated with externalization of failure (e.g., “That person is racist”). Given that emerging adulthood is a critical period for identity formation (Kiang et al., 2008), the children participants may be more vulnerable to subtle discrimination as opposed to blatant discrimination. Also, while there were significant direct actor associations between parent’s discrimination (i.e., total, subtle, blatant) and their own relationship conflict, stress did not mediate these associations. It is possible that other mediator may better explain these associations, such as social avoidance and communication (e.g., Wei, Heppner, Ku, & Liao, 2010).

### ***Discrimination, Stress, and Relationship Depth***

It was hypothesized that stress would mediate the negative actor and partner associations between discrimination and relationship depth, given the notions of minority stress (Meyer, 2003) and stress spillover (Bolgers et al., 1989). Stress was found to be a significant mediator in the association between all types of discrimination and relationship depth for parents only. While there were no significant direct actor associations between discrimination and relationship depth for parents, when stress is taken into account, the associations are significant. This suggests that when the parent experience discrimination, it may not always be associated with their closeness with their child; however, if the discrimination leads to greater stress, it could then be associated with relationship depth. This is supported by the stress spillover theory (Bolger et al., 1989) and highlights the importance of having appropriate resources to cope with discrimination so that it does not impact individuals’ stress and their relationships.

### ***Discrimination, Stress, and Relationship Support***

It was hypothesized that stress would mediate the negative actor and partner associations between discrimination and relationship support, given the notions of minority stress (Meyer, 2003) and stress spillover (Bolgers et al., 1989). Similar to relationship depth, stress was found to be a consistent mediator in the associations between all forms of discrimination and relationship support for parents only. This means that when the parent reports any type of discrimination, they tend to report greater general stress, which in turn is associated with less perceived support from the child. This aligns with the study hypothesis.

### ***Discrimination, Stress, and Satisfaction***

It was hypothesized that stress would mediate the negative actor and partner associations between discrimination and relationship satisfaction, given the notions of minority stress (Meyer, 2003) and stress spillover (Bolgers et al., 1989). Significant actor-actor mediation was found between subtle discrimination, stress, and relationship satisfaction for both child and parent. Said differently, when either the child or parent experiences subtle discrimination, they tend to report greater stress, which then is negatively associated with relationship satisfaction. This is consistent with the study hypothesis.

Overall, stress can sometimes act as a mediator in the associations between the forms of racial/ethnic discrimination and the various aspects of relationship quality. Thus, there was partial support for the second hypothesis of the present study. It is interesting to note that all of the significant mediation effects have been for actor-actor associations, despite some significant partner associations between discrimination and relationship quality (e.g., association between child's subtle discrimination and parent's relationship



satisfaction). However, none of the partner associations between discrimination and stress were significant. This suggests that one's experiences of discrimination may not be associated with another person's stress and that other variables may better explain the partner associations for discrimination and relationship quality, such as social avoidance and communication (e.g., Wei, Heppner, Ku, & Liao, 2010).

### **Limitations and Future Directions**

Despite the study's potential contributions to the research with Asian Americans, and in particular their experiences with discrimination, this study is not withstanding limitations. First, there may have been some sampling bias due to the method of recruiting participants. In the present study, most of the data were collected via convenience sampling (i.e., students from Arizona State University and their parents). While this method was helpful in recruiting the number of participants needed to achieve adequate power in a dyadic study, convenience sampling can potentially lead to lack of representation in the data (Etikan, Musa, & Alkassim, 2016). However, despite these concerns, the current sample of participants was diverse in their self-reported gender, ethnicity, and immigration/generational status. Additionally, a significant portion of this study's sample ( $n = X$ ; over 25%) identified as multiracial or multiethnic. Given multiracial individuals have various ways to define their ethnic identity (Miville et al., 2005), multiracial participants in this study may have perceived or experienced discrimination differently than the monoracial participants. For example, it is far more common for multiracial individuals to experience discrimination from their own family than monoracial individuals (Franco & Carter, 2019). To potentially address this, participants were asked questions that focused on their Asian American experiences (e.g.,

“In America, I am treated with less respect because I am Asian”). While this is beyond the scope of this study, future research may wish to focus specifically on the experiences of discrimination for multiracial and multiethnic individuals.

It should be noted that while Asian Americans may have similar experiences of discrimination, they are not a homogenous group (e.g., Hune, 2002). In particular, the diversity in ethnicity helped increase representation of different groups, which is important because even in the marginalized group of Asian Americans, specific ethnic groups (e.g., Filipinx, Vietnamese) are still underrepresented (Shah & Kandula, 2020). However, given the small subsample of participants, the present study did not examine between-ethnic or cultural differences. Examining the unique experiences of discrimination in specific ethnic groups, especially how they may be similar or different, is a notable area for future research.

Another potential limitation is with respect to how the variables were measured. This study used self-reports as the primary method of measurement. Data collected with self-report instruments, especially those administered at one point of time, are limited to response biases (e.g., recall bias, social desirability; Donaldson & Grant-Vallone, 2002). However, in the case of relationship quality, it could have been helpful to obtain more objective measures in order to test how discrimination may be associated with *actual* relationship quality rather than *perceived* relationship quality or even compare any differences between actual and perceived relationship quality. Future research could utilize behavioral observations or coding, which could provide standardized and objective data about Asian American family relationships. One possibility is to prime participants to recall a past discriminatory experience and then instruct them to have discussions with

family members about their relationships, during which coders would observe the discussions and note any behaviors of interest (e.g., conflict, support). There exists a number of behavioral coding systems for family observations (e.g., Fiese & Spagnola, 2005; Kerig & Lindahl, 2000). Moreover, coding systems that are typically used with romantic couples, such as the Dyadic Coping Coding Manual (Bodenmann, 2008) which is used to examine stress and support between partners, can be applied to the family system.

Finally, there are limitations related to the cross-sectional nature of this study. According to MacKinnon and Fairchild (2009), true mediation can only take place when there is a temporal ordering of variables, meaning that the variables must be measured at different time points (i.e., predictor variables measured first, then mediators, and finally outcome variables). In the present study, all variables were measured at the same time point; thus, it could be argued that the models that were assessed were not true mediation models. However, although causal relationships could not be established between discrimination, stress, and relationship quality, important insight about their associations, with the direction of these associations supported by theory (e.g., Bolger et al., 1989; Meyer, 2003), were found. In the future, longitudinal data could be collected in order to draw stronger inferences about the impacts of discrimination on relationship outcomes. For instance, a daily survey study design could be utilized to assess participants' baseline levels of discrimination and experiences of stress and relationship quality on subsequent days. This would allow for possible causal inferences of discrimination on relationship outcomes.

## **Implications for Counseling Psychologists**

Taken together, the present study offers valuable implications for the counseling psychology field. Results showed clear, negative associations between discrimination and relationship quality for Asian American children and parents. When working with Asian American clients, it is imperative to consider how cultural factors, such as discrimination, may play a role in clients' presenting concerns (Wang & Kim, 2010). There is evidence suggesting that Asian Americans who receive ethnic-specific services report greater treatment outcomes (Lau & Zane, 2000). Thus, counseling psychologists should ensure that they are continuously undergoing multicultural training in order to provide culturally informed services. Culturally informed therapy for Asian American clients may include understanding of cultural values (e.g., collectivism; Kim, 2007), stressors unique to the Asian American population (e.g., discrimination; Inman & Yeh, 2007), and awareness of the therapist's own cultural identities and biases (Vasquez, 2007).

In addition, it is critical for counseling psychologists to engage in social advocacy work, as outlined by the American Psychological Association's (2017) Code of Ethics. Within the past year, hate crimes and discrimination against Asian Americans have increased dramatically due to COVID-19 and xenophobia (Jeung et al., 2021). As shown in this study and existing literature (e.g., Sue et al., 2007), discrimination towards Asians can be extremely damaging not only for the target of the acts but the Asian American community at large. Although individual outcomes such as self-esteem (Yoo et al., 2010), anxiety (Chen et al., 2014), and depression (Lam 2007) have been examined in prior research, one area of oppression that has been neglected is in understanding the

associations between experiences of discrimination and relationship functioning (for a notable exception see Tao, 2020).

## **Conclusion**

Based on data collected from Asian American parent-child dyads during the early phases of the COVID-19 pandemic (March to October of 2020), the present study demonstrated that one's experiences of discrimination may not only be associated with their own well-being, however, can also be associated with family members' experiences. As such, relationships can deteriorate and communities can dissolve over time. Families can cope with discriminatory experiences by understanding how these experiences may impact them at the individual and relational levels, communicating their stress with others, and seeking professional help. Further, to combat the negative effects of discrimination, organizations such as Stop AAPI Hate and the Asian American Psychological Association have been very active in speaking up against the violence and supporting those who have been affected by the discrimination. These efforts have helped bring forth changes at the sociopolitical level, such as President Joe Biden's signing of the COVID-19 Hate Crimes Act protecting Asian Americans. During a time when there is division in the United States and beyond, it is crucial for counseling psychologists to stand in solidarity with the Asian American community.

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APPENDIX A

DEMOGRAPHIC QUESTIONNAIRE – CHILD VERSION

1. What is your participant ID? \_\_\_\_\_
2. What is your age?
  - a) \_\_\_\_\_ years
  - b) \_\_\_\_\_ months
3. Please list any and all of your ethnic heritages (e.g., Chinese, Filipino, Hmong).  
\_\_\_\_\_  
\_\_\_\_\_
4. What is your gender identity?
  - a) Man
  - b) Woman
  - c) Transgender man
  - d) Transgender woman
  - e) Gender-non-binary
  - f) Not listed (please specify) \_\_\_\_\_
5. What is your sexual orientation?
  - a) Asexual
  - b) Bisexual
  - c) Heterosexual/Straight
  - d) Homosexual/Gay or Lesbian
  - e) Pansexual
  - f) Not listed (please specify) \_\_\_\_\_
6. Are you a citizen of the United States?
  - a) Yes
  - b) No (please indicate number of years living in the United States)  
\_\_\_\_\_
7. Were you born in the United States?
  - a) Yes
  - b) No
8. Were your parents born in the United States?
  - a) Both of my parents were born in the United States.
  - b) One of my parents was born in the United States.
  - c) Neither of my parents were born in the United States.
  - d) Not listed (please specify) \_\_\_\_\_
9. Were your grandparents born in the United States?
  - a) All of my grandparents were born in the United States.
  - b) At least one of my grandparents were born in the United States.
  - c) None of my grandparents were born in the United States.
  - d) Not listed (please specify) \_\_\_\_\_

10. What is the highest level of education that you have completed?
- a) Less than high school
  - b) High school degree (or GED)
  - c) Professional trade or technical school
  - d) Some college
  - e) Associate's degree (e.g., A.A., A.S.)
  - f) Bachelor's degree (e.g., B.A., B.S.)
  - g) Graduate degree (e.g., M.A., Ph.D.)
11. What was your cumulative high school GPA on a 4.0 scale? \_\_\_\_\_
12. Are you currently attending/Have you attended a college or university?
- a) Yes (please indicate your academic year) \_\_\_\_\_  
 (please indicate your college GPA on a 4.0 scale) \_\_\_\_\_  
 (please indicate your proposed major(s) and minor(s)) \_\_\_\_\_
  - b) No
13. What is your annual household income?
- a) \$0 - \$24,999
  - b) \$25,000 - \$49,999
  - c) \$50,000 - \$74,999
  - d) \$75,000 - \$99,999
  - e) \$100,000 - \$149,999
  - f) Greater than \$150,000
14. What is your relationship status?
- a) Single
  - b) In a committed relationship
  - c) Engaged
  - d) Married
  - e) Divorced
  - f) Widowed
  - g) Other (please specify) \_\_\_\_\_
15. Are you currently living with the parent with whom you are participating in this study?
- a) Yes
  - b) No (please indicate whether you live in the same state as your parent)  
 \_\_\_\_\_
16. How often do you communicate with your parent per week?
- a) Less than once a week
  - b) Once a week
  - c) 2-3 times per week

- d) More than half of the week
- e) Almost every day
- f) Every day

17. About how many minutes do you spend communicating with your parent per week?

\_\_\_\_\_

18. What is your primary method of communication with your parent?

- a) In person
- b) Phone call
- c) Video call
- d) Text messaging
- e) Social media
- f) Email
- g) Not listed (please specify) \_\_\_\_\_

19. How many older siblings do you have? \_\_\_\_\_

20. How many younger siblings do you have? \_\_\_\_\_

APPENDIX B

DEMOGRAPHIC QUESTIONNAIRE – PARENT VERSION

1. What is your participant ID? \_\_\_\_\_
2. What is your age?
  - a) \_\_\_\_\_ years
  - b) \_\_\_\_\_ months
3. Please list any and all of your ethnic heritages (e.g., Chinese, Filipino, Hmong).  
\_\_\_\_\_  
\_\_\_\_\_
4. What is your gender identity?
  - a) Man
  - b) Woman
  - c) Transgender man
  - d) Transgender woman
  - e) Gender-non-binary
  - f) Not listed (please specify) \_\_\_\_\_
5. What is your sexual orientation?
  - a) Asexual
  - b) Bisexual
  - c) Heterosexual/Straight
  - d) Homosexual/Gay or Lesbian
  - e) Pansexual
  - f) Not listed (please specify) \_\_\_\_\_
6. Are you a citizen of the United States?
  - a) Yes
  - b) No (please indicate number of years living in the United States)  
\_\_\_\_\_
7. Were you born in the United States?
  - a) Yes
  - b) No
8. Were your parents born in the United States?
  - a) Both of my parents were born in the United States.
  - b) One of my parents was born in the United States.
  - c) Neither of my parents were born in the United States.
  - d) Not listed (please specify) \_\_\_\_\_
9. Were your grandparents born in the United States?
  - a) All of my grandparents were born in the United States.
  - b) At least one of my grandparents were born in the United States.
  - c) None of my grandparents were born in the United States.
  - d) Not listed (please specify) \_\_\_\_\_

10. What is the highest level of education that you have completed?
- a) Less than high school
  - b) High school degree (or GED)
  - c) Professional trade or technical school
  - d) Some college
  - e) Associate's degree (e.g., A.A., A.S.)
  - f) Bachelor's degree (e.g., B.A., B.S.)
  - g) Graduate degree (e.g., M.A., Ph.D.)
11. What was your cumulative high school GPA on a 4.0 scale? \_\_\_\_\_
12. Are you currently attending/Have you attended a college or university?
- a) Yes (please indicate your academic year) \_\_\_\_\_  
 (please indicate your college GPA on a 4.0 scale) \_\_\_\_\_  
 (please indicate your proposed major(s) and minor(s)) \_\_\_\_\_
  - b) No
13. What is your annual household income?
- a) \$0 - \$24,999
  - b) \$25,000 - \$49,999
  - c) \$50,000 - \$74,999
  - d) \$75,000 - \$99,999
  - e) \$100,000 - \$149,999
  - f) Greater than \$150,000
14. What is your relationship status?
- a) Single
  - b) In a committed relationship
  - c) Engaged
  - d) Married
  - e) Divorced
  - f) Widowed
  - g) Other (please specify) \_\_\_\_\_
15. Are you currently living with the child with whom you are participating in this study?
- a) Yes
  - b) No (please indicate whether you live in the same state as your child)  
 \_\_\_\_\_
16. How often do you communicate with your child per week?
- a) Less than once a week
  - b) Once a week
  - c) 2-3 times per week
  - d) More than half of the week

- e) Almost every day
- f) Every day

17. About how many minutes do you spend communicating with your child per week?

\_\_\_\_\_

18. What is your primary method of communication with your child?

- a) In person
- b) Phone call
- c) Video call
- d) Text messaging
- e) Social media
- f) Email
- g) Not listed (please specify) \_\_\_\_\_

19. How many children do you have in total? \_\_\_\_\_



APPENDIX C

SUBTLE AND BLATANT RACISM SCALE FOR ASIAN AMERICANS

*Instructions:* Please indicate how often you have encountered each experience using the following scale.

1	2	3	4	5
Almost never	Once in a while	Sometimes	Often	Almost always

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

APPENDIX D

QUALITY OF RELATIONSHIPS INVENTORY – CHILD VERSION

*Instructions:* Please use the scale below to describe your relationship with the parent with whom you are participating in this study.

1	2	3	4
Not at all	A little	Quite a bit	Very much

1. To what extent could you turn to your parent for advice about problems?
2. How often do you need to work hard to avoid conflict with your parent?
3. To what extent could you count on your parent for help with a problem?
4. How upset does your parent sometimes make you feel?
5. To what extent can you count on your parent to give you honest feedback, even if you might not want to hear it?
6. How much does your parent make you feel guilty?
7. How much do you have to “give in” in this relationship?
8. To what extent can you count on your parent to help you if your family member very close to you died?
9. How much does your parent want you to change?
10. How positive a role does your parent play in your life?
11. How significant is this relationship in your life?
12. How close will your relationship be with your parent in 10 years?
13. How much would you miss your parent if the two of you could not see or talk with each other for a month?
14. How critical of you is your parent?
15. If you wanted to go out and do something this evening, how confident are you that your parent would be willing to do something with you?
16. How responsible do you feel for your parent’s well-being?
17. How much do you depend on your parent?

18. To what extent can you count on your parent to listen to you when you are very angry at someone else?
19. How much would you like your parent to change?
20. How angry does your parent make you feel?
21. How much do you argue with your parent?
22. To what extent can you really count on your parent to distract you from your worries when you feel under stress?
23. How often does your parent make you feel angry?
24. How often does your parent try to control or influence your life?
25. How much more do you give than you get from this relationship?

APPENDIX E

QUALITY OF RELATIONSHIPS INVENTORY – PARENT VERSION

*Instructions:* Please use the scale below to describe your relationship with the child with whom you are participating in this study.

1	2	3	4
Not at all	A little	Quite a bit	Very much

1. To what extent could your child turn to you for advice about problems?
2. How often do you need to work hard to avoid conflict with your child?
3. To what extent could your child count on you for help with a problem?
4. How upset does your child sometimes make you feel?
5. To what extent can your child count on you to give them honest feedback, even if they might not want to hear it?
6. How much does your child make you feel guilty?
7. How much do you have to “give in” in this relationship?
8. To what extent can your child count on you to help them if their family member very close to them died?
9. How much does your child want you to change?
10. How positive a role does your child play in your life?
11. How significant is this relationship in your life?
12. How close will your relationship be with your child in 10 years?
13. How much would you miss your child if the two of you could not see or talk with each other for a month?
14. How critical of you is your child?
15. If you wanted to go out and do something this evening, how confident are you that your child would be willing to do something with you?
16. How responsible do you feel for your child’s well-being?
17. How much does this depend on you?

18. To what extent can your child count on you to listen to them when they are very angry at someone else?
19. How much would you like your child to change?
20. How angry does your child make you feel?
21. How much do you argue with your child?
22. To what extent can your child really count on you to distract them from their worries when they feel under stress?
23. How often does your child make you feel angry?
24. How often does you try to control or influence your child's life?
25. How much more do you give than you get from this relationship?



APPENDIX F

ADAPTED RELATIONSHIP ASSESSMENT SCALE – CHILD VERSION

*Instructions:* The following questions are designed to measure your feelings about your current relationship with your parent (the one with whom you are participating in this study). Please use the scales to indicate the degree of your responses.

1. How well does your parent meet your needs?
  - a) Extremely poorly
  - b) Poorly
  - c) Average
  - d) Well
  - e) Extremely well
  
2. In general, how satisfied are you with your relationship with your parent?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
3. How good is your relationship with your parent compared to most?
  - a) Very poor
  - b) Poor
  - c) Average
  - d) Good
  - e) Excellent
  
4. How satisfied are you with your performance as a child?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
5. How satisfied are you with your parent?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
6. How much do you love your parent?
  - a) Not much
  - b) Below average
  - c) Average
  - d) Above average
  - e) Very much

7. How much do you trust your parent?

- a) Not much
- b) Below average
- c) Average
- d) Above average
- e) Very much

8. How many problems are there in your relationship with your parent?

- a) Very few
- b) Few
- c) Average
- d) Many
- e) Very many

APPENDIX G

ADAPTED RELATIONSHIP ASSESSMENT SCALE – PARENT VERSION

*Instructions:* The following questions are designed to measure your feelings about your current relationship with your child (the one with whom you are participating in this study). Please use the scales to indicate the degree of your responses.

1. How well do you meet your child's needs?
  - a) Extremely poorly
  - b) Poorly
  - c) Average
  - d) Well
  - e) Extremely well
  
2. In general, how satisfied are you with your relationship with your child?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
3. How good is your relationship with your child compared to most?
  - a) Very poor
  - b) Poor
  - c) Average
  - d) Good
  - e) Excellent
  
4. How satisfied are you with your performance as a parent?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
5. How satisfied are you with your child?
  - a) Extremely unsatisfied
  - b) Unsatisfied
  - c) Average
  - d) Satisfied
  - e) Extremely satisfied
  
6. How much do you love your child?
  - a) Not much
  - b) Below average
  - c) Average
  - d) Above average
  - e) Very much

7. How much do you trust your child?

- a) Not much
- b) Below average
- c) Average
- d) Above average
- e) Very much

8. How many problems are there in your relationship with your child?

- a) Very few
- b) Few
- c) Average
- d) Many
- e) Very many

APPENDIX H  
PERCEIVED STRESS SCALE

*Instructions:* The questions in this scale ask you about your feelings and thoughts during the last month. In each case, you will be asked to indicate *how often* you felt or thought a certain way.

0	1	2	3	4
Never	Almost never	Sometimes	Fairly often	Very often

1. In the last month, how often have you been upset because of something that happened unexpectedly?
2. In the last month, how often have you felt that you were unable to control the important things in your life?
3. In the last month, how often have you felt nervous and “stressed”?
4. In the last month, how often have you felt confident about your ability to handle your personal problems?
5. In the last month, how often have you felt that things were going your way?
6. In the last month, how often have you found that you could not cope with all the things that you had to do?
7. In the last month, how often have you been able to control irritations in your life?
8. In the last month, how often have you felt that you were on top of things?
9. In the last month, how often have you been angered because of things that were outside of your control?
10. In the last month, how often have you felt difficulties were piling up so high that you could not overcome them?



APPENDIX I  
IRB APPROVAL

EXEMPTION GRANTED

[Ashley Randall](#)  
[CISA: Counseling and Counseling Psychology](#)  
 480/727-5312

Ashley.K.Randall@asu.edu

Dear [Ashley Randall](#):

On 2/20/2020 the ASU IRB reviewed the following protocol:

Type of Review:	Initial Study
Title:	Associations between Discrimination and Well-Being in Asian American Parent-Adult Child Relationships
Investigator:	<a href="#">Ashley Randall</a>
IRB ID:	STUDY00011586
Funding:	Name: ASU: Graduate and Professional Student Association (GPSA)
Grant Title:	
Grant ID:	
Documents Reviewed:	<ul style="list-style-type: none"> <li>• Child Measures, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Consent Form, Category: Consent Form;</li> <li>• Flyer, Category: Recruitment Materials;</li> <li>• IRB Protocol, Category: IRB Protocol;</li> <li>• Parent Measures, Category: Measures (Survey questions/Interview questions /interview guides/focus group questions);</li> <li>• Recruitment Material (Emails and Social Media), Category: Recruitment Materials;</li> <li>• Screening Survey, Category: Screening forms;</li> </ul>

The IRB determined that the protocol is considered exempt pursuant to Federal Regulations 45CFR46 on 2/20/2020.

In conducting this protocol you are required to follow the requirements listed in the

INVESTIGATOR MANUAL (HRP-103).

Sincerely,

IRB Administrator

cc: Kin Lau

Kin Lau