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### Internalized racism mediating the effects of ethnic-racial socialization on self-esteem and psychological distress among Asians and Asian Americans in the United States.

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INTERNALIZED RACISM MEDIATING THE EFFECTS OF ETHNIC-RACIAL  
SOCIALIZATION ON SELF-ESTEEM AND PSYCHOLOGICAL DISTRESS  
AMONG ASIANS AND ASIAN AMERICANS IN THE UNITED STATES

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A Dissertation  
Submitted to the Faculty of the  
College of Education and Human Development  
in Partial Fulfillment of the Requirements  
for the Degree of

Doctor of Philosophy  
in Counseling and Personnel Services

Department of Counseling and Human Development  
University of Louisville  
Louisville, Kentucky

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A Dissertation Approved on

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## DEDICATION

This dissertation is dedicated to people who are experiencing hardship in their journey of exploring and becoming who they would like to become.

## ACKNOWLEDGMENTS

This work would not have been possible without any of the people who have advised and guided me, brainstormed with me, laughed and cried with me, and listened to and consoled me. I am sincerely grateful for those who have been there for me at every point in my pursue of this degree.

## ABSTRACT

### INTERNALIZED RACISM MEDIATING THE EFFECTS OF ETHNIC-RACIAL SOCIALIZATION ON SELF-ESTEEM AND PSYCHOLOGICAL DISTRESS AMONG ASIANS AND ASIAN AMERICANS IN THE UNITED STATES

Tianhong “Jojo” Yao

November 23, 2021

Research has indicated ethnic-racial socialization can influence one’s ethnic identity development including ethnic identity and internalized racism. However, there is limited empirical research directly examining the relation among ethnic-racial socialization, internalized racism, and psychological outcomes including self-esteem and psychological distress among Asian populations in the U.S. The current research explored the influences of the three dimensions of ethnic-racial socialization (cultural socialization-pluralism, promotion of mistrust, and preparation for bias) on two outcomes (i.e., self-esteem and psychological distress) through internalized racism as a mediator in a sample of 245 participants identified as Asian and Asian American adults currently residing in the U.S. Unexpectedly, results revealed that perceiving more cultural socialization/pluralism and preparation for bias combined messages lead to lower levels of self-esteem and higher levels of psychological distress through higher levels of internalized racism in the current sample. However, as expected, results revealed that perceiving more messages of promotion of mistrust from parents lead to lower levels of



self-esteem and higher levels of psychological distress through higher levels of internalized racism. Study limitations and implications for parents and mental health providers are discussed.

## TABLE OF CONTENTS

	PAGE
DEDICATION .....	iii
ACKNOWLEDGEMENTS.....	iv
ABSTRACT.....	v
LIST OF TABLES.....	viii
LIST OF FIGURES .....	ix
INTRODUCTION.....	1
METHOD.....	35
Participants .....	35
Procedures.....	36
Measurements.....	37
RESULTS .....	42
Missed Data.....	42
Data Cleaning.....	43
Factor Analysis and Parallel Analysis.....	43
Mediation Analysis.....	45
Bivariate Correlations for Central Variables.....	46
Test of Mediation Model.....	48
DISCUSSION .....	51
REFERENCES .....	65
CURRICULUM VITA .....	89

LIST OF TABLES

TABLE	PAGE
1. Exploratory Factor Analysis of the Perceived Ethnic–Racial Socialization Scale (Imputed Data Set 1) .....	79
2. Descriptive Statistics of Core Variables (Original Data Set) .....	81
3. Pooled Bivariate Correlations and Means of Core Variables (Five Imputed Data) ...	82

LIST OF FIGURES

FIGURE	PAGE
1. Proposed relationships among ERS, IR, and self-esteem.....	83
2. Proposed relationships among ERS, IR, and psychological distress.....	84
3. Indirect effect of cultural socialization-pluralism and preparation for bias on self-esteem through internalized racism.....	85
4. Indirect effect of promotion of mistrust on self-esteem through internalized racism...	86
5. Indirect effect of cultural socialization-pluralism and preparation for bias on psychological distress through internalized racism.....	87
6. Indirect effect of promotion of mistrust on psychological distress through internalized racism. ....	88

## INTRODUCTION

The Asian population has been the fastest growing racial group in the U.S. between 2000 and 2015 (López et al., 2017). According to the 2017 Census (U.S. Census Bureau, 2019), approximately 6% of the total U.S. population identified as Asian or in combination with other races in 2017. Not only is the Asian population growing at a rapid rate, there is also a tremendous diversity in the culture and background within the Asian population in the U.S. The Asian population is composed of individuals with different cultural backgrounds and the following ethnic groups are examples of the largest groups within this population: Chinese (22.5%), Indian (19.8%), Filipino (18%), Vietnamese (9%), Korean (8%) and Japanese (7%) based on the U.S. Census Bureau 2019 data (U.S. Census Bureau, 2019). Furthermore, within this population, there is a large proportion of individuals who are not native born or U.S. citizens. It was estimated that in 2017 around 60% Asians in the U.S. were foreign born and around 24% Asians were not U.S. citizens (U.S. Census Bureau, 2019). Asians in the U.S. also differ based on the reasons or purposes of being in the U.S. For example, during 2017 to 2018 there were approximately 734,309 international students from Asian countries, which composed 69.2% of the total international students studying in the U.S. during this year (Institute of International Education, 2019).

Despite the Asian and Asian American population is growing rapidly, internalized racism tends to be neglected and understudied in the racial discrimination literature

across different disciplines among this population in the U.S. (Pyke, 2010a). Studies have shown that Asian and Asian Americans experience historical and contemporary oppression that involve institutional racism, personal mediated discrimination, and internalized racism (Alvarez & Helms, 2001; Lee & Ahn, 2011). A meta-analysis has shown the negative influences of personal mediated and institutional racism on the outcomes including self-esteem and psychological well-being of Asians in the U.S. (Lee & Ahn, 2011). However, little is known about the experience of internalized racism and its negative influences on outcomes such as self-esteem and psychological distress within Asian populations in the U.S. David et al. (2019) pointed out the paucity of research on internalized racism by conducting a search for “internalized racism” on PsycINFO which revealed much less results compared to searches for “racism” or “institutional racism.” The authors argued for a need for more research to better understand this phenomenon including what factors may influence internalized racism and its respective effects on different outcomes among various populations.

Internalized racism involves the process of a member from an oppressed racial group internalizing and accepting the negative racial messages or stereotypes about the oppressed held by the oppressor or the dominant culture (Jones, 2000). Internalized racism is a form of internalized oppression, specific to racial oppression that leads to experiences of endorsement of negative messages related to one’s own racial group, negative affect and attitude towards own groups, and low self-worth (Pyke, 2010a). Williams (2012) examined the internalization process of oppression in his theoretical review and identified that socialization and intergenerational transmission of what it means to be a member of a specific group are important parts of the internalization

process. Both intergenerational transmission and socialization of what it means to be a member of a specific group can take place in overt and/or covert interactions with one's immediate family or main care takers (Harro, 2010; Kellermann, 2001). The psychological, emotional, and behavioral components of internalized oppression can be transmitted through observations, modeling, and receiving direct or indirect messages from generations to generations, which can influence one's psychological experience. In other words, William argued intergenerational socialization of racial messages can be ways influencing one's experience with internalized racism and influencing psychological experiences indirectly. Some qualitative studies have examined the intergenerational socialization and transmission of what it means to be a member of a specific racial or ethnic group by investigating what and how messages are passed down from generations related to historical trauma such as the Holocaust and physical attractiveness among Holocaust survivors, American Indians, and African American families (Denham, 2008; Kellermann, 2001; Parmer et al., 2004).

Just like any other racial groups in the U.S., Asians and Asian Americans in the U.S. are constantly socialized about own and others' races through social interactions to learn to navigate in this racially diverse society (Juang et al., 2017). Socialization about one's race and ethnicity through family members can take place both directly and indirectly in Asian American families through activities, conversations, or indirect and nonverbal communications about own and others' cultures and races (Hughes et al., 2008). Based on the internalization process of oppression proposed by Williams (2012), one may speculate that intergenerational socialization of racial messages among Asian and Asian American families can affect the development or the maintenance of

internalized racism, influencing the psychological experience indirectly. However, based on a literature search, no study has examined the indirect effect of intergenerational ethnic-racial socialization on wellbeing outcomes through internalized racism among Asian and Asian American populations in the U.S. Tran and Lee (2010) further pointed out a need to understand the process of how intergenerational socialization messages related to race and ethnicity is internalized by the receivers. Suggested by Williams (2012), internalized racism may explain whether these messages related to race and ethnicity is internalized in a certain way that may lead to the experience of internalized racism, which further influence one's psychological experience indirectly. Based on my review, no study has examined internalized racism serving as a mediator explaining the indirect relation between ethnic-racial racialization and outcomes including self-esteem and psychological distress in this population.

As a result, the current study aims to pay close attention to the racial experiences of Asians in the U.S. by examining the relations among ethnic-racial socialization, internalized racism, and outcomes including self-esteem and psychological distress. I am specifically interested in examining the direct effects of different dimensions of ethnic-racial socialization (cultural socialization-pluralism, promotion of mistrust, and preparation for bias) on internalized racism, the direct effect of internalized racism on self-esteem and psychological distresses, and the indirect effect of ethnic-racial socialization on self-esteem and psychological distresses through internalized racism among Asians and Asian Americans in the U.S. Thus, I proposed six models which internalized racism mediates the indirect relations between three dimension of ethnic-racial racialization (cultural socialization-pluralism, promotion of mistrust, and



preparation for bias) and two separate outcomes including self-esteem and psychological distresses in this population.

I will first provide a review on the existing literature in racism with a focus on internalized racism including the theoretical conceptualization of internalized racism and the existing studies focusing on the different impacts of internalized racism on a variety of outcomes among Asian Americans. I will then review the existing frameworks examining the relation between socialization and one's perception of own race and ethnicity. Lastly, I will discuss the existing framework on ethnic-racial socialization and review studies investigating the different impacts of the three dimensions of ethnic-racial socialization on outcomes among Asians and Asian Americans.

## **Racism**

Researchers conducting studies on internalized racism have been conceptualizing internalized racism as one of the three levels of racism: the personal mediated level, the institutionalized level, and the internalized level (David et al, 2019; Jones, 1997, 2000; Pyke, 2010a; Speight, 2007). However, racism in the internalized level is often overlooked (David et al., 2019). This negligence of internalized racism is evident in other frameworks of racism. Carter's framework of racism (2007) and its review on existing studies placed a heavy emphasis on experiences with racial discrimination, racial harassment, and discriminatory harassment in the personal mediated and institutional levels without taking the internalized racism into consideration. Researchers critiqued this framework by arguing that it fails to incorporate a crucial piece of the picture of racism, which is the experience of internalized racism, to fully understand the process and the impacts of racism (Pyke, 2010a; Speight, 2007). In the next section, I will briefly

discuss studies on discrimination in these three different levels and transition to discussions about internalized racism in Asian Americans.

Jones (2000) proposed a framework that conceptualizes racism on three different system levels: personal mediated racism, institutionalized racism, and internalized racism. Jones presented this framework to raise new hypotheses and understandings to explain the different impacts of racism on individuals' physical and mental health. Personal mediated racism refers to the prejudice and discriminative treatments that one may experience from direct or indirect interactions with others such as coworkers, law enforcers, peers, teachers, or even strangers (Jones, 2000). Institutionalized racism refers to the unequal treatment of different races and ethnicities through limiting services, opportunities, and goods within a society (Jones, 2000). Internalized racism, the third level of racism, refers to the internalization and acceptance of the negative messages about one's own racial and ethnic group (Jones, 2000).

Existing studies on racism among Asian Americans tend to focus on examining the impacts of personal mediated racism on psychological outcomes. A meta-analysis (Lee & Ahn, 2011) examined a total of 23 studies that investigated the impact of experiences of racism on mental health and individual resources such as coping strategies, personal strengths, and cultural identity among Asian Americans and Asian international undergraduate and graduate students. They found a moderate association between racial discrimination and distress including depression, anxiety, and overall psychological distress ( $r = .23$ ). When conceptualizing and measuring one's experience of racism, many of the studies included in the meta-analysis (Lee & Ahn, 2011) mainly focused on individuals' perceived experiences with personal mediated racism in terms of

personal or vicarious experiences with stereotyping, microaggression, prejudice, and harassment in direct or indirect interactions with others. Similarly, in the 2015 annual review of research on Asian American psychology (Kiang et al., 2016), the reviewers pointed out that the majority of the existing studies on racism in Asian Americans focused on the psychological outcomes of perceived discrimination specific to the individual level such as microaggressions.

Some studies have incorporated the aspect of institutionalized level of racism when examining the experience of racism and its impact on psychological distress in this population. Cress and Ikeda (2003) investigated Asian American college students' perceptions of campus and institutional climates by directly asking the participants to reflect on their experiences with racism in the campus and institutional levels. They found that perceived discrimination against students based on their race, ethnicity, gender, sexual orientation, or disability at the institutional level predicted experiences with depression among students. Furthermore, Liang et al. (2004) incorporated experiences with historical and institutional racism as a subscale, Socio-Historical Racism, in their development of the Asian American Racism-Related Stress Inventory (AARRSI). Even though Liang et al. did not use the term, *institutionalized racism*, to name the subscale, the subscale captured the contextual racism related to social, political, and institutional inequity manifested in the larger societal context, which addresses the institutionalized level of racism discussed by Jones (2000). Miller et al. (2011) used the AARRSI composite score to measure racism-related stress, and they found that higher levels of AARRSI predicted higher levels of mental health issues measured by the Mental Health Inventory (MHI; Veit & Ware, 1983) among 367 Asians in the U.S. for both the

immigrant sample and U.S. born sample. Liang and Fassinger (2008) found similar results indicating that higher levels of AARRSI predicted more self-esteem problems. These studies suggest that institutionalized racism is incorporated into the conceptualization and measurement of racism.

However, internalized racism, the third level of racism, referring to the internalization and acceptance of the negative messages about one's own racial and ethnic group tends to be largely neglected and understudied in the racial discrimination literature across different disciplines among Asian Americans (David et al., 2019; Jones, 2000; Pyke, 2010a). The negligence of internalized racism is reflected in Carter's model (2007) of racism, which put a heavy emphasis on racial discrimination, racial harassment, and discriminatory harassment in the personal mediated, institutional, and cultural levels without taking the internalized racism into consideration. Speight (2007) pointed out Carter "overlooked a key piece of the puzzle necessary to fully assess the impact of racism," being internalized racism, which "might be even more damaging" (p 126). Speight asserted that racism goes beyond a discrete discriminatory act carried out by one perpetrator in one place at one time. What is missing in the literature of racism that helps to fully understand its impacts is the lack of investigation, conceptualization, and measurement of internalized racism (Speight, 2007). Consistently, other scholars also argued that the internalized racism tends to be lesser known as researchers have paid little direct attention to the conceptualization and definition of this concept (Liao, 2016; Rangel, 2014). Furthermore, Liao (2016) explicitly pointed out studies that directly examined internalized racism with a focus on Asian populations in the U.S. mainly took place in the past decades (David, 2010; David & Okazaki, 2006a; Pyke & Dang, 2003;

Shen et al., 2011). Therefore, the current study expands on the literature by shifting the focus from personal mediated racism and institutionalized racism to internalized racism. In the next section, I aim to provide a review on the existing conceptualization of internalized racism and the research on internalized racism specific to Asians and Asian Americans in the U.S.

### **Conceptualization of Internalized Racism**

Internalized racism (IR) is defined as the internalization and acceptance of the negative messages about one's own racial group (Jones, 2000). There is not a particular model of IR in the current literature that captures the entire IR experience, but several researchers have conceptualized IR through various perspectives (Jones, 2000; Liao, 2016; Pyke, 2010a). Jones (2000) theorized that IR involves an acceptance of the limitations of the full humanity, ability, and worthiness of oneself and co-ethnics as a result of the internalization of the schemas created by the oppressor and communicated through institutionalized and personally mediated racism. IR begins when the oppressed regards the schemas created and dictated by the dominant or allegedly superior group as the referencing point (Pyke, 2010a). This means that the oppressed group members are constantly building an understanding of the world and of themselves in relation to others based on the norms set by the dominant group. Examples of these schemas and norms may involve social roles, stereotypes, and beauty standards (Pyke, 2010a). Any attempts to reconstruct identities and meanings are restrained and challenged because one must do so according to the norms imposed by the dominant group (Pyke, 2010a). Through repetitive exposure to the schemas and norms created by the dominant group and communicated through institutionalized and personal mediated racism without much

freedom to challenge them, the oppressed members become the subordinated group, accepting and internalizing the messages, schemas, and norms created by the dominant and “superior” group (Speight, 2007). Therefore, theorists argue that internalization of the schemas involving messages and stereotypes of one’s racial group is a fundamental element of IR.

As a consequence, theorists further argued that IR functions as the mechanism that erodes the individual's sense of intrinsic value and worth and undermines the collective actions as a group, indicating a sense of inferiority, self-hatred, and negative attitudes towards one’s own ethnic or racial group (Jones, 2000; Jones & Carter, 1996). Jones and Carter (1996) argued that causing a sense of inferiority in the subordinate group is the central piece of racism and its various forms. Pyke (2010a) also conceptualized IR as the implantation of the negative messages about one’s own race, which leads to feelings of “self-doubt, disgust, and disrespect” for oneself and own group (p.553). These feelings are the core to IR as the purpose of racism and its form in IR is to corrode one’s evaluation of the self so that the “superior” are justified to subjugate the subordinated (Jones & Carter, 1996). Therefore, the diminished self-worth and sense of inferiority is theorized to be a key component of IR.

Another manifestation of IR involves the phenomenon referred to as “defensive othering” or “intra-group othering” which describes the process of denigrating co-ethnics who fit with the negative stereotypes of the group and wanting to become a part of the “superior” group (Liao, 2016; Pyke, 2010b). Two elements are involved in this process: disidentification from the stigmatized status by devaluing own culture and display of the assimilated status. As the subordinated live under the schemas and norms created by the

dominant, members from the subordinated are constantly making attempts to create and manage positive identities in relation to the meanings of these social schemas (Pkye & Dang, 2003). In order to maintain a positive self-identity, individuals may disidentify from the stigmatized status by creating distance from co-ethnics who fit with the stereotypes by devaluing own group or engaging in behaviors that cast doubt on their stigmatized status to display assimilation with the dominant group (Pkye, 2010b). “Intra-group othering” is an adaptive response to racism and the schemas created by the dominant group with a function of maintaining a positive concept of the self (Schwalbe et al., 2000). The “intra-group othering” is therefore theorized to be another key element of the IR process.

### **Studies on IR among Asian Americans**

After a review of the existing studies, I found a limited number of studies that directly measured and examined IR among Asians in the U.S. Moreover, as mentioned above, most of these studies were mainly conducted in the past two decades (David & Okazaki, 2006a; David, 2010; Pkye & Dang, 2003; Shen et al., 2011). Although the current literature on IR among Asians in the U.S. is scarce, empirical studies do provide support for the conceptualization of IR discussed above in this population. I will discuss the specific studies examining different themes or factors of IR among Asian Americans in the following section.

### ***Negative Affect and Attitude towards the Self and Own Group***

One key factor of IR, the eroded intrinsic value of self, characterized by a sense of inferiority, self-hatred, and negative affect and attitudes towards one’s own Asian ethnic identity and group is found in the IR studies among Asian Americans in the U.S. Osajima

(1993) examined IR among 30 Asian American college students in predominantly White colleges through interviews. Osajima found experiences of feelings of inferiority and negative affect towards own racial and ethnic group as an underlying theme of IR in the sample. Some participants disclosed endorsing negative affects related to being a member of own group and expressed feelings including shame, loathing, and hatred towards their own racial identities and groups.

In addition, the sense of inferiority and negative affects related to one's own group were also found to be factors in the Colonial Mentality Scale which was developed to measure colonial mentality among Filipino Americans (David & Okazaki, 2006b). David and Okazaki (2006a, 2006b) asserted that colonial mentality is a specific form of IR in the context of colonialism with the colonizer functioning as the oppressor, imposing negative messages of the colonized on themselves, which results in an internalization of senses of self-hatred and inferiority among the colonized. Millan and Alvarez (2014) also pointed out some of the aspects of colonial mentality among Filipino Americans can be expanded to the overall experience of IR in other groups of Asian Americans due to some overlaps of experiences as a result of colonialism and historical oppression by western countries. The overall negative affect and attitude including a sense of inferiority and negative affects towards self and own group was found among Filipino Americans (David & Okazaki, 2006a, 2006b). Furthermore, David and Nadal (2013) examined the experience of colonial mentality, internalized oppression as a result of colonialism, in six Filipino Americans who identified as first generation using a qualitative approach. David and Nadal found denigration and sense of inferiority related to the self, one's own



culture, and ethnicity to be common themes in their sample, which is consistent with previous findings (David & Okazaki, 2006a; 2006b).

Furthermore, one of the subscales in the Internalized Racism in Asian Americans Scale (IRAAS; Choi et al., 2017), Self-Negativity, also captures this component characterized by the negative attitude and affect towards own Asian American identity and other members in the group. Choi et al. (2017) found support using Exploratory Factor Analysis (EFA) and Confirmatory Factor Analysis (CFA) models for this subscale based on two samples (n=324 and 331) of Asian American individuals residing in the U.S with 53% being 2<sup>nd</sup> generation and 24% being 1<sup>st</sup> generation. In conclusion, negative affect and attitude towards self and co-ethnic members including sense of inferiority, denigration, and self-hatred, is a key component in IR among Asian Americans.

### ***Endorsement of Negative Stereotypes***

The acceptance and endorsement of the negative stereotypes assigned to Asian Americans is found to be another key factor as a component of IR among Asian Americans. In a qualitative study by Pyke and Dang (2003) that investigated intra-group othering through an IR framework in a total of 184 second generation Korean and Vietnamese immigrants in California, several participants demonstrated the endorsement of the common socially assigned stereotypes involving how Asians dress, speak, socialize, and attempt to achieve in academics. The study further showed that the participants did not only accept the stereotypes related to their group and co-ethnics but also endorsed the socially constructed meanings created and attached to the stereotypes by engaging in intra-ethnic othering. Pyke and Dang (2003) further examined the usages of terms such as “Fresh off the Boat” and “whitewashed” in their sample. They found that

participants used these terms to denigrate co-ethnic peers who fit with the negative stereotypes and to differentiate the self from the stigmatized status. Pyke and Dang argued that the “intra-ethnic othering” phenomenon found in their sample are attempts to resist the stigmatized status as a result of the internalization of the negative stereotypes and inferiority of the stigmatized.

Similarly, another qualitative study by Pyke (2010b) examined internalization and endorsement of racial stereotypes of Asian men among 128 second-generation Korean and Vietnamese American women. Participants in the study demonstrated internalized negative stereotypes of Asian men and over-generalization of deficits of individual Asian males, such as male dominance, to all Asian males, which further impacted participants’ dating and social choices and experiences (Pyke, 2010b). Pyke (2010b, p 88) found that, instead of seeing male dominance as a characteristic for gender inequality that can exist across different racial groups, some participants endorsed and internalized characteristics such as male dominance as an undesirable “racialized feature of Asian masculinity” and overlooked some Asian American men’s commitment to gender equality. As a result, some participants engaged in denigration of Asian American men and perceived them as inferior and dominating due to the stereotype. At the same time, some participants overlooked the same undesirable characteristic, male dominance, in white men, and moreover idealized the same behaviors and characteristics as desirable. Similarly, Pyke and Johnson (2003) also examined internalized oppression in relation to forms of gender in interviews with one hundred female descents of Korean and Vietnamese immigrants. Pyke and Johnson reported that respondents generally constructed the Asian and Asian American culture as uniformly patriarchal with the characteristic of being resistant to

change whereas the mainstream white American culture as the prototype of gender equality. Thus, the respondents categorized Asian and Asian American women and white women representing the two opposites: female oppression and gender equality. Participants' responses indicated that Asian and Asian American women were constructed as submissive and passive, suggesting female oppression, whereas white women were constructed as assertive, independent, and confident, suggesting hegemonic femininity. These responses did not only indicate internalization of these stereotypes of Asian women but also suggested a hierarchy between the two groups, perceiving Asian and Asian Americans as the oppressed and being lower on the hierarchy. These researchers pointed out the internalization of these negative stereotypes and seeing co-ethnic as less are a part of the internalized oppression experience (Pyke & Johnson, 2003; Pyke, 2010b).

Besides these qualitative studies examining internalization of negative stereotypes in Asian Americans, this aspect of IR was also incorporated as one of the subscales in the measurement for IR, IRAAS (Choi et al., 2017). The subscale, Weakness Stereotypes, is characterized by the endorsement of negative stereotypes related to being an Asian American such as "Asians tend to be socially awkward" or "Asians tend to be passive". In summary, the acceptance and endorsement of negative stereotypes are incorporated as a part of IR in Asian Americans.

### ***Endorsement of Eurocentric Physical Characteristics***

Another component of IR found in Asian Americans is the endorsement of Eurocentric standards of physical attractiveness. Kawamura and Rice (2009) pointed out the desire to have more Eurocentric phenotypes such as bridged nose and double eyelids

among Asian Americans. The authors further suggest that this desire might be related to IR indicating a rejection of one's own racial identity and a desire to look more similar to the dominant beauty standard characterized by the Eurocentric phenotypes. Consistent with the discussions of Kawamura and Rice, Chin Evans and McConnell (2003) found that Asian women are more likely to endorse U.S. mainstream/White beauty standards with Eurocentric characteristics and as a result tend to experience greater body dissatisfaction and poorer body image compared to Black women in a sample of 54 Asian women, 52 Black women, and 64 White women recruited on a U.S. campus. The authors suggested that internalization of White standards of beauty might explain Asian women's lower ratings of body image.

The endorsement of Eurocentric physical characteristic and negatively comparing Asian physical features against the Eurocentric phenotypes is found to be a factor in the colonial mentality literature among Filipino Americans (David & Okazaki, 2006b). The items in the Physical Characteristics subscale in the Colonial Mentality Scale involve a preference for Eurocentric physical features such as bridged nose and lighter skin tone. Consistently, Choi et al. (2017) also provided support for the endorsement of Eurocentric physical characteristics as a factor in their model of IR and included the factor as a subscale in the IRAAS. The items in the subscale reflect a global preference for Eurocentric physical appearance.

### **Impacts of IR on Self-esteem and Psychological Distress among Asian Americans.**

One of the key manifestations of IR is a diminished sense of intrinsic value and worth and a sense of inferiority (Jones, 2000; Pyke, 2010a). Findings of studies on IR and Colonial Mentality, which is a specific form of IR, among Asian Americans provided

support for the theory, indicating an adverse association between IR and constructs related to self-worth such as self-esteem. Filipino Americans who exhibited internalized inferiority, negative affect towards own group, within-group discrimination, and preference for Euro-centric physical features were more likely to have lower levels of personal self-esteem and private and public regards in collective self-esteem (David & Okazaki, 2006b). In a study examining covert and overt colonial mentality among Filipina Americans, David (2010) found significant negative correlations between internalized inferiority and collective and personal self-esteem. Similarly, Choi et al. (2017) found that IR as a composite factor was associated with higher depressive symptoms and lower collective self-esteem in a total sample of 655 Asian Americans with 24% of the sample being 1<sup>st</sup> generation Asian Americans. These studies provide support for the negative impact of IR on self-esteem among Asian Americans.

In addition, IR has been shown to have negative impact on psychological distress among Asian Americans in the literature of IR and Colonial Mentality. David and Okazaki (2006b) found that all dimensions of colonial mentality have a positive association with depression in their sample of Filipino Americans, indicating that higher levels of colonial mentality predict higher depressive symptoms. In a follow-up study conducted by David (2008), colonial mentality as an omnibus construct better explained depression symptoms among Filipino Americans compared to other factors including ethnic identity, self-esteem, and enculturation. David and Nadal (2013) also found that colonial mentality as an omnibus construct to be significantly related to depressive symptoms and accounted for 7.6% of the variance in explaining depressive symptoms when controlling for participants' income, educational level, experience of racism, and

racism-related stress appraisals in a sample of 219 Filipino Americans who identified as first generation.

These findings on IR are consistent with the literature on other minority populations in the U.S. Campón and Carter (2015) found that IR is positively associated with depression and anxiety and negatively associated with self-esteem among a sample of 341 adults composed of a variety of racial minorities including Black, Asian/Pacific Islander, Latino/a or Hispanic, and Native Americans. As a result, the findings of these studies provide support for the theoretical conceptualization of IR indicating IR negatively impacts self-esteem and psychological distress among Asian Americans. Therefore, based on the existing research, self-esteem and psychological distress including experiences with anxiety and depression will be incorporated in the current study as the outcomes.

Furthermore, to the author's knowledge, no existing study has examined IR and its impacts among other groups of Asians who do not identify themselves as Americans in the U.S. For example, Asian international students or graduates who are currently in the workforce are often neglected in research even though they might also experience IR during their stay in the U.S. Therefore, the current study also contributes to the existing research by expanding research on experiences of IR among different groups of Asians in the U.S.

### **Ethnic-Racial Socialization and Ethnic/Racial Identity Development**

With an intention of examining the direct effects of IR on self-esteem and psychological distress among Asians in the U.S., another goal of the current study is to examine the direct impacts of ethnic-racial socialization on the experience of IR. After

reviewing the existing literature, there remains a paucity of research examining the factors that may impact the experience of IR. Millan and Alvarez (2014) further pointed out the need to investigate and expand our understanding of the factors impacting the process of IR.

### ***Theoretical Frameworks***

Williams (2012) pointed out that socialization and intergenerational transmission of racial messages from parents to children can be key factors impacting how beliefs, attitudes, values, perspectives, affects, and assumptions about one's own group are maintained and challenged. Similarly, Harro (2010) proposed that socialization with family members or care takers is one of the key means of socialization that shapes our perceptions of different group identities, which Harro described as the "first socialization" in the Cycle of Socialization (p 46). Kellermann (2001) further described the different processes of socialization and transmission of trauma among Holocaust survivors. Kellermann discussed that overt messages such as "Don't trust anybody!" transmitted in socialization through parenting and modeling can influence one's perception of self, psychological distress, and interpersonal functioning. In short, an individual's identity and perception related to own group can be influenced by the messages that are communicated and transmitted through intergenerational socialization.

In addition to intergenerational socialization theories, theories related to ethnic identity further suggest that ethnic/racial identity development can influence one's self-concept and self-esteem (Phinney, 1991). Derived from the Erikson's theory of ego development (1968) and Marcia's identity statues (1966), Phinney (1989) examined ethnic identity as a continuum with high ethnic identity as strong self-identification,

positive evaluation, high involvement, and commitment to own ethnic group and low ethnic identity as low self-identification, negative evaluation, little involvement, or commitment to own ethnic group. In addition, Phinney argued that the different levels of ethnic identity can influence one's self-esteem and concept, but only for individuals who perceive their ethnicity as a salient factor.

Based on these theoretical frameworks, one can argue that intergenerational socialization specifically related to race and ethnicity can influence one's perception of own racial and ethnic group including the experience of IR, which involves the internalization of the negative messages about one's own racial group, and can influence one's self-esteem and psychological well-being indirectly.

### ***Ethnic-Racial Socialization and Ethnic Identity***

Even though few studies directly examined the relation between ethnic-racial socialization and IR, a number of studies have examined different characteristics of socialization about racial messages and its influence on one's perception including attitudes and emotions towards own racial and ethnic groups (Denham, 2008; Kellermann, 2001; Parmer et al., 2004; Priest et al., 2014; Quintana & Vera, 1999). Quintana and Vera (1999) examined the relations between parental ethnic socialization and ethnic identity (ethnic knowledge and ethnic behavior) and ethnic prejudice among 47 Mexican American children. They found that parental ethnic socialization and discussion about ethnic discrimination were positively associated with children's development of ethnic knowledge about own culture. However, inconsistent with what they expected, parental racial-ethnic socialization about discrimination was not found to be associated with children's understanding of ethnic prejudice or ethnic behaviors.



However, Umaña-Taylor and Fine (2004) found that familial ethnic socialization was positively related to ethnic identity achievement entailing exploration and commitment toward one's ethnic group, active ethnic behaviors, and positive feelings towards own ethnic group among 1065 Mexican origin adolescents. The findings of these studies indicate that ethnic-racial socialization may have an impact on individuals' beliefs and feelings about own racial group and ethnic identity.

A meta-analysis conducted by Huguley et al (2019) specifically evaluating the impact of parental ethnic-racial socialization practices on the construction of one's ethnic-racial identity among children of color further provides evidence for the argument that ethnic-racial socialization has an impact on one's development of ethnic identity. The authors found a moderate effect size ( $r = .18$ ) between global ethnic-racial socialization and global ethnic-racial identity based on a meta-analysis of sixty-eight studies that evaluated the association between parental ethnic-racial socialization and ethnic racial identity among non-adopted U.S. based Latinx, African American, and/or Asian American individuals with range of age between kindergarten and college ages. Among the sixty-eight studies included in the meta-analysis, Huguley et al. (2019) reported that 627 separate correlation estimates were found with 83 studies measuring and using a global score for ethnic-racial socialization and 544 using specific dimensions of ethnic-racial socialization including cultural socialization-pluralism, preparation for bias, and promotion of mistrust. Based on the meta-analysis, Huguley et al. argued that parental ethnic-racial socialization practices tend to cultivate a strong sense of racial-ethnic identity leading to positive attitudes and feelings about own racial group. In addition, the authors examined the relationships between different dimensions of ethnic-

racial socialization and ethnic-racial identity, which will be discussed in more detail later. In conclusion, these findings indicate that intergenerational socialization about race and ethnic influences one's identity related to being a member of a specific racial and ethnic group.

### ***Ethnic-Racial Socialization and IR***

Specifically related to IR, Parmer et al. (2004) examined how Eurocentric physical characteristic standards including facial features, skin color, hair texture, and body size are transmitted and socialized across multiple generations through the process of internalized racism among African American families. In their article (Parmer et al., 2004), receiving overt and covert messages devaluing African American physical features and capturing a preference for lighter skin color, light eye colors, straight hair, or a certain body size, or observing actions or intentions to change one's physical appearance to fit with the dominant beauty standards in one's family can influence the experience of internalized racial oppression among African American families, influencing individuals' psychological outcomes. The study implies that internalized racism may explain the relation between Ethnic-racial socialization (ERS) and psychological outcomes.

However, few studies have directly explored how interactions and communications involving messages related to race and ethnicity with others such as family members might impact the experience of IR among Asian populations in the U.S. (Pyke, 2010a). Therefore, the current study is also interested in investigating how these sociocultural communications about race, ethnic-racial socialization, impact on one's attitudes and affect related to being a member of a specific racial group. More

specifically, the current study examines the direct effects of racial-ethnic socialization on the experience of IR among Asian Americans. The next section will focus on discussing the existing research on the conceptualization, dimensions, and impacts of ethnic-racial socialization among Asian Americans.

### **Ethnic-Racial Socialization**

Ethnic-racial socialization (ERS) refers to the messages and processes of providing information and creating meanings about one's ethnic and/or racial status in relation to one's own identity and other groups in the larger society (Hughes et al., 2006). The practice of ERS has mostly been studied in the parent and family context, where typically the socializing agents are parents and family members and the receiving agents are children and youth. Studies on parental and familial ethnic-racial socialization tend to focus on examining the message content about race and ethnicity and the overt and covert processes of transmitting the message from adults to children and youth at home (Hughes et al., 2006; Umaña-Taylor & Fine, 2001).

#### ***ERS Conceptualization Model/Dimensions***

Based on a review by Juang et al. (2017), studies on Asian American populations have commonly conceptualized and measured ERS based on the model proposed by Hughes and Chen (1997) and advanced by Hughes et al. (2006). Hughes et al. (2006) integrated the existing literature and proposed a central framework for ERS that consists of four empirically-studied content domains including cultural socialization, preparation for bias, promotion of mistrust, and pluralism-egalitarianism. *Culture socialization* refers to engaging in messages of cultural history and heritage that helps to promote understanding and pride in one's culture, tradition, and history. *Preparation for bias*

refers to messages that bring awareness to the existence and impact of racial biases, barriers, and discrimination in the society. *Promotion of mistrust* refers to messages that promote warnings and guardedness about interracial interactions. *Pluralism-egalitarianism* refers to messages that promote awareness of other racial and ethnic groups and emphasize equality and equity among these groups.

At the same time, researchers have argued that the majority of research on the ERS model tends to focus on African Americans and may fail to incorporate the unique experience ERS has among Asians in the U.S. (Juang et al., 2017; Tran & Lee, 2010). The *promotion of mistrust* in the old model developed by Hughes and Chen (1997) was initially conceptualized as promoting mistrust against the dominant white culture, which automatically assumes and emphasizes the Black-versus-White race relation without conceptualizing racial mistrust in a larger social and cultural dynamic that involves interactions among a diverse body of racial and ethnic groups in the U.S. Furthermore, limited evidence supports the validity and reliability of the model and its related measurement on Asian populations (Juang et al., 2017). Tran and Lee (2010), one of the few studies that examined and modified this model for Asian Americans, found support for three dimensions: (a) preparation for bias with an internal reliability estimate of .85; (b) cultural socialization-pluralism with an internal reliability estimate of .80; and (c) promotion of mistrust with an internal reliability estimate of .74. The researchers found that each dimension of ERS has different impact on outcomes such as social competence in their sample of Asian American college students with the majority (57.2%) born in the U.S. They found that perceived level of promotion of mistrust has a negative association with social competence among Asian American college students. Cultural socialization-

pluralism was found to have an indirect relation with social competence through ethnic identity in this population. However, they did not find any significant association between preparation for bias and social competence among Asian American college students.

Tran and Lee (2011) further found support for the three-factor model in a sample of 146 incoming undergraduate students who identified as Asian Americans with the majority of the sample being U.S. born (61.6%). They used an exploratory factor analysis that resulted in a three-factor solution: cultural socialization-pluralism with an internal reliability estimate of .72, preparation for bias with an internal reliability estimate of .82, and promotion of mistrust with an internal reliability estimate of .89. Consistent with the findings of Tran and Lee (2010), Tran and Lee (2011) also found that promotion of mistrust to be negatively related to social competence. In addition, Tran and Lee (2011) reported a positive association between cultural socialization-pluralism and same-race friendships and a marginal association between cultural socialization-pluralism and cross-race friendships. Moreover, preparation for bias was found to be positively associated with cross-race friendships, suggesting that preparing for intergroup social interactions may enable individuals to better manage cross-racial relationships. Furthermore, among individuals who reported receiving high levels of proportion for bias, a positive significant relation between cross-race friendships and social competence was found by Tran and Lee (2011). In conclusion, the three-factor model of ethnic-racial socialization has been tested in the Asian American population in some studies. The next section will mainly focus on discussing findings related to each specific dimension of the ethnic-racial socialization in Asian Americans.

## **Each Dimension of ERS and Outcomes in Asian Americans**

### ***Culture Socialization/Pluralism***

Studies have consistently shown positive impacts of cultural socialization-pluralism on a variety of outcomes. In the meta-analysis by Huguley et al. (2019), a positive association between cultural socialization and ethnic identity was found with a moderate effect size of .23 in a total of sixty-eight studies that examined association between parental ethnic-racial socialization and ethnic racial identity among non-adopted U.S. based Latinx, African American, and/or Asian American individuals.

Cultural socialization-pluralism also has been found to have positive effects on other outcomes including ethnic and American identity (Daga & Raval, 2018; Gartner et al., 2014), affirmation/belonging to one's ethnic group (Daga & Raval, 2018), social competence (Tran & Lee, 2010, 2011), and school engagement (Seol et al., 2016) among Asian Americans. Furthermore, cultural socialization-pluralism was found to be negatively associated with depression in a sample of 670 African American (21.2%), Latino (41.0%), and Asian American (37.8%) young adults (Liu & Lau, 2013). Liu and Lau (2013) reported that among all the Asian American participants, 26.3% were first generation, 66.5% were second generation, and 7.2% were third generation. They also reported that this association was not significantly different across racial/ethnic groups in their study.

Similarly, Atkin et al. (2019) investigated cultural socialization-pluralism as a moderator on the relation between racial discrimination and psychological distress measured using the 21-item Hopkins Symptoms Checklist (Green et al., 1988) in a sample of 187 Asian American adolescents with the majority (70%) being U.S. born.

Atkin et al. found that for adolescents reporting low frequencies of cultural socialization-pluralism, experiences with racial discrimination was positively associated with higher levels of psychological distress. These findings indicate a consistent message suggesting that cultural socialization-pluralism is a protective factor.

Besides studies that showed support for cultural socialization-pluralism directly leading to positive outcomes, some studies also focused on examining the indirect impact of cultural socialization-pluralism on outcomes including self-esteem (Brown & Ling, 2012) and psychological well-being (Nguyen et al., 2015) through ethnic identity as a mediator. Specifically, Brown and Ling (2012) proposed a mediation model that examined the indirect positive effect of cultural socialization-pluralism on self-esteem through ethnic identity among 114 Asian American emerging adults (i.e., ages 18 to 25) with the majority (82%) being first-generation. They found that ethnic identity mediated a positive association between parental cultural socialization-pluralism and self-esteem. The finding of their study suggested that higher frequencies of perceived messages about cultural socialization-pluralism have an indirect effect on higher levels of self-esteem through ethnic identity. Similarly, Nguyen et al. (2015) examined the indirect positive effect of family cultural socialization on psychological well-being measured by the Questionnaire for Eudaimonic Well-Being (QEWB; Waterman et al., 2010) through ethnic identity as a mediator in a sample of 970 Asian American college students. Sixty-four percent of the participants reported that they were born in the U.S. The authors also found support for the mediation model, suggesting that having a higher frequency of perceived messages about cultural socialization has an indirect effect on higher levels of psychological well-being through ethnic identity. In conclusion, these findings,

expanding on studies only examining the direct effect of cultural socialization-pluralism, further support an indirect positive effect of cultural socialization-pluralism on self-esteem and psychological well-being through ethnic identity among Asian Americans.

### ***Promotion of Mistrust***

Studies examining the effects of promotion of mistrust have generally shown that it tends to predict negative adjustment outcomes. Promotion of mistrust has been found to have negative effects on social competence (Tran & Lee, 2010; 2011) and academic achievement among adolescents from Chinese, Mexican, and European backgrounds (Huynh & Fuligni, 2008). Moreover, higher levels of promotion of mistrust have been found to be associated with higher levels of model minority pressure and adjustment issues and lower levels of life satisfaction among South Asian American emerging adults (Daga & Raval, 2018). In addition, Liu and Lau (2013) found promotion of mistrust to be positively associated with depression across the three ethnic samples in their study: African American, Latino, and Asian American young adults.

Even though the relation between promotion of mistrust and ethnic racial identity were significant in the meta-analysis by Huguley et al. (2019), other studies showed a negative relation between promotion of mistrust and ethnic identity among Asian American populations (Gartner et al., 2014). Gartner et al. (2014) found that promotion of mistrust to be negatively associated with ethnic identity in a final sample of 147 Asian American adolescents residing in U.S. Furthermore, Gartner et al. pointed out that this association was stronger for participants born outside of the U.S. in their study. The researchers further examined the indirect association between promotion of mistrust and self-esteem through ethnic identity as a mediator. The finding provided support for the



mediation relation, suggesting that greater promotion of mistrust may indirectly lead to lower self-esteem through the negative association between promotion of mistrust and ethnic identity.

Studies also have examined promotion of mistrust as a moderator influencing the relation between discrimination and self-esteem and psychological well-being (Atkin et al., 2019; Kim et al., 2017; Thai et al., 2017). Atkin et al. (2019) found that promotion of mistrust was positively related to general and somatic distress in a sample of 217 Asian American adolescents with the majority being U.S. born (70%). Furthermore, for participants who reported high level of promotion of mistrust, the positive relation between racial discrimination and psychological distress was significant, suggesting promotion of mistrust may be a risk factor. Thai et al. (2017) also found promotion of mistrust to be negatively correlated with individual self-esteem, and public and private self-esteem in a sample of 87 Asian American emerging adults from 18 to 29 years old with 16% participants being first generation immigrants. Thai et al. also examined promotion of mistrust as a moderator influencing the relation between racial microaggressions and self-esteem. However, inconsistent with the findings by Atkin et al., Thai et al. found that, when participants reported low and moderate levels of promotion of mistrust, there was a significant negative relation between racial microaggression and individual self-esteem. However, when participants reported high levels of promotion of mistrust, the negative relation was no longer significant. Thai et al. discussed that receiving greater promotion of mistrust might lead marginalized individuals to attribute experiences of racial discrimination to others instead of internalizing the negative experiences as own deficits. In summary, promotion of mistrust

has generally been shown to have negative impacts on outcomes including ethnic identity, distress, adjustment, and life satisfaction even though some studies provided mixed findings about promotion of mistrust.

### ***Preparation for Bias***

Studies on preparation for bias and a variety of outcomes have shown less consistent findings compared to the other two dimensions of ERS. Huguley et al. (2019) found that preparation for bias to be positively related to ethnic-racial identity with a small effect size ( $r=.08$ ). At the same time, the authors pointed out the findings on preparation for bias and ethnic-racial identity ranged widely and require a more nuanced examination of this association. Preparation for bias also has been found to be positively related to higher ethnic exploration and higher behavioral engagement in ethnic behaviors among 170 mother adolescent pairs with 36% of the participants being Black, 29% being Latino, and 34% being Chinese Americans (Hughes et al., 2009).

On the other hand, other studies found preparation for bias to have negative effects on a variety of outcomes including model minority pressure and adjustment issues among South Asian Americans emerging adults (Daga & Raval, 2018), general and somatic distress among Asian American adolescents (Atkin et al., 2019), and experience of cultural misfit in the U.S. among Chinese American adolescents (Benner & Kim, 2009). Furthermore, Liu and Lau (2013) found preparation for bias to be positively associated with depression across all three different racial groups: African American, Latino American, and Asian American, in their sample.

Some studies also showed that the impacts of preparation for bias are more complex than being black and white. Rivas-Drake et al. (2009) examined the relation

between preparation for bias and different aspects of ethnic identity including ethnic centrality, private regard, and public regard among a sample of 308 sixth graders with 19% self-identifying as Black, African American, or of African descent, 12% as Puerto Rican, 9% as Dominican, 28% as Chinese American, and 32% as White. About 50% of all the participants identified as children from immigrant families. They found that preparation for bias was only significantly associated with negative public regard but not ethnic centrality or private regard in their hierarchical regression models. In addition, they found an interaction between preparation for bias at home and experience with discrimination by adults at school. For participants who reported greater experience with discrimination by adults at school, higher preparation for bias led to more negative public regard compared to those who reported less experience with discrimination. Interestingly, Seol et al. (2016) found that preparation for bias has a curvilinear relationship with school engagement among adopted and nonadopted Korean American adolescents. They showed that a moderate level of preparation for bias was associated with positive school engagement whereas low or high levels were associated with negative school engagement. These studies indicate that preparation for bias may have non-linear relations with various outcomes.

At the same time, other studies did not find any significant relation between preparation for bias on outcomes including social competence among Asian American undergraduate students (Tran & Lee, 2010; 2011) and ethnic identity (Tran & Lee, 2010). Atkin et al. (2019) did not find preparation for bias to be a significant moderator affecting the relation between experience with racial discrimination and psychological distress. Thai et al. (2017) also did not find support for preparation for bias as a moderator of the

association between experience with racial microaggressions and self-esteem. These findings showed a mixed result of the impacts of preparation for bias in Asian Americans.

In conclusion, studies have examined different impacts of different dimensions (cultural socialization/pluralism, promotion of mistrust, and preparation for bias) within ERS on a variety of outcomes including ethnic identity, aspects of well-being such as self-esteem, sense of belonging, school engagement, and adjustment, and psychological distress among Asian American adolescents, emerging adults, and families. However, no study has investigated how each dimension of ERS directly impact the experience of IR among Asian American or Asian adults currently residing in the U.S., which can potentially affect outcomes including self-esteem and psychological distress. As a result, the current study also aims to expand the literature by directly examining the impacts of different dimensions, cultural socialization/pluralism, promotion of mistrust, and preparation for bias, within ERS, on the experience of IR with a specific focus on Asian and Asian American adults.

### **Current Study**

Even though studies have examined the respective influences of IR and ERS on self-esteem and psychological distresses, no study has directly investigated the relations among these constructs using an integrated model as discussed in the literature review. Therefore, the current research addressed: (a) the influences of the three dimensions of ERS (cultural socialization-pluralism, promotion of mistrust, and preparation for bias) on the experience of IR among Asians in the U.S.; (b) IR's influence on self-esteem and psychological distress among Asians in the U.S.; and (c) ERS's indirect influence on the

two outcomes (i.e., self-esteem and psychological distress) through IR as a mediator among Asians in the U.S. This researcher proposed six models where IR mediates the indirect relations between three dimensions of ERS (cultural socialization-pluralism, promotion of mistrust, and preparation for bias) and two outcomes, (i.e., self-esteem and psychological distress) respectively. Studies using mediation analysis across different fields typically use a parsimonious approach that examines interested outcomes in separate models instead of investigating all outcomes in one model (Nguyen et al., 2015; O'Rourke & Vazquez, 2019; Ma & Wu, 2019). As a result, in order to closely examine the effects of ERS and IR on each outcome in this current study, six separate mediation models were investigated.

Based on the existing literature in IR and ERS among Asian Americans, the current researcher proposed six hypotheses addressing the relations among IR, ERS, and self-esteem and psychological distresses. IR tends to have negative influences on one's self-esteem and psychological distress among Asian Americans (Choi et al., 2017; David & Okazaki, 2006a, 2006b). At the same time, the ERS literature indicates that cultural socialization/pluralism tends to lead to positive outcomes such as positive perception of and attitude towards one's ethnicity and race, greater self-esteem and lower psychological distress whereas promotion of mistrust tends to have a negative influence on these same outcomes (Juang et al., 2017). However, studies showed mixed findings related to the influence of preparation for bias among Asian Americans (Juang et al., 2017). Based on the previous studies, the current researcher proposed the following hypotheses:

1. Perceiving more frequent messages of cultural socialization/pluralism from parents will indirectly lead to a higher level of self-esteem through a lower level of internalized racism (see *Figure 1. a*).
2. Perceiving more frequent messages of promotion of mistrust from parents will indirectly lead to a lower level of self-esteem through a higher level of internalized racism (see *Figure 1. b*).
3. Perceiving more frequent messages of preparation for bias from parents will indirectly lead to a lower level of self-esteem through a higher level of internalized racism (see *Figure 1. c*).
4. Perceiving more frequent messages of cultural socialization/pluralism from parents will indirectly lead to a lower level of psychological distress (depression/anxiety) through a lower level of internalized racism (see *Figure 2. d*).
5. Perceiving more frequent messages of promotion of mistrust from parents will indirectly lead to a higher level of psychological distress (depression/anxiety) through a higher level of internalized racism (see *Figure 2. e*).
6. Perceiving more frequent messages of preparation for bias from parents will indirectly lead to a higher level of psychological distress (depression/anxiety) through a higher level of internalized racism (see *Figure 2. f*).

## METHOD

### Participants

A total of 283 individuals who are 18 years old and above currently residing in the United States participated in the online survey through Qualtrics. Three (1%) participants identified as White and Hispanic and were excluded from the sample as this study focuses on examining individuals who identify as Asian or Asian American. Fourteen (5%) participants selected wrong responses to the question “Please select ‘Disagree’ for this question,” which asks participants to select a specific response choice “disagree” and therefore were removed from the sample to reduce and control for common methods variance (CMV). Five (2%) participants identified as non-binary and selected “prefer not to disclose” for gender. These responses were also removed since there were not enough data in these gender categories to compare with other categories. Sixteen additional data points with outliers above 3 standard deviations from the mean were removed, and these data points are from variables including age and ethnic racial socialization. The final data set consisted of 245 participants identified as Asian and Asian American adults currently residing in the U.S. after removing data points mentioned above.

The mean age of the sample was 24 ( $SD = 5.07$ ) with a range of 18 to 41, and the majority of the participants identified as female (74%). Forty four percent of the participants identified as U.S. citizen-born in the U.S., 13% identified as U.S. citizen-naturalized, 6% identified as being permanent residents, 34% identified as staying in the U.S. through student or work visa, 3% identified as “Other” for a citizenship status not

listed above, and 0.4% did not disclose. Among the participants who did not identify as a U.S. citizen-born in the U.S, the mean length of stay in the country was 5.8 years ( $SD = 4.42$ ). In terms of education, 0.4% reported completing some high school education, 16% reported completing high school or obtaining G.E.D degrees, 31% reported completing some college or community college education, 22% reported completing college degrees, 23% reported completing master level education, and 21% reported completing doctoral or professional education.

### **Procedures**

Participants who are 18 years old and above and identify as Asians currently residing in the country of United States were recruited to fill out an online survey hosted on Qualtrics. The link to the survey was distributed through social media outlets such as Facebook, WeChat, Instagram, and Twitter. The link to the survey also was distributed through different community and/or institutional listservs that tend to be subscribed by Asian Americans or Asian communities in the U.S. In addition, snowball sampling was used to disseminate the study by encouraging individuals to forward the survey information and link to potential eligible participants.

Participants were informed of the purpose and nature of the study which were included in the informed consent before starting the online survey. Participants were given the choice to be a part of the lottery system where ten participants were randomly picked to each receive an Amazon gift card worth \$10 value as incentives. Participants who were willing to participate were asked to provide their email addresses at the end of the study. Identifying information for the raffle was separated from the survey responses to ensure anonymity. Participants who did not wish to participate in the raffle and/or



chose not to provide their emails for the raffle were still able to participate in the study. The current researcher used a random number generator application online to randomly select ten participants as the lottery winner after the recruitment of participants was completed. The current researcher purchased ten online Amazon gift cards which were sent to the lottery winners electronically.

### **Measurements**

The survey consisted of five sections: demographic information (i.e., age, gender, socioeconomic status, years in the U.S., education, immigration and generation status), ethnic-racial socialization, ethnic identity, internalized racism, self-esteem, and anxiety and depressive symptoms. In addition, one 6-point Likert scale item “to what extent has your life been impacted by COVID?” ranging from 1 (*Not at all*) to 6 (*To a very great extent*) was created to assess and control for any impact of COVID-19 experienced by participants.

### ***Ethnic Identity***

The *Multigroup Ethnic Identity Measure – Revised (MEIM-R)*; Phinney & Ong, 2007), a 6-item scale, was used to measure participants’ exploration and commitment related to their identity background. The scale utilizes a 5-point Likert response option, ranging from 1 (*Strongly Disagree*) to 5 (*Strongly Agree*), with higher values indicating higher levels of ethnic identity exploration and commitment. Some example items of the scale include “I have a strong sense of belonging to my own ethnic group,” “I feel a strong attachment towards my own ethnic group,” and “I have often talked to other people in order to learn more about my ethnic group.” Phinney & Ong (2007) found support for a two-factor structure with two subscales with a high correlation of .74

between the two subscales, and the authors suggested calculating two sub-scores or one unidimensional score are both acceptable. Good reliabilities were found in the sample by Phinney & Ong (2007) with Cronbach's alphas of .76 for exploration and .78 for commitment, and a Cronbach's alpha of .81 for the combined 6-item scale. For the current study, a total mean score averaged from all responses of the 6 items was calculated and used. The Cronbach's alpha for the scale based on the 5 imputed data was .82.

### ***Internalized Racism***

The *Internalized Racism in Asian Americans Scale* (IRAAS; Choi et al., 2017), a 14-item scale, was used to measure participants' levels of internalized racism (IR) among Asians in the U.S. Participants were asked to indicate the endorsement level on each statement on a 6-point Likert scale ranging from 1 (*Strongly Disagree*) to 6 (*Strongly Agree*), with higher values indicating higher levels of IR. The instruction included in the scale encourages participants to consider a full range of Asian and Asian Americans in the U.S. when seeing the term Asian. The scale consists of three dimensions: Self-Negativity, Weakness Stereotypes, and Appearance Bias, and bifactor modeling showed support for the use of a composite score of the scale as a single construct (Choi et al., 2017). Therefore, a total mean score averaged from all responses of the 14 items was calculated as suggested by Choi et al. (2017). Some example items of the scale include "I sometimes wish I weren't Asian," "Asians are less physically attractive than Whites," and "Asians tend to be socially awkward." Good psychometrics properties including predictive validity and convergent validity were found in a sample of 331 Asian Americans (Choi et al., 2017). Choi et al. (2017) reported a  $W_H$  of .82, which is the factor

analytic model-based reliability estimates for the general factor. The Cronbach's alpha for the scale based on the 5 imputed data was .85.

### ***Ethnic-Racial Socialization***

*Perceived Ethnic–Racial Socialization Scale* (Tran & Lee, 2010), adapted from scale items in Hughes and Johnson (2001), was used to measure the presence and frequency of perceived ERS in interactions with participants' parents in the past 12 months. This 16-item scale assessed participants' perceptions of parental socialization of messages related to race and ethnicity. The ERS scale has three dimensions including cultural socialization-pluralism (5 items), promotion of mistrust (3 items), and preparation for bias (8 items). Participants were first asked to report whether one or more of their parents has ever engaged in any specific ERS behaviors using a yes-no rating scale. An example item for the cultural socialization-pluralism subscale would be "Have one or more of your parents ever talked to you about important people or events in the history of racial/ethnic groups other than your own?" An example item for the promotion of mistrust subscale would be "Have one or more of your parents ever done or said things to encourage you to keep a distance from people of other races/ethnicities?" An example item for the preparation for bias subscale would be "Have one or more of your parents ever talked to you about others who may try to limit you because of race/ethnicity?" If participants responded yes to these questions, they were then asked to report how frequent each parental ERS practice took place in the past 12 months, using a 5-point Likert scale ranging from 1 (*Never*) to 5 (*Very Often*).

Tran & Lee (2010) reported that Cronbach's alpha for the total scale score to be .88, and the scores for the subscales ranged from .74 to .85 in their study sample of

169 Asian undergraduate students from 17 to 23 years old. Thai et al (2017) reported an alpha of .81 for the socialization-pluralism subscale, .78 for preparation for bias subscale, and .82 for promotion of mistrust subscale in their sample of 87 Asian Americans from 18-29 years old. Higher scores in each subscale indicate higher frequency levels of the specific ERS behaviors.

It is important to note that, based on the exploratory factor analysis conducted for the current study, the 3-factor solution of this scale was not supported, and the result indicated that a 2-factor solution with two scores should be used instead. Detailed information is provided in the exploratory factor analysis and parallel analysis section of the results.

### ***Self-Esteem***

The *Rosenberg self-esteem scale (RSE)*; Rosenberg, 1965), a 10-item scale, was used to measure personal self-esteem. Participants were asked to report the level of endorsement on each statement on a 4-point Likert scale ranging from 1 (*Strongly Agree*) to 4 (*Strongly Disagree*). Higher scores indicate higher levels of self-esteem. An example item of the scale would be “On the whole, I am satisfied with myself.” This scale has been used with a variety of Asian American and Asian international student populations with coefficient alphas ranging from .78 to .92 (David & Okazaki, 2006b; Lee, 2005; Wei et al., 2008). The Cronbach’s alpha for the scale based on the 5 imputed data was .88.

### ***Depression and Anxiety Symptoms***

The *Hopkins Symptom Checklist (HSCL-25)*, a 25-item scale derived from the *90-item Symptom Checklist (SCL-90)*; Derogatis et al., 1974; Parloff et al., 1954), was used to measure the severity of anxiety and depression symptoms. The scale consists of 10 items

on anxiety symptoms (i.e., headaches, feeling tense or keyed up, suddenly scared for no reason, etc.) and 15 items on depression symptoms (i.e., feeling low in energy or slowed down, feeling blue, feeling lonely, etc.). Participants were asked to indicate the extent that each specific symptom has bothered them during the past month using a 4-point Likert scale ranging from 1 (*Not at All*) to 4 (*Extremely*). Higher scores indicate higher levels of symptoms. HSCL-25 has been used with Asian and Asian immigrant populations with a coefficient alpha of 0.89 in the anxiety subscale and 0.92 in the depression subscale (Lhewa et al., 2007; Pernice & Brook, 1996). The alpha for the scale based on the 5 imputed data was .94.

## RESULTS

In this section, the current researcher will first present information related to dealing with missing data and data cleaning. This is followed by discussions of factor and parallel analyses results of the *Perceived Ethnic–Racial Socialization Scale (ERS*; Tran & Lee, 2010) and modification of the original hypotheses. Lastly, the researcher will discuss correlation and mediation analyses results for each hypothesis.

### **Missing Data**

I followed the suggested steps in reporting and handling missing data discussed by Schlomer et al. (2010) for the current study. Eighty-six percent of the participants fully completed all the survey questions. The variables with the highest missing values included ethnic racial socialization with 13% missing, ethnic identity with 12% missing, and psychological distress with 11% missing. I then computed Little’s missing completely at random (MCAR) test (1988) to determine the pattern of missing data as suggested by Scholmer et al. (2010). The Little’s MCAR test yielded a p-value of .999 indicating the missing data is completely random without any specific pattern. Finally, I used multiple imputation (MI) method to replace the missing values for both demographic and survey item responses including age, years in the U.S. generation, education level, discrimination experience and impact levels due to COVID, SES, ethnic identity, ethnic-racial socialization, internalized racism, self-esteem, and psychological distress. The advantages of MI include having more precise parameter estimates, standard errors, inferential conclusions, and better representativeness of the data due to increased

number of imputed data (Widaman, 2006; Schlomer et al., 2010). Five imputed data sets using MI are usually adequate (Schafer, 1997). Therefore, I used MI to generate five imputed data sets based on the original data using SPSS.

### **Data Cleaning**

The averages of continuous variables were converted into z-scores to put scores on the same scales in order to identify outliers and to acquire standardized regression coefficients (Osborn, 2016). In addition, the data were examined to ensure it meets the assumptions of multiple regression including normality, linearity, homoscedasticity, and multicollinearity. Following the procedures suggested by Osborn and Waters (2002) and Field (2013), I visually inspected the histograms or frequency distribution to identify any existence of outliers in addition to removing data points with z-scores that were above three standard deviations from the mean. Additionally, I visually inspected the probability-probability plot (P-P plot) to ensure normality (Field, 2013). I further visually inspected the scatterplot of the standardized residuals to ensure the residuals were randomly scattered (Field, 2013). Lastly, I examined the Variance Inflation Factor (VIF) values for multicollinearity, and all VIF values were lower than 10 indicating none of the predictors were highly correlated with each other (Field, 2013).

### **Factor Analyses and Parallel Analysis**

Exploratory factor analyses and parallel analysis were performed to determine the number of factors and subscales to retain for the 3-subscale 16-item *Perceived Ethnic-Racial Socialization Scale (ERS; Tran & Lee, 2010)*. A three-factor exploratory factor analysis using principle-axis extraction and direct oblimin rotation (Delta=0) was first conducted. The principle-axis extraction and direct oblimin rotation were used in order to

be consistent with the analyses used in the original scale development article by Tran and Lee (2010). In addition, the direct oblimin rotation with a delta value of 0 was selected to allow for some correlation between the factors (Field, 2013). A parallel analysis was then conducted to determine the factors by comparing the eigenvalues from a random data set to the eigenvalues from the five imputed data sets. O'Connor (2000) suggested using a parallel analysis as a better alternative to determining the factors by using other rules of thumbs such as the eigenvalue-greater-than-one rule or using the scree plots. As a result, I followed the steps recommended to compare the eigenvalues from two data sets. The eigenvalues for the first three factors from the parallel analysis of the random data set were 1.47 (1<sup>st</sup> factor), 1.36 (2<sup>nd</sup> factor), and 1.29 (3<sup>rd</sup> factor). The eigenvalues for the first three factors from the 3-factor solution exploratory factor analysis of the five imputed data were 5.56 (1<sup>st</sup> factor), 2.18 (2<sup>nd</sup> factor), and 1.28 (3<sup>rd</sup> factor). A two-factor solution was retained because the third factor had a smaller averaged eigenvalue (1.28) from the five imputed data sets compared to the eigenvalues (mean =1.29, 95<sup>th</sup> percentile = 1.34) from the random data (O'Connor, 2000). As a result, a two-factor solution was retained for this scale and two items, item 2 and 4, were removed because they did not load on either factor. Factor 1 included the original 5 items from the original Cultural Socialization subscale and 6 items from the Prepare for Bias subscale, with an average reliability of .83 for the 5 imputed data sets. Factor 2 included original 3 items from the Promotion for Mistrust subscale, with an average reliability of .80 for the five imputed data sets. Since the current researcher utilized the multiple imputation method to replace missing data and created five imputed data sets, each data set has slightly different coefficients and communalities for each item. One example of the Exploratory Factor



Analysis result from one of the five imputed data sets for the scale is presented in Table

1.

Therefore, the original hypotheses were adjusted based on the new two-factor solution:

1. Perceiving messages of cultural socialization/pluralism and preparation for bias from parents will affect the level of self-esteem through internalized racism.
2. Perceiving more frequent messages of promotion of mistrust from parents will indirectly lead to a lower level of self-esteem through a higher level of internalized racism.
3. Perceiving messages of cultural socialization/pluralism and preparation for bias from parents will affect the level of psychological distress (depression/anxiety) through internalized racism.
4. Perceiving more frequent messages of promotion of mistrust from parents will indirectly lead to a higher level of psychological distress (depression/anxiety) through a higher level of internalized racism.

### **Mediation Analysis**

To conduct the mediation analyses for the two outcomes (self-esteem and psychological distress), I used the PROCESS command in SPSS (Hayes, 2013) to test for mediation based on the framework discussed by Hayes and Rockwood (2017).

Methodologists argued that the causal steps approach of testing mediation proposed by Baron and Kenny (1986) has several limitations, and therefore alternative methods are recommended to replace the Baron and Kenny's approach (Hayes & Rockwood, 2017; Preacher & Hayes, 2008; Zhao et al., 2010). Baron and Kenny proposed that, for a

mediation effect to exist, three criteria need to be met. First, the predictor must have a significant relation with the mediation. Second, the predictor must have a significant relation with the outcome variable. Third, the mediator variable must have a significant relation with the outcome variable. Hayes and Rockwood (2017) pointed out the more contemporary approach for mediation emphasizes the indirect effect of the predictor on the outcome, which is the combined effect of the relation between the predictor and the mediator and the relation between the mediator and the outcome. The test significant for each individual path relation among the predictor, mediator, and outcomes discussed by Baron and Kenny is no longer crucial to detect a mediation. The key component in the mediation framework discussed by Hayes and Rockwood is whether there is a significant indirect effect of the predictor on the outcome. In order to test the significance of the indirect effect, I followed the procedure of using 95% bootstrapping confidence intervals (CI) for the indirect effect discussed by Hayes and Rockwood (2017) using the PROCESS command for SPSS.

Four mediation analyses were conducted for each imputed data. The cultural socialization-pluralism and preparation for bias combined factor and promotion of mistrust were entered as predictors for each outcome (self-esteem and psychological distress) with internalized racism as the mediator. In order to calculate pooled effect estimates, I used the formula provided by Rubin (1987) by averaging the effect coefficients from the five imputed data sets for each path to get a mean coefficient estimate.

### **Bivariate Correlations for Central Variables**

The descriptive statistics of the central variable for the original data are indicated in Table 2. The pooled descriptive statistics and the bivariate correlations of the central variables for the five imputed data are indicated in Table 3. Consistent with the expectation, Promotion of mistrust was positively related to internalized racism (IR) ( $r = .23, p < .01$ ), negatively related to self-esteem ( $r = -.23, p < .01$ ), and positively related to psychological distress ( $r = .30, p < .01$ ). However, unexpectedly, the combined cultural socialization-pluralism and preparation for bias factor was positively related to IR ( $r = .20, p < .01$ ) and positively related to psychological distress ( $r = .32, p < .001$ ). The positive directions of the relations between combined cultural socialization-pluralism and preparation for bias and internalized racism and psychological distress are unexpected. Consistent with the expectations, IR was negatively related to self-esteem ( $r = -.31, p < .01$ ) and positively related to psychological distress ( $r = .25, p < .01$ ).

Age was significantly related to both self-esteem ( $r = .23, p = .00$ ) and psychological distress ( $r = -.33, p = .00$ ), indicating older participants tend to have higher levels of self-esteem and lower psychological distress. Years spent in the U.S. was also significantly related to both self-esteem ( $r = -.21, p = .001$ ) and psychological distress ( $r = .21, p = .001$ ), indicating that participants who spend a longer time in the U.S. tend to have lower self-esteem and higher distress. Furthermore, COVID impact was also significantly related to both self-esteem ( $r = -.17, p = .008$ ) and psychological distress ( $r = .25, p = .000$ ), indicating participants who have been impacted by COVID more tend to have less self-esteem and more psychological distress. Therefore, age, years in the U.S., and COVID impact were entered as control variables for the mediation analyses for both self-esteem and psychological distress. Gender ( $r = .24, p = .00$ ) and U.S. born status ( $r =$

-.15,  $p = .02$ ) were significantly related to only psychological distress. Therefore, gender and U.S. born were only entered as control variables for psychological distress.

### **Test of Mediation Model**

The mediation analysis examining the indirect effect of cultural socialization-pluralism and preparation for bias combined on self-esteem through internalized racism is reported in Figure 3. Unexpectedly, it was found that cultural socialization-pluralism and preparation for bias combined was positively associated with IR ( $B = 0.16, p < .01$ ), indicating that for each 1 standardized deviation increase in these perceived ERS practices, there is a .16 standardized increase in the level of internalized racism, after controlling for other variables. As expected, IR was negatively associated with self-esteem ( $B = -0.3, p < .01$ ), indicating that for each 1 standardized deviation increase in the level of internalized racism, there is a .3 standardized decrease in self-esteem, after controlling for other variables. The direct effect of cultural socialization-pluralism and preparation for bias combined on self-esteem was positive ( $B = 0.03$ ) with  $p$  values ranging from 0.46 to 0.82 for the five imputed data. Based on the 95% confident interval (CI) with a bootstrap sample of 5000, IR significantly mediated a negative relation between cultural socialization-pluralism and preparation for bias combined and self-esteem,  $B = -0.06, 95\% \text{ CI } [-0.11, -0.02]$ , indicating for each 1 standardized deviation increase in these perceived ERS practices, there is a .06 standardized decrease in self-esteem through internalized racism.

The mediation analysis examining the indirect effect of promotion of mistrust on self-esteem through internalized racism is reported in Figure 4. As expected, it was found that promotion of mistrust was positively associated with IR ( $B = 0.23, p < .01$ ),

indicating that for each 1 standardized deviation increase in perceived promotion of mistrust practice, there is a .23 standardized increase in internalized racism, after controlling for other variables. In addition, IR was negatively associated with self-esteem ( $B = - 0.29, p < .001$ ), indicating that for each 1 standardized deviation increase in internalized racism, there is a .29 standardized decrease in self-esteem, after controlling for other variables. The direct effect of promotion of mistrust on self-esteem was negative ( $B = - 0.1$ ) with  $p$  values ranging from 0.07 to 0.14 for the five imputed data. Based on the 95% confident interval (CI) with a bootstrap sample of 5000, IR significantly mediated a negative relation between promotion of mistrust and self-esteem,  $B = - 0.07$ , 95% CI [-0.12, -0.03], indicating that for each 1 standardized increase in perceived promotion of mistrust practice, there is a .07 standardized decrease in self-esteem through internalized racism.

The mediation analysis examining the indirect effect of cultural socialization-pluralism and preparation for bias combined on psychological distress through internalized racism is reported in Figure 5. Unexpectedly, it was found that cultural socialization-pluralism and preparation for bias combined was positively associated with IR ( $B = 0.20, p < .01$ ), indicating that for each 1 standardized deviation increase in these perceived ERS practices, there is a .20 standardized increase in internalized racism, after controlling for other variables. As expected, IR was positively associated with psychological distress ( $B = 0.19, p < .01$ ), indicating that for each 1 standardized deviation increase in internalized racism, there is a .19 standardized increase in psychological distress, after controlling for other variables. The direct effect of cultural socialization-pluralism and preparation for bias combined on psychological distress was

positive ( $B = 0.19$ ) with  $p$  values ranging from 0.00 to 0.01 for the five imputed data. Based on the 95% confident interval (CI) with a bootstrap sample of 5000, IR significantly mediated a positive relation between cultural socialization-pluralism and preparation for bias combined and psychological distress,  $B = 0.04$ , 95% CI [0.01, 0.08], indicating that for each 1 standardized increase in these perceived ERS practices, there is a .04 standardized increase in psychological distress through internalized racism.

The mediation analysis examining the indirect effect of promotion of mistrust on psychological distress through internalized racism is reported in Figure 6. As expected, it was found that promotion of mistrust was positively associated with IR ( $B = 0.23$ ,  $p < .01$ ), indicating that for each 1 standardized deviation increase in perceived promotion of mistrust practice, there is a .23 standardized increase in internalized racism, after controlling for other variables. Additionally, IR was positively associated with psychological distress ( $B = 0.20$ ,  $p < .01$ ), indicating that for each 1 standardized deviation increase in internalized racism, there is a .20 standardized increase in psychological distress after controlling for other variables. The direct effect of promotion of mistrust on psychological distress was positive ( $B = 0.16$ ) with  $p$  values ranging from 0.00 to 0.01 for the five imputed data. Based on the 95% confident interval (CI) with a bootstrap sample of 5000, IR significantly mediated a positive relation between promotion of mistrust and psychological distress,  $B = 0.04$ , 95% CI [0.01, 0.09], indicating that for each 1 standardized increase in perceived promotion of mistrust practice, there is a .04 standardized increase in psychological distress through internalized racism.

## DISCUSSION

The current study aims to examine the relations among ethnic-racial socialization (ERS), internalized racism (IR), self-esteem, and psychological distress among Asians and Asian Americans in the United States. Based on intergenerational racial socialization theories (Williams, 2012; Harro, 2010), ethnic identity development theory (Phinney, 1991), and the existing literature in this population, ERS was hypothesized to indirectly influence self-esteem and psychological distress through IR.

### **Effects of Internalized Racism**

As expected, higher levels of IR were significantly associated with lower levels of self-esteem and higher levels of psychological distress. These findings are consistent with the conceptualization of IR that theorizes IR as a mechanism that erodes one's sense of intrinsic value and worth and leads to a sense of inferiority (Jones & Carter, 1996). In addition, it is also consistent with studies showing negative influences of IR on psychological wellbeing among Asian Americans and other minority populations in the U.S. including African Americans, US-born Caribbean blacks, Chicana/o and Latina/o college students (Campón & Carter, 2015; David & Okazaki, 2006b; David & Nadal, 2013; Hipolito-Delgado, 2010; Mouzon & McLean, 2017). The result of the current study further highlights the detrimental effects of IR, a form of racism that is given less attention compared to interpersonal mediated racism and institutionalized racism. When members from oppressed racial groups accept and internalize the negative racial

messages about own racial groups that are perpetuated by the oppressor, the self-esteem and psychological wellbeing of the oppressed are being eroded.

### **Ethnic-Racial Socialization**

It is interesting that the *Perceived Ethnic–Racial Socialization Scale* (Tran & Lee, 2010) did not load significantly on the three-factor model for this sample. Instead, the result indicated a two-factor model with cultural socialization-pluralism and preparation for bias combined and promotion of mistrust as a stand-alone factor. This is inconsistent with the results from the exploratory factor analysis study on this scale in a sample of 169 late adolescent Asian Americans (Tran & Lee, 2010). Tran & Lee (2010) found support for a three-factor model for the 16-item scale using an exploratory factor analysis. However, based on the current data, a two-factor model for this scale with two items removed was supported. For example, one of the items removed “Explained something on TV to you that showed discrimination against your racial/ethnic group” had low pattern coefficients ranging from .27 to .32 for factor 1 for the five imputed data in the current study whereas the same item had a coefficient of .51 for factor 1 for the data collected by Tran & Lee (2010). Therefore, more close examinations and validations of this scale are warranted. One possible explanation is that the current study sample was composed of adults with a wider age range, from 18 to 41 years old, whereas participants recruited by Tran and Lee (2010) were mostly late adolescents who were just about to enter college. The ethnic-racial socialization process can look very different for individuals with various levels of developmental cognitive abilities of understanding concepts such as race and/or discrimination and developmental needs and tasks (Hughes et al., 2006). McHale et al. (in press) reported African American mothers engaged in



more preparation for bias with their older children compared to their younger children. Similarly, Hughes and Johnson (2001) reported that parents tend to engage in more preparation for bias and promotion of mistrust for older youth due to their increased ability to understand the complexity of races and ethnicities. In addition, most studies that examined the relationship between developmental age and the parental ethnic-racial socialization process tend to focus on children and adolescents rather than adult individuals (Hughes et al., 2006; Juang et al., 2017). Therefore, the frequency and types of perceived parental ethnic-racial socialization experienced by the participants in the current study may reflect a very different process compared to the experience of children and/or adolescents.

Moreover, parents' education may also influence one's experience of ethnic-racial socialization. Studies have found that mothers with higher levels of education tend to engage in more cultural socialization practice with their children (Hughes et al., 2009; Tran & Lee, 2010). The current study did not examine any information related to participants' parents including education level, socioeconomic status, or immigration status, which may influence participants' experience and their perception of ethnic-racial socialization.

Furthermore, experiences with person-mediated and institutional discrimination outside of families can influence the ethnic-racial socialization process at home (Hughes et al., 2006). In a longitudinal study, Chinese American parents engaged in more ethnic-racial socialization practices with their adolescents when the parents experienced higher levels of discrimination. African American parents also engaged in more preparation for bias and promotion of mistrust when they experienced higher levels of prejudice at work

(Hughes & Chen, 1997). Similarly, when parents perceived their children were treated unfairly by peers or other adults, parents tended to engage in more promotion of mistrust to caution their children regarding interracial relations (Hughes & Johnson, 2001). It is important to note that data collection for the current study was administered during the outbreak of the novel coronavirus 2019 (COVID-19) which led to increased discrimination and hate crimes against Asian and Asian Americans in the U.S. (Asian Pacific Policy & Planning Counseling, 2020). Also, the instruction of the *Perceived Ethnic–Racial Socialization Scale* asked participants to reflect upon their interactions with parents only in the past 12 months. Parents may react to the increased incidents of discrimination and hate crimes during COVID by engaging in more preparation for bias and promotion of mistrust and less racial socialization- pluralism to caution and protect their children. The ethnic-racial socialization process in the past 12 months may be considerably different compared to the pre-COVID era where parents may not feel less of an immediate need to employ certain ethnic-racial socialization practice. Therefore, events took place in the macrosystem level, contributing to the direct and indirect experiences of person-mediated and institution discrimination, may trigger and constantly shape the ethnic-racial socialization process practiced by parents. Future research may take a closer investigation in the impacts of macro-level environmental and societal factors on the microlevel practice of ethnic-racial socialization.

***Cultural socialized-pluralism and preparation for bias combined and Internalized Racism***

As expected, perceiving more messages of cultural socialization/pluralism and preparation for bias from parents affects the levels of self-esteem and psychological

distress through internalized racism. Surprisingly, cultural socialization/pluralism and preparation for bias combined messages lead to lower levels of self-esteem and higher levels of psychological distress through higher levels of internalized racism.

The current researcher did not hypothesize a specific direction of the relations of the effects because, different from the previous studies, cultural socialization-pluralism and preparation for bias are combined as one factor in the current study. Therefore, the result does support the hypothesis that cultural socialization/pluralism and preparation for bias combined messages from parents affect the levels of self-esteem and psychological distress through internalized racism. However, the result further indicates that cultural socialization/pluralism and preparation for bias combined messages will lead to higher levels of internalized racism, indirectly leading to higher levels of psychological distress and lower levels of self-esteem. This result is the opposite from previous studies examining the effects of cultural socialization/pluralism. Studies have shown consistent positive associations between cultural socialization/pluralism and ethnic identity, self-esteem, and psychological wellbeing (Liu & Lau, 2013; Wang et al., 2020). In addition, previous studies also showed mixed findings regarding the effects of preparation for bias (Hughes et al., 2009; Liu & Lau, 2013; Tran & Lee, 2010). Wang et al. (2020) found that preparation for bias has no relation to self-perceptions but has small positive association with externalizing and internalizing behaviors in their meta-analysis study. However, Huguley et al. (2019) found preparation for bias to have a small positive effect on ethnic racial identity.

Several considerations should be taken into account when interpreting the negative effects of cultural socialization/pluralism and preparation for bias combined on

psychological wellbeing found in the current study. First, the current sample supported a two-factor scale for ethnic-racial socialization that combined cultural socialization/pluralism and preparation for bias as one subscale. When the effects of cultural socialization/pluralism and the effects of preparation for bias are combined and examined as one factor, the results may be different from the findings of the effects of these factors when studied separately.

Furthermore, a more complex relation such as a curvilinear relation, rather than a simple linear relation, may be warranted to be examined in order to explain the multifaceted effects of cultural socialization/pluralism and preparation for bias. In a study on adopted and non-adopted Korean American adolescents, Seol et al. (2016) found preparation for bias to have a curvilinear relation with school adjustment for both groups, with moderate level of preparation for bias predicting positive school adjustment and low and high levels of preparation for bias predicting negative school adjustment. Harris-Britt et al. (2007) found similar results indicating a curvilinear effect of preparation for bias on the relation between perceived discrimination and self-esteem among African American adolescents. These findings suggest that the effect of certain ethnic-racial socialization practices may be more complex than a linear relation. An under-emphasis on bias preparation may lead individuals to feel underprepared when discrimination occurs, and an over-emphasis on bias preparation or constant reminders of racial barriers may lead individuals to feel overwhelmed and lacking control to deal with racism. (Harris-Britt et al., 2007; Seol et al, 2016). The current study only hypothesized a linear relation using multiple linear regression as the data analysis method, and the negative effects of cultural

socialization/pluralism and preparation for bias on psychological wellbeing found in the current study may be oversimplified as a result of the data analysis method.

Another possibility that may contribute to the negative effects of combining cultural socialization/pluralism and preparation for bias is the lack of emphasis on incorporating coping-related messages as a part of ethnic-racial socialization. Wang et al. (2020) pointed out that bias and ethnic socialization can be multifaceted constructs, which involve not just raising one's awareness of racism against their own race/ethnicity but also talking about coping strategies one can use to deal with discrimination. However, the existing measurements for bias preparation tend to only focus on the aspect of raising awareness of racism while neglecting the coping aspect, which may explain the mixed findings in the current literature and the negative effects found in the current study (Tran & Lee, 2010; Wang et al, 2020). If individuals are only socialized to have increased awareness of their race/ethnicity and potential discrimination without receiving any coping-focused messages, it may lead to unintended counteractive effects on psychological wellbeing. Specifically, for the current study, with the exacerbated discrimination against Asian and Asian Americans during COVID-19, cultural socialization/pluralism and preparation for bias messages provided in isolation without coping-related messages may cause counter-effective effects.

### ***Promotion of mistrust and Internalized Racism***

As expected, perceiving more messages of promotion of mistrust from parents is found to lead to lower levels of self-esteem and higher levels of psychological distress through higher levels of internalized racism in the current sample. These findings are consistent with previous findings in the literature showing that receiving more frequent

promotion of mistrust messages leads to higher levels of negative psychological outcomes (Juang et al., 2017; Wang et al., 2020).

Wang et al. (2020) discussed that promotion of mistrust-centered messages were found to be negatively associated with one's self-perception and avoidance-based coping strategies, leading to more internalizing problems. Similarly, Liu and Lau (2013) found promotion of mistrust to be associated with depressive symptoms in Asian American young adults. The finding of the current study supports the hypothesis and the existing findings in the literature, showing that promotion of mistrust leads to higher psychological distress and lower self-esteem.

Moreover, the current finding adds to the literature suggesting that internalized racism mediates the relation between promotion of mistrust and psychological distress and self-esteem. More promotion of mistrust messages leads to a higher level of internalized racism, indirectly leading to higher levels of psychological distress and lower levels of self-esteem. This result adds to the literature since no study has explicitly examined internalized racism as a mediator influencing the relation between promotion of mistrust and psychological distress and self-esteem. Consistent with intergenerational socialization theories and ethnic/racial identity development theories (Phinney, 1989; William, 2012), the current study shows that messages centered around promotion of mistrust can affect individuals' perceptions of own race and ethnicity in a negative way, leading to higher levels of psychological distress and lower levels of self-esteem. Furthermore, this result also is consistent with the finding by Gartner et al. (2014) showing that promotion of mistrust leads to a lower level of self-esteem through a lower level of ethnic identity. Even though Gartner et al. (2014) only measured and considered

ethnic identity, rather than internalized racism, as a mediator in their study, their finding is consistent with the current finding suggesting that promotion of mistrust can lead to low level of self-identification and high negative evaluation towards one's own ethnic group. Also, it is worth noting that the current study shows an inverse relation between ethnic identity and internalized racism, suggesting that ethnic identity and internalized racism may be at two opposite ends of a continuum of one's perception and/or attitudes of own ethnicity and race.

### **Limitations & Future Directions**

The first limitation in the current study is the utilization of a cross-sectional study design that warrants cautious interpretation of the results and one should not assume causal inferences among the predictors and outcomes. Longitudinal or experiential study design should be considered for future research to closely examine the causal relation between ethnic-racial socialization, internalized racism, and psychological outcomes.

Secondly, the current research utilizes a mediation analysis that assumes linear relations between the predictors and outcomes. As discussed above, a curvilinear relation may be warranted to understand the association between cultural socialization/pluralism and preparation for bias and psychological wellbeing in a more comprehensive way. Therefore, future studies should expand on the current findings to explore and test for a more complex relationship between the predictors and outcomes.

Thirdly, more studies are needed to validate the *Perceived Ethnic–Racial Socialization Scale* (Tran & Lee, 2010) among Asian and Asian American populations. The current study supported a 2-factor model for the measurement rather than a 3-factor model. It is important for researchers to continue conducting studies to validate this

measure. Studies are needed to examine what types of ethnic-racial socialization practices are typically employed by Asian and Asian American parents and whether practices such as coping orientated messages related to racism have been overlooked in relation to ethnic-racial socialization. In addition, the developmental age of participants can be an important factor to consider when validating the scale. As indicated by studies that examined relations between developmental age and the parental ethnic-racial socialization process (Hughes et al., 2006), the socialization process can vary across different ages depending on one's developmental skills and needs. As a result, validation of the *Perceived Ethnic–Racial Socialization Scale* (Tran & Lee, 2010) may require close attention to the participants' developmental age.

The current data collection method also has limitations. The distribution of the study was only through internet due to COVID-19, which limited individuals who do not have internet connections from participating. Furthermore, the survey used in the current study was only in English, which also limited individuals who are not English speakers and/or those who are not comfortable completing the surveys in English from participating in the study. These limitations in the data collections process may interfere with the randomization of the sample, restricting the generalization of the sample to represent the whole population.

Another limitation is that the current study aggregated data across different subethnic groups that identified as Asian in the U.S. with different developmental ages without examining differences or similarities among these subgroups. This may potentially lead to loss of statistical power if significant subgroup differences exist



(Helm, 2017). Future studies should take further steps to examine whether significant subgroup differences exist.

Another limitation and critique specifically related to the process of parental ethnic-racial socialization is that these socialization behaviors tend to be conceptualized as isolated behaviors happening in the direction from parents to children. The theoretical frameworks used by most studies on ethnic-racial socialization, and the current study as well, tend to conceptualize ethnic-racial socialization as a “transmission of information from adults to children,” emphasizing the one-way direction of parents passing along information to their children who are passive receivers of these ethnic-racial socialization information (Hughes et al., 2006; Juang et al., 2017). However, socialization can be a dynamic process where parental socialization is embedded and intertwined within a complex network, constantly influenced by a variety of factors such as parent’s own racial identity development, their SES and/or education status, parents’ social relationships to the community and/or the society, and events happening in the macrosystem. In addition, characteristics of children including developmental age, gender, disability, and their own ethnic racial identity development can also actively influence the socialization practices at home (Juang et al. 2017). For example, children with older developmental age or at different racial identity development stages may actively engage in the ethnic-racial socialization process such as educating parents about race and ethnicity (Juang et al., 2014). Conceptualizing parental ethnic-racial socialization as an isolated and one-way transmission behavior simplify the research method at the cost of excluding important information on this dynamic and reciprocal process. Future studies can take steps to expand the conceptualization of parental ethnic-

racial socialization and consider the transactional and reciprocal process by exploring various factors in different system levels through both qualitative and quantitative studies.

### **Contributions and Implications**

The findings of this study contribute to the understanding of ethnic-racial socialization practices and its effects on internalized racism, psychological distress, and self-esteem among Asian and Asian Americans in the U.S. The findings provide practical information for parents, educators, and mental health providers to consider when working with individuals who identify as Asian or Asian Americans in the U.S. Millan and Alvarez (2014) pointed out the need to investigate the factors impacting one's experience of internalized racism. Williams (2012) discussed socialization about racial messages can be key factors impacting the development of one's attitudes towards own group. Even though studies (Huguley et al., 2019) have examined the impact of ERS on one's ethnic identity, no study has directly examined how ERS may influence the experience of IR. In conclusion, this study highlights the negative effect of internalized racism and the importance of understanding different ethnic-racial socialization practices and their impacts on psychological wellbeing.

Several implications for parental practice and mental health providers can be drawn based on the findings of the study. For parents, it is important to be aware of the types of ethnic-racial socialization practice they employ with children and their potential impacts on their children's perceptions of their own race and ethnicity, how they feel about themselves in general, and their psychological wellbeing. The current study suggests that engaging in messages with heavy emphases on promoting mistrust against

individuals from other racial or ethnic groups may result in lower self-esteem and increased psychological distress through internalized racism. Therefore, parents should consider potential impacts of different interventions or practices, whether they may inadvertently lead to or perpetuate internalized racism. Parents should avoid these messages even if the intention of having these messages may be out of the desire to protect their children. Parents can reflect upon their use of cultural mistrust socialization practice by exploring their own experiences related to other groups and how biases, assumptions, and own past racial trauma and whether these experiences may lead to their use of such practice. Parents can also engage in open discussions with their children, given that children are at an appropriate developmental age being able to understand the complexity of race and ethnicity, if parents notice themselves engaging in promoting mistrust practice out of the desire to protect their children from being hurt from potential cross-racial discrimination or tension. Parents can also focus more on helping children understand these tensions and better deal with difficult feelings stemmed from such experience. Furthermore, even though the current study suggests that engaging in cultural socialization/pluralism and preparation for bias combined message predicts lower levels of self-esteem and higher levels of psychological distress through internalized racism, more studies are needed to further explore this process to help parents understand the impact of these practices more comprehensively.

For mental health providers who work with Asian and Asian American clientele should consider cultural factors when helping clients better understand their psychological experiences and self-esteem. Mental health providers can engage in open discussion and reflections with clients on how race and ethnicity are discussed and

mentioned at home and explore how they react to these messages. Open conversations about how clients internalize racial messages at home or in the society can be explored to help clients understand their experience with racism and develop insights into how these experiences may affect their overall psychological wellbeing if clients find them to be relevant to their presenting concerns. Mental health providers may also work with clients to recognize and challenge internalized racism by understanding the process of its development through parental ethnic-racial socialization and systematic racism and cultivate a more flexible view, rather than an all-negative attitude, towards their own race and ethnicity.

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Table 1

*Exploratory Factor Analysis of the Perceived Ethnic–Racial Socialization Scale (Imputed Data Set 1)*

Items	Pattern Coefficients		Structure Coefficients		Communalities
	Factor 1	Factor 2	Factor 1	Factor 2	
1. Talked to you about important people or events in the history of racial/ethnic groups other than your own	.46		.43		.20
3. Told you to avoid another racial/ethnic group because of its members' prejudice against your racial/ethnic group		-.54		-.57	.35
5. Done or said things to you to keep you from trusting people of other races/ethnicities		-.83		-.82	.68
6. Talked to you about important people or events in the history of your racial/ethnic group	.50		.52		.27
7. Talked to you about expectations others might have about your abilities based on your race/ethnicity	.65		.73		.68
8. Talked to you about discrimination against people of a racial/ethnic group other than your own	.59		.61		.38
9. Done or said things to show you that all people are equal regardless of race/ethnicity	.78		.72		.60
10. Talked to someone else about racial/ethnic discrimination when you could hear them	.37		.42		.23
11. Told you that you must be better in order to get the same rewards given to others because of race/ethnicity	.53		.589		.41
12. Encouraged you to read books about your racial/ethnic group	.40		.38		.16
13. Done or said things to encourage you to keep a distance		-.79		-.77	.60

from people of other races/ethnicities					
14. Encouraged you to read books about other racial/ethnic groups	.37		.33		.14
15. Talked to you about unfair treatment that occurs due to race/ethnicity	.80		.85		.78
16. Talked to you about racial/ethnic stereotypes, prejudice, and/or discrimination against people of your racial/ethnic group	.68		.76		.71

Table 2

*Descriptive Statistics of Core Variables (Original Data Set)*

	N	Range	Minimum	Maximum	Mean	SD	Skewness
ERS1	213	2.64	1	3.64	1.71	.58	.84
ERS2	213	3.33	1	4.33	1.80	.84	.95
Internalized Racism	222	2.64	1	3.64	2.01	.62	.40
Ethnic Identity	216	3.33	1.67	5	3.79	.72	-.45
Self-Esteem	223	2.70	1.30	4	2.84	.53	-.16
Psychological Distress	219	2.44	1	3.44	1.86	.57	.47

*Note. ERS1= Cultural socialization-pluralism and preparation for bias combined,*

*ERS2=Promotion of mistrust*

Table 3

*Pooled Bivariate Correlations and Means of Core Variables (Five Imputed Data)*

Variable	Mean	1	2	3	4	5	6
1. ERS1	1.82	-					
2. ERS2	1.87	.33**	-				
3. Internalized Racism	2.10	.20**	.23**	-			
4. Ethnic Identity	3.74	.04	.03	-.20**	-		
5. Self-Esteem	2.81	-.10	-.23**	-.31**	.23**	-	
6. Psychological Distress	1.92	.32**	.30**	.25**	-.13	-.56**	-

*Note.* ERS1 = Cultural socialization-pluralism and preparation for bias combined,

ERS2 = Promotion of mistrust

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

Figure 1. Proposed relationships among ERS, IR, and self-esteem

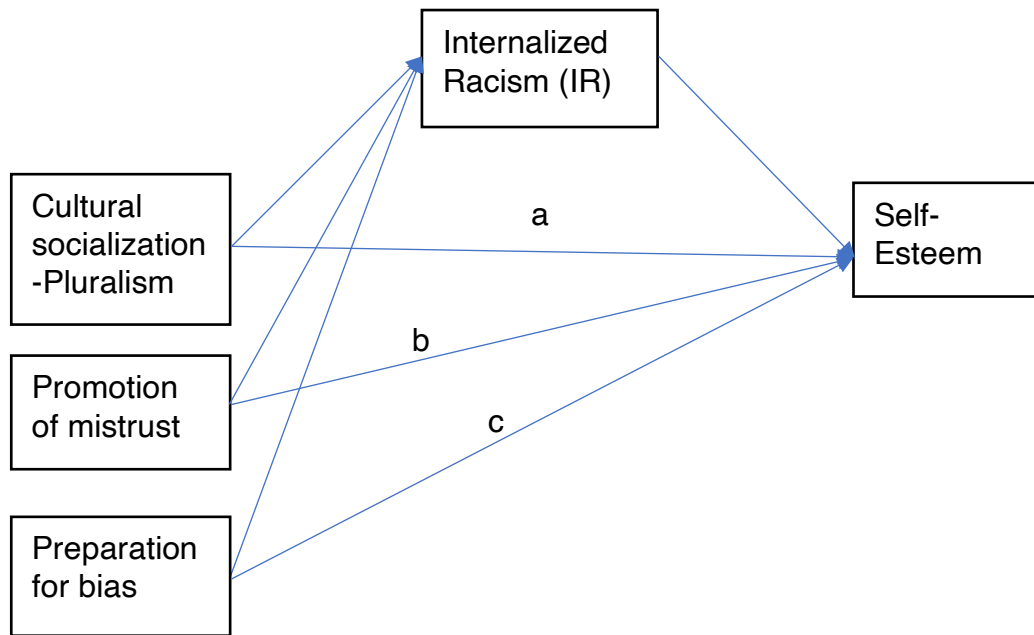


Figure 2. Proposed relationships among ERS, IR, and psychological distress

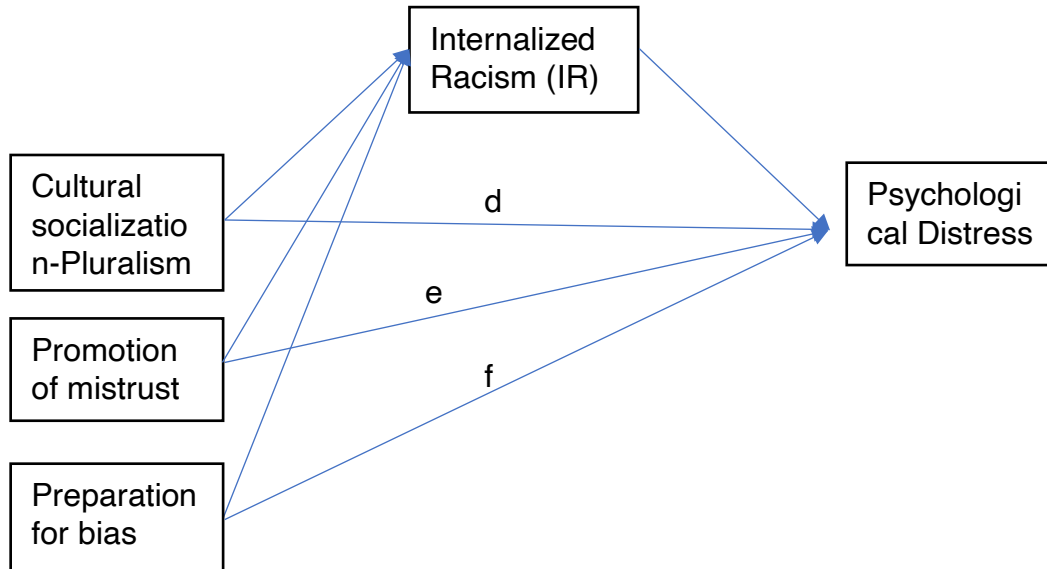




Figure 3. Indirect effect of cultural socialization-pluralism and preparation for bias on self-esteem through internalized racism. Note: \* $p < .05$ ., \*\*  $p < .01$ ., \*\*\*  $p < .001$

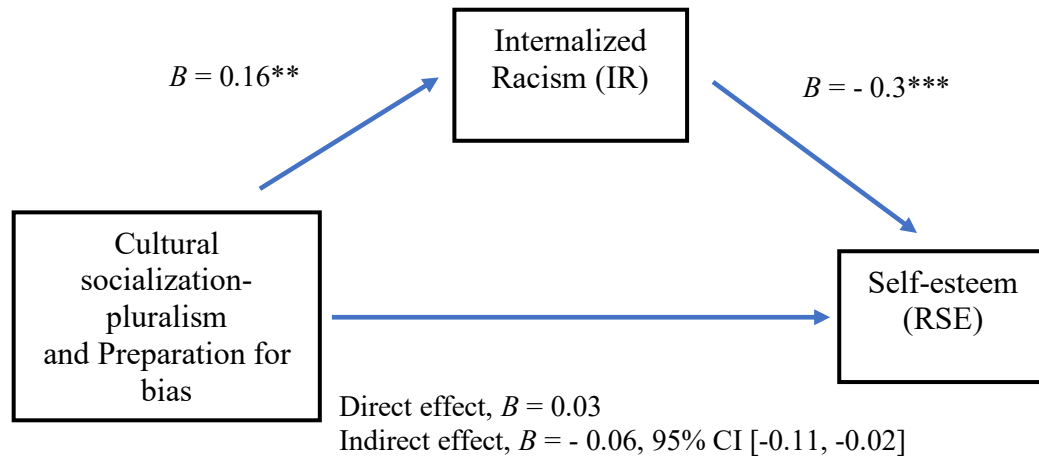


Figure 4. Indirect effect of promotion of mistrust on self-esteem through internalized racism. Note: \* $p < .05$ ., \*\*  $p < .01$ ., \*\*\*  $p < .001$

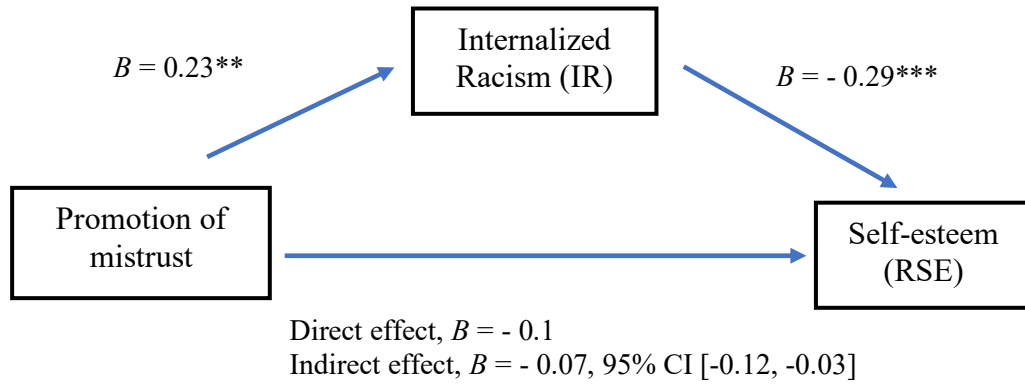


Figure 5. Indirect effect of cultural socialization-pluralism and preparation for bias on psychological distress through internalized racism. Note: \* $p < .05$ ., \*\*  $p < .01$ .

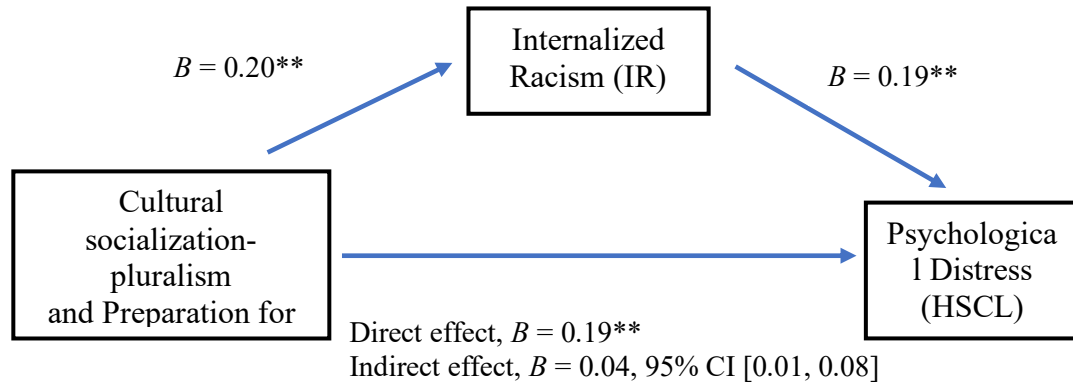
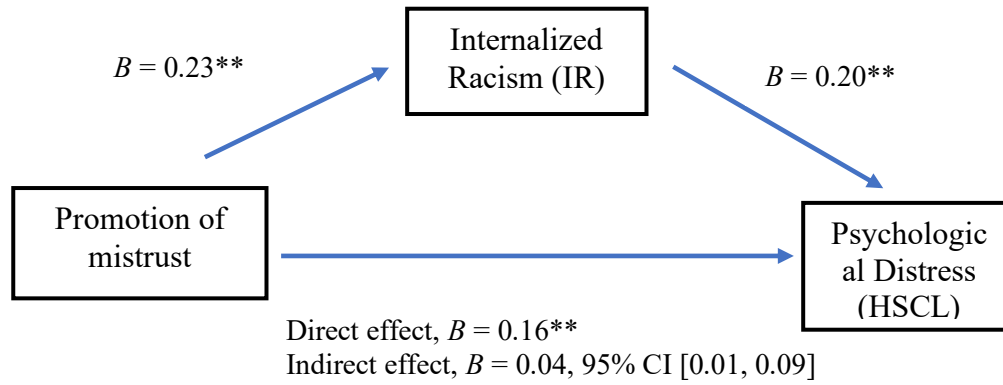


Figure 6. Indirect effect of promotion of mistrust on psychological distress through internalized racism. Note: \* $p < .05$ ., \*\*  $p < .01$ .



## CURRICULUM VITA

NAME: Tianhong “Jojo” Yao

ADDRESS: 1401 Arch Street, apt 1313, Philadelphia, PA, 19102

### EDUCATION

- July 2022                      **Doctor of Philosophy in Counseling Psychology**  
University of Louisville, Louisville, KY (APA Accredited)  
Dissertation: *Internalized Racism Mediating the Effects of Ethnic-Racial Socialization on Self-Esteem and Psychological Distress among Asians and Asian Americans in the United States*
- July 2016                      **Master of Philosophy in Education with a Concentration in Professional Counseling**  
University of Pennsylvania, Philadelphia, PA
- July 2015                      **Master of Science in Education with a Concentration in Counseling and Mental Health Services**  
University of Pennsylvania, Philadelphia, PA
- May 2014                      **Bachelor of Arts in Psychology and Studio Art**  
Franklin & Marshall College, Lancaster, PA

### SUPERVISED CLINICAL TRAINING

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- July 2021- July 2022                      **Drexel University Counseling Center, Philadelphia, PA**  
Position: Pre-doctoral Intern  
Population served: Undergraduate and graduate students enrolled in an urban private university with rigorous co-op program and quarter system. Clients of various backgrounds including nationality and visa status, race/ethnicity, gender identity, socioeconomic status, disability status, sexual orientation, and religious orientation. Clients presented with a range of concerns, including mood disorders, international student concerns, trauma- and stressor-related disorders, eating disorders, identity development, relational concerns, academic/career, and family conflicts.

- Conduct approximately 4 initial triage assessments per week.
- Conduct intake assessments to develop case formulation, treatment goals, and modes of intervention.
- Provide 30-minute same-day appointments.
- Conduct suicide and risk assessments. Provide urgent triages and crisis interventions for emergency appointments.
- Participate in on-call crisis rotations and carry an after-hours phone for one week once a term.
- Provide in-person and telehealth individual psychotherapy using a time-limited goal-oriented treatment modality.
- Co-facilitate group psychotherapy (e.g., Understanding Self and Others for Graduate Students, International Student Support Group, Student of Color Support Group) and psychoeducational workshops (e.g., Anxiety Toolbox).
- Participate in outreach presentation and programming on mental health related topics (e.g., international student acculturation and homesickness, stress management, mindfulness, self-care, and counseling center services).
- Receive a total of 4 hours of individual and group supervisions per week.

Supervisor: Minsun Lee, Ph.D.

Aug. 2019- June 2020

**University of Louisville Counseling Center, Louisville, KY**

Position: Doctoral Graduate Assistant

Population served: Traditional and non-traditional undergraduate and graduate students enrolled at a large urban public university. Clients of various backgrounds including nationality, race/ethnicity, gender identity, socioeconomic status, disability status, sexual orientation, and religious orientation. Clients presented with a range of mental health concerns, including depressive and anxiety disorders, bipolar disorders, trauma- and stressor-related disorders, personality disorders, identity development, relational concerns, academic/career, and family conflicts.

- Conducted initial triage evaluations and intake assessments.
- Conducted suicide and risk assessments. Provided same day urgent consultations and crisis interventions for walk-ins.
- Maintained a caseload of 10-13 clients and provided short-term and long-term individual psychotherapy in person and through Telehealth during COVID-19.
- Made referrals to campus services (Campus Health, Disability Resource Center, LGBT Center, etc.).

- Responded to university sanctioned outreach requests and presented on mental health related topics (e.g., psychoeducation on anxiety and depression, self-care, and counseling center services) to student organizations, classes, and university departments.
- Consulted with psychiatric providers in Campus Health to monitor client's symptoms and response to medications.
- Managed UCC social media accounts and posts. Collaborated with Student Affairs Divisions and UCC staff to plan annual Self-Care Fair.
- Participated in weekly individual supervisions.

Supervisors: Geeta Gulati, Psy.D., HSPP; Aesha Uqdah, Psy.D., HSPP

May 2019- May 2020

**Behavioral Wellness Clinic: Louisville OCD Clinic/  
Louisville Center for Eating Disorders, Louisville, KY**

Position: Advanced Therapy Practicum Student

Population served: The Louisville OCD Clinic provides outpatient and intensive outpatient services for adolescents and adults with Obsessive-Compulsive Disorder (OCD) and related disorders. The Louisville Center for Eating Disorders provides outpatient and intensive outpatient services for adolescents and adults with Eating Disorders (EDs) using an interdisciplinary team of psychologists, dietitians, and psychiatrists.

- Provided consultation sessions with psychoeducation information on the OCD cycle and treatment approaches including exposure and ritual prevention therapy (EX/RP) and acceptance and commitment therapy (ACT).
- Administered diagnostic and treatment outcome assessments (Y-BOCS, CY-BOCS, MINI, and MINI-KID).
- Provided twice-a-week 90-min individual psychotherapy for individuals with OCD.
- Provided weekly individual therapy to adolescents and adults with Anorexia Nervosa (AN), Bulimia Nervosa (BN), and Binge Eating Disorder (BED).
- Led weekly breakfast and lunch meal therapy groups for clients in the Eating Disorder Intensive Outpatient Program.
- Shadowed and co-led weekly group therapy sessions including Body Image Group, Perfectionism group, and ED thoughts group.
- Worked as a part of a multidisciplinary team with psychologists, dietitians, and psychiatrists and participated in weekly multidisciplinary clinical team meetings to monitor

client's symptoms and progresses in the Eating Disorder Intensive Outpatient Program.

- Implemented evidenced-based interventions including Exposure and Ritual Prevention Therapy (EX/RP), Acceptance and Commitment therapy (ACT), Cognitive-Behavioral Therapy for Eating Disorders (CBT-E) and Dialectical Behavior Therapy (DBT).
- Participated in outreach activities in the National Eating Disorders Association (NEDA) Walk to promote awareness of EDs and resources in the community.
- Participated in weekly group and individual supervisions led by licensed psychologists.
- Provided telehealth individual and group psychotherapy sessions during COVID-19.

Supervisors: Broderick Sawyer, Ph.D.; Alexandria Pruitt, Psy.D.

Aug. 2018- May 2019

**University of Louisville Counseling Center, Louisville, KY**

Position: Advanced Therapy Practicum Student

Population served: See above

- Conducted intake assessments and provided short-term and long-term individual psychotherapy while maintaining a caseload of 10-12 clients.
- Made referrals to campus services (Campus Health, Disability Resource Center, LGBT Center, etc.).
- Co-led an Emotion-Focused Therapy group (Tame Your Inner Critic) with a staff psychologist.
- Participated in weekly group and individual supervisions, including case presentations and reviewing film of therapy sessions.
- Attended outreach events and responded to student questions about campus and counseling services.

Supervisors: Aesha Uqdah, Psy.D., HSPP; Ruby Casiano, Ph.D., HSPP,

May 2018- Aug. 2018

**Pathways Brain Injury Program, Louisville East Post Acute, Louisville, KY**

Position: Assessment Practicum Student

Population served: Individuals suffering from traumatic brain injuries and in need of rehabilitation services during brain injury recovery

- Administered neuropsychological assessments (California Verbal Learning Test-2, Wisconsin Card Sorting Test,



Orientation Questionnaire) under live supervision and completed assessment evaluations.

- Provided assessment result feedback and appropriate recommendations for treatments in multidisciplinary treatment team meetings.
- Interacted with patients to gather, track, and record weekly behavioral data using the Orientation Questionnaire.
- Worked as a part of a multidisciplinary team with nurses, physicians, psychiatrists, social workers, physical therapists, occupational therapists, and speech therapists.
- Observed family meetings where family members of patients received updates and feedbacks on patients from the multidisciplinary treatment team.

Supervisor: Bradley Burton, Ph.D.

Aug. 2017-May 2018

**Bellarmine University Counseling Center, Louisville, KY**

Position: Intermediate Therapy Practicum Student

Population served: Undergraduate and graduate students at a private, Catholic university, ages (18-24). Clients comprised traditional and first-generation students. Majority of caseload identified as White women with various socioeconomic status, gender identity expression, and sexual orientation. Clients presented with adjustment disorders, major depression, anxiety disorders, trauma, academic concerns, disordered eating, perfectionism, and personality disorders.

- Conducted intake assessments and provided individual psychotherapy services to students while maintaining a caseload of 10-12 clients.
- Conducted triage assessments via phone for students seeking counseling services.
- Utilized outcome measures (e.g. CCAPS, ORS, and SRS) for treatment planning and case conceptualization.
- Utilized Therapist Assisted Online as adjunctive to individual therapy.
- Participated in weekly group and individual supervisions, including case presentations and reviewing film of therapy sessions.
- Assisted with outreach events and responded to student questions about counseling services. Established and maintained liaison relationship with residence hall staffs.

Supervisor: Melissa Gibson, Psy.D.

May 2017-Aug. 2018

**Cardinal Success Program @ Nia Center, Louisville, KY**

Position: Intermediate Therapy Practicum Student

Population served: Individuals and families residing in West Louisville, a low-income historically underserved community that tend to face a series of systematic barriers including lack of societal resources and discrimination. Individual clients and families presented with a range of mental health concerns, including depressive and anxiety disorders, bipolar disorder, trauma- and stressor-related disorders, family conflicts, and parenting concerns.

- Provided brief models of psychotherapy using evidence-based treatments (e.g., CBT, Behavioral Therapy, Motivational Interviewing, parent skills training) for individuals and families.
- Delivered consultation for clients which included initial assessment, service referrals, and follow-up care if clients required longer term mental health care.
- Engaged in weekly treatment team meetings and individual supervisions.

Supervisor: Katy Hopkins, Ph.D.

Aug. 2016- May 2017

**Academy @ Shawnee, Louisville, KY**

Position: Intermediate Therapy Practicum Student

Population served: Middle and high school students in a low income historically underserved community that tend to face a series of systematic barriers including lack of societal resources and discrimination. Clients presented with a range of mental health concerns, including depressive and anxiety disorders, trauma- and stressor-related disorders, identity development, academic concerns, and family conflicts.

- Conducted initial assessment and provided evidenced-based individual and family therapy services to middle and high school students and their families.
- Led two social skill groups for 8th grade ESL students.
- Co-facilitated two groups for high school students using a manualized CBT depression prevention program, TIM & SARA.
- Conducted classroom observations and provided consultations and corrective action to teachers and school personnel concerning students with mental health concerns.

- Collaborated with staff and participated in meetings on education plans for clients (e.g., 504 plans and IEPs).
- Consulted with parents and provided parent skills training. Engaged in weekly treatment team meetings and individual supervisions.

Supervisor: Katy Hopkins, Ph.D.

Sept. 2015- May 2016

**The Consortium, Inc. Hope Counseling Center,  
Philadelphia, PA**

Position: Beginning Therapy Practicum Student (M.Phil. Program)

Population served: Individuals aged 18 and older with behavioral health concerns. Clients generally fit with the lower to lower-middle class socio-economic bracket and identify as African American. Common presenting concerns include severe mood disorders, history of psychosis, complex and acute posttraumatic-stress, substance use disorders, personality disorders, and relational concerns.

- Conducted intake assessments and provided weekly individual psychotherapy services while maintaining a caseload of 6-8 clients.
- Shadowed experienced clinicians and supervisor as they conducted intake evaluations, individual therapy sessions, group therapy sessions, and assessments.
- Attended clinical supervision at least one hour per week.

Supervisor: Carter Cloyd, Psy.D.

Jan. 2015- June 2015

**Holy Redeemer Chinese Catholic School, Philadelphia,  
PA**

Position: Beginning Practicum Counselor (M.S.Ed. Program)

Population served: K-8<sup>th</sup> grade students and parents of low-income immigrant families. The large majority of the students come from non-Catholic families and speak English as a second language. Common presenting concerns of students referred for counseling include acculturation challenges, academic concerns, family conflicts, and ineffective communication skills.

- Provided weekly individual support to middle school students in Mandarin and/or English and maintained a caseload of 3-4.
- Developed and distributed workshop training surveys to collect interested workshop topics for all parents.
- Co-led parenting and communication skills training workshop sessions and psychoeducation groups for parents in Mandarin.

- Collaborated and communicated with teachers and school personnel about needs and concerns of students in classroom settings.
- Engaged in group activities (art, play, and learning) with students from K-8.
- Attended supervision once a week and discussed needs and progresses of clients.

Supervisor: Lisa Cancelliere, Ed.D.

## RESEARCH EXPERIENCE

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Aug. 2016- Current

### **Resilience Research Lab**

College of Education and Human Development, University of Louisville

Supervisor: Laurie McCubbin, Ph.D.

- Conduct and collaborate on research projects evaluating resilience across various ages and cultural groups.
- Identify conceptual definitions of resilience across peer reviewed studies.
- Review lab member manuscripts and projects and provide support and feedback.
- Prepare manuscripts and research presentations for journal submissions and conferences.

### **Dissertation Project** (Dissertation chair: Laurie McCubbin, Ph.D.)

Dissertation Defended.

#### ***Internalized Racism Mediating the Effects of Ethnic-Racial Socialization on Self-Esteem and Psychological Distress among Asians and Asian Americans in the United States***

Description: This study investigates the effects of different dimensions of ethnic racial socialization on self-esteem and psychological distress through internalized racism as a mediator among Asians and Asian Americans in the United States.

- Conduct literature searches and review.
- Develop and propose research questions and study design. Create and distribute online surveys.
- Collect and analyze research data.

### **Research Project** (Co-P.I.; P.I.: Laurie McCubbin, Ph.D.) May 2020 –

Current:

#### ***Impacts of Covid-19 on Asians and Asian Americans***

Description: This study aims (a) to investigate Covid-19 triggered ethnic/racial discrimination and vigilance; (b) to investigate the effects of Covid-19 related ethnic/racial discrimination and vigilance on thriving and psychological distress;

(c) to investigate the effect of resilience on thriving and psychological distress;  
(d) to investigate resilience as a moderator on the relation between discrimination and well-being, among Asian and Asian Americans.

- Conduct literature searches and review.
- Develop and propose research questions and study design.
- Create and distribute online surveys. Collect and analyze research data.

**Research Project** (Co-P.I.; P.I.: Laurie McCubbin, Ph.D.) Aug. 2016 – Jan. 2019:

***The Effects of Resilience on Psychological, Relational, and Academic Well-being among International Students in the United States***

Description: This study investigated the moderating effect of resilience between stressors such as acculturation stress and cultural difference in individualism and collectivism and international students' academic, social, and psychological outcomes

- Conducted literature search and review.
- Developed and proposed research questions and study design.
- Created and distributed online surveys.
- Collected and analyzed data and reported findings.
- Applied for and received the Graduate Student Council Research Grant (\$300).

Aug. 2017- Aug. 2019

**Graduate Research Assistant**

Department of Special Education, College of Education & Human Development, University of Louisville

Supervisor: Jessica K. Hardy, Ph.D.

- Conducted literature searches and reviews on various topics including coaching, teacher collaboration, embedding systematic instruction, and teacher classroom practices when working with children with disabilities.
- Assisted with data collection and provided data management and coding.

**Independent Project** (P.I.: Jessica K. Hardy, Ph.D.) Feb. 2019 – Aug. 2019:

***Healthy Start Family Coaching***

Description: The purpose of this study was to gather data on parents' confidence in their own parenting and coaches' thoughts and feelings related to increasing parents' confidence. This was done through one parent survey and five coach surveys.

- Conducted literature search and review on coaching.
- Assisted in data collection and provided data management.
- Observed and coded over 30 videos on parent-child interactions.
- Coded and entered over 100 survey data from parents and coaches on parenting.

**Independent Project** (P.I.: Jessica K. Hardy, Ph.D.) Feb. 2019 – Aug. 2019:

***Designing Inquiry-Based Science Centers and Embedding Systematic Instruction: Collaborating with Teachers and Measuring Impacts on Children in Inclusive Preschool Classrooms***

Description: This study aimed to design and implement a science curriculum in four teachers' classrooms and provide systematic instruction to preschoolers with disabilities. The science learning of the target children with disabilities were observed and measured throughout the intervention to determine their science learning.

- Conducted literature search and review on embedding systematic instruction and teacher collaboration.
- Coordinated data collection and provided data management.
- Observed and coded over 40 videos on teacher-child interactions. Met weekly for inter-rater reliability checks.

**Independent Project** (P.I.: Jessica K. Hardy, Ph.D.) Feb. 2018 – Aug. 2019:

***Use of Self-Monitoring to Increase Teachers' Use of Recommended Practices in Preschool Classrooms***

Description: This study investigated the effectiveness of self-monitoring on teachers' use of descriptive praise, providing choices, and emotion labeling practices.

- Conducted literature search and review on praises, providing choices, and emotion labeling.
- Assisted with data collection and took videos of teachers practicing in classrooms.
- Observed and coded over 40 videos on teacher-child interactions in classroom settings.

Aug. 2016- Aug. 2017

**Graduate Research Assistant**

Department of Special Education, College of Education & Human Development, University of Louisville

Supervisors: Timothy J. Landrum, Ph.D., Ginevra Courtade, Ph.D., Monica Delano, Ph.D.

- Conducted literature searches and reviews on various topics including choices, emotional behavioral disorders, mindfulness, and autism.
- Attended weekly research meetings.
- Reviewed manuscripts and projects and provided feedback.
- Provided administrative and teaching assistance for department faculties.

## **PUBLICATIONS AND PRESENTATIONS**

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### **BOOK CHAPTER:**

Bishop, C. D., Hardy, J. K., & **Yao, T.** (2018). *Resources within reason: Resources to support instruction*. In P.A. Snyder & M.L., Hemmeter (Eds.), *Instruction: Effective strategies to support engagement, learning, and outcomes (DEC Recommended Practice Monograph Series No. 4)*. Washington, DC: Division for Early Childhood.

### **PUBLICATIONS:**

**Yao, T.**, McCubbin, L., & Zhang, D. (under review). Effects of Resilience on Social and Academic Well-being among International Students in the United States.

Hardy, J.K., Pennington, R.C., Rogers, A.J & **Yao, T.** (under review). Measuring the Impact of Protagonist Race on Preschoolers' Engagement and Preferences in Book Reading Activities. *Behavior Analysis in Practice*.

### **CONFERENCE PRESENTATIONS:**

**Yao, T.**, Kim, M., & Sawhney, A. (April 2020) *Culturally Sensitive Mentoring for International Students in Counseling Psychology: Mentees' Perspectives*. Symposium accepted at 2020 Counseling Psychology Conference, New Orleans, LA.

Washington, A., Berghuis, K. J., Geary, M., Gonzaga, K. P., **Yao, T.**, & Zhong, J. (October 2019). *Legacies of the Middle Passage*. Symposium presented at 2019 Universities Studying Slavery at Xavier University, Cincinnati, OH.

**Yao, T.** & McCubbin, L. (2018, April). *The Effects of Resilience on Psychological, Relational, and Academic Well-being among International Students in the United States*. Poster presented at the Great Lakes Regional Counseling Conference, Kalamazoo, MI.

**Yao, T. & McCubbin, L.** (2018, August). *The Effects of Resilience on Psychological, Relational, and Academic Well-being among International Students in the United States*. Poster presented at the 126th Annual American Psychological Association Convention, San Francisco, CA.

**PROFESSIONAL EXPERIENCE**

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| July 2020- Current                       | <p><b>Child Welfare Training Graduate Program Assistant</b><br/>         University Training Consortium, Kent School of Social Work,<br/>         University of Louisville</p> <ul style="list-style-type: none"> <li>• Conduct literature searches and reviews on training topics and manuals for child protective service workers and supervisors (e.g., unconscious bias and racial sensitivity training, leadership and management training).</li> <li>• Develop training protocols based on the literature.</li> <li>• Conduct diversity inclusion reviews of current curriculum based on MAEC Equity Audits checklist.</li> </ul> <p><u>Supervisor:</u> Emma M. Sterrett-Hong, Ph.D.</p> |
| Aug. 2020- Current<br><b>Coordinator</b> | <p><b>International Student Council Social Media</b><br/><br/>         University of Louisville</p> <ul style="list-style-type: none"> <li>• Manage and post updates on the organization's social media accounts.</li> <li>• Assist in preparing informational documents with local community resources and COVID-19 information for incoming international students.</li> <li>• Assist in planning organizational events and programs.</li> <li>• Attend bi-weekly meetings.</li> </ul>   |
| Oct. 2019                                | <p><b>National Depression Screening Day Screener</b><br/>         University of Louisville</p> <ul style="list-style-type: none"> <li>• Screened community members for symptoms of depression and anxiety and provided appropriate resources and referrals on National Depression at the University of Louisville Counseling Center</li> </ul>   |
| Aug. 2018- May 2019                      | <p><b>Graduate Assistant</b><br/>         Undergraduate and Graduate Student Advising, College of Education &amp; Human Development, University of Louisville</p> <ul style="list-style-type: none"> <li>• Communicated with students through phone to discuss program requirements.</li> <li>• Revised and updated students' program requirement documentations.</li> </ul>   |



- Provided administrative support to create advising forms and program interviews.

Supervisor: Margaret W. Pentecost, Ph.D.

Jan. 2018- May 2018

**Graduate Assistant: EDSP 218 (Technology for Students with Disabilities)**

Department of Special Education, College of Education & Human Development, University of Louisville

- Assisted with teaching preparation.
- Prepared class materials and tools required for class projects.
- Attended classes to coordinate and assist with class projects.

Instructor: Debra Bauder, Ed.D.

**PROFESSIONAL DEVELOPMENT**

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June 2020

Anti-Racism Amongst the Asian American Pacific Islander Community: panel and discussion on Anti-Racism, Privilege, and Fear amongst our community in relations to the Black Lives Matter Movement

Feb. 2019

Emotion-Focused Therapy Training: The Transforming Power of Affect (2-day clinical intervention training).  
Dr. Rhonda Goldman, Ph.D.

Dec. 2016

TF-CBT Web: An Online Training Course for Trauma-Focused Cognitive Behavioral Therapy.

Oct. 2016

Tenth Annual UofL Depression Center Conference: Expanding Horizons for Treatment of Mental Disorders (2-day professional conference).

Aug. 2016  
Prevention Program

TIM & SARA: Cognitive-Behavioral Depression

**OTHER CLINICAL & VOLUNTEER EXPERIENCE**

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May 2013- May 2014

**Lancaster Regional Hospital, Lancaster, PA**

Position: Behavioral Health Department Volunteer

- Participated in group activities (art therapy) and group sessions (coping strategy discussion) with patients.
- Communicated with patients about their feelings and to alleviate discomfort, worries, and unpleasantness.
- Ensured a healthy, safe and pleasant living environment for the patients.

- Shadowed psychologists, social workers and nursing staffs.

May 2012- Aug. 2012

**Children of Promise, New York City, NY**

Position: Summer Youth Counselor Intern

- Provided and supported mentorship for children impacted by parental incarceration in a Summer Day Camp Program.
- Participated in Art Therapy and Group Counseling Sessions.
- Ensured the health, safety, and well-being of children in the program by providing close supervision of all activities.
- Supported activity specialists with lesson plans for Physical Education, Music, Art, Spoken Word.

Sept. 2011- Dec. 2011

**Reynolds Middle School, Lancaster, PA**

Position: After School Tutor

- Provided academic support for over 30 middle school students to improve their academic performance.
- Assisted teachers in organizing after-school activities to create a safe and fun environment.

**AWARDS & SCHOLARSHIPS**

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2020

**International Student Tuition Support Award, \$250**

International Student & Scholars Service, University of Louisville

Competitive award for Outstanding international students at University of Louisville

2018

**The Graduate Student Council Travel Grant (\$350)**

College of Education and Human Development, University of Louisville

Competitive grant to provide support for attending and presenting at the APA annual convention

2017

**The Graduate Student Council Research Grant (\$350)**

College of Education and Human Development, University of Louisville

Competitive grant to fund the research study examining the effects of resilience on well-being among International Students in the United States