

“THAT WAS BIASED”: HOW DO PARENTAL RACIAL/ETHNIC SOCIALIZATION AND  
MOTIVATIONS TO CONTROL PREJUDICE PREDICT WHITE ADULTS’ DEFENSIVE  
REACTIONS TO PREJUDICE FEEDBACK?

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## ABSTRACT

Racism and systemic racism remain prevalent issues in American, but White Americans (50%) tend to be less likely to recognize the existence of institutional racism in America compared to people of color (67-83%; Ipsos, 2020). Moreover, studies indicate that many White Americans react defensively when given feedback about their own biases (Howell, 2017). White parents in America are unlikely to have discussions about race or racial inequality with their children, taking a rather racemute approach (Apfelbaum et al., 2012), although how parents discuss about race can create a powerful context for children's racial attitude development. Thus, this study aimed to investigate how parental racial-ethnic socialization (RES) messages serve as a developmental precursor to predicting variation in White Americans' motivations to control prejudice and defensive responses to feedback about their own biases. The sample consisted of 722 adults between the age of 18 and 25 that self-identified as White/Caucasian American, recruited through Amazon Mechanical Turk (71.5% female,  $M_{age}= 24.6$ ,  $SD = 1.1$ ) and Introductory Psychology Subject Pool at a public university in southern region of United States (71.5% female,  $M_{age}= 18.9$ ,  $SD = 1.2$ ). The current study found that color-conscious messages were related to internal motivations and lower defensiveness, and racemute messages were related to external motivations and lower defensiveness. The current study also found that egalitarian messages were related to both motivations but are likely to lead to greater defensiveness. These results carry theoretical implications for developing a more effective and impactful approach to RES that could foster more positive racial attitudes in individuals.

## DEDICATION

To my parents who always support and trust me

To my sister who always celebrates and is proud of my achievements even when I'm not

To D.S. for being the rock of my love and unwavering support

## LIST OF ABBREVIATIONS AND SYMBOLS

|          |                                                                                                                                                    |
|----------|----------------------------------------------------------------------------------------------------------------------------------------------------|
| $\alpha$ | Cronbach's index of internal consistency                                                                                                           |
| $df$     | Degrees of freedom: number of values free to vary after certain restrictions have been placed on the data                                          |
| $SD$     | Standard deviation                                                                                                                                 |
| $M$      | Mean: the sum of a set of measurements divided by the number of measurements in a set                                                              |
| $p$      | Probability associated with the occurrence of the null hypothesis of a value as extreme as ore more extreme than the current value                 |
| $r$      | Pearson product-moment correlation                                                                                                                 |
| $t$      | Computed value of a t test                                                                                                                         |
| $<$      | Less than                                                                                                                                          |
| $=$      | Equal to                                                                                                                                           |
| $\beta$  | Standardized beta coefficient, in regression analyses. Indicates the strength of the effect of each independent variable on the dependent variable |
| $b$      | Unstandardized regression coefficients                                                                                                             |
| $\chi^2$ | Pearson's chi squared test, a test of the differences between expected frequencies and observed frequencies in one or more categories              |
| CI       | Confidence Interval                                                                                                                                |
| RES      | Racial ethnic socialization                                                                                                                        |

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## INTRODUCTION

“To call someone prejudiced or racist in early twenty-first century America is to comment on both cognitive competence and moral standards of that individual (Arkes & Tetlock, 2004, p. 268).”

Racism and systemic racism are persistent problems in America. However, White Americans (50%) are far less likely to acknowledge institutional racism in America than people of color (67-83%; Newall & Machi, 2020) and evidence suggests that many White Americans are defensive when receiving feedback about their own prejudice (Howell et al., 2017). Past literature suggests that such defensiveness may be motivated by people’s desire to maintain a belief of being less biased or being egalitarian (e.g., Howell & Ratliff, 2016; O’Brien et al., 2010). This may be due to egalitarian or anti-racist identity becoming an important aspect of Americans’ self-identity, as the awareness of racism arises, and prejudice is frowned upon by the society. Such a societal shift is reflected in studies that used self-reports to assess prejudice, where the majority of participants reported highly endorsing egalitarian beliefs (Bonilla-Silva, 2006; Dunton & Fazio, 1997). However, racial disparities continue to persist across different domains of life (Blank, 2001; Fisher & Borgida, 2012). To combat racial disparities and promote egalitarian interracial interaction, it is critical to recognize and acknowledge one’s biases and decrease defensive responses to prejudice feedback which can impede internalization of feedback (Hillard et al., 2013; Epton et al., 2015; Howell & Ratliff, 2014; Sherman & Cohen, 2006).

Considering that racial biases start developing as early as age four (Bigler & Liben, 2007), it would be beneficial to identify developmental precursors of defensive responding and their impact during a developmental period where we see more varying levels of individuation from parents. Emerging adulthood is a developmental period in which the process of individuation and separation from parents that started during adolescence continues (Tanner, 2006). However, early adulthood is also when the parents' racial attitudes influence their racial attitudes most strongly, which could result in variation in emerging adults' emotional separation from parents and the degree to which parental messages about race are predictive of emerging adults' responses to prejudice feedback (Castelli et al., 2009; Miklikowsak, 2016; Degner & Dalege, 2013).

Some argue that people may have differing motivations behind their pursuit of egalitarianism, and depending on the source of their motivation, people could have different levels of prejudice (Legault et al., 2007; Plant & Devine, 1998). It may be that different sources of motivation to control prejudice are also associated with the level of defensive responding to prejudice feedback. The current study will examine how developmental precursors, such as parental messages about race and emotional separation from parents, and motivations to control prejudice predict variation in White Americans' defensive responses to feedback on biases.

### **White Americans and Defensiveness to Prejudice Feedback**

In contemporary America, the societal norm is to endorse egalitarianism and equality and condemn prejudice (O'Brien et al., 2010). Indeed, most Americans report having little prejudice and finding prejudice as personally unacceptable (Crandall et al., 2002; Dunton & Fazio, 1997; Plant & Devine, 1998). When encountering information that challenges or threatens one's self-view, people tend to dismiss such information (Pyszczynski & Greenberg, 1987; Shepperd et al.,

2008). Thus, any evidence or accusations that suggest that one is prejudiced could threaten one's self-view as a non-prejudiced individual, inducing self-protective strategies such as defensiveness (Howell et al., 2013; Rudman et al., 2007). A robust body of research on social identity threat utilizing the Implicit Association Test (IAT; Greenwald et al., 1998) shows that when the IAT results threaten one's egalitarian identity, people are more likely to respond defensively (Howell et al., 2013). The IAT is a computerized task that assesses the relative strength of associations between two target categories (e.g., Black and White) and two concepts (e.g., good and bad) by measuring reaction times to pairing each group with each concept. The most common source of data using the IAT is the Project Implicit website ([www.implicit.harvard.edu](http://www.implicit.harvard.edu)). Visitors can complete an IAT and receive feedback about their implicit attitudes. They also report their explicit attitudes and opinions of the IAT feedback.

In the context of the Black-White IAT, most people tend to show a pro-White bias which usually does not align with their self-reported explicit attitudes (Howell et al., 2015). The discrepancy between their implicit attitudes as indicated by the IAT feedback and their self-views as indicated by their report of explicit attitudes seem to cause people to respond defensively. In Howell and colleagues' (2017) investigation, most people self-reported themselves to be either egalitarian or slightly biased. However, people's implicit attitudes as measured by the IAT indicated that most had moderate to strong stereotypical bias. Overall, the discrepancy between IAT feedback and self-reported attitudes was associated with defensiveness and negative reactive affect. The greater the magnitude of the discrepancy, the more likely people were to disparage the feedback and to feel bad.

Prior studies that examined the impact of such discrepancy on White participants' response to implicit attitude feedback found similar defensive reactions. Howell and colleagues

(2015) showed that White participants showed greater implicit pro-White bias compared to Black and Black/White biracial participants. Moreover, the discrepancy between implicit and explicit racial attitudes was the greatest among White participants. White participants reacted to their implicit attitude feedback defensively when the feedback indicated greater pro-Whiteness than they explicitly indicated, suggesting that White participants' egalitarian self-view was threatened by the IAT feedback. Similarly, Howell et al. (2013) also found that the majority of their White participants underestimated their implicit preference for White individuals. Again, the discrepancy between the feedback they expected to get and the actual feedback they got indicating pro-White biases resulted in greater negative mood and greater regret of learning their feedback. It was also associated with greater desire to avoid learning the IAT results. In another study by Howell et al. (2017), they found that White participants' implicit racial attitudes were more likely to align with societal prejudice of preferring White over Black compared to non-White counterparts. White people were more sensitive to the feedback discrepancy as well, as indicated by their greater feedback derogation. Moreover, those that derogated the feedback were less likely to intend to change their behavior or desire to reduce their implicit bias. Similarly, when they detected the IAT results would indicate pro-White bias, White participants experienced negative affect and made external attributions for their biases, blaming factors irrelevant to racial bias for the feedback, such as the validity of the test (Monteith et al., 2001). White participants' defensiveness may have resulted from feeling threatened by the discrepant implicit-explicit racial attitude, possibly due to their desire to avoid appearing racist. Frantz et al. (2004) found that White participants experienced stereotype threat when they believed the IAT was diagnostic of racism which resulted in them exhibiting greater pro-White biases.

Overall, the research suggests that people exhibit defensiveness in various forms when their egalitarian self-view is threatened by evidence for their biases. This effect seems to be especially pronounced in White Americans due to their heightened concern about being viewed as racist. The current study aims to assess White individuals' defensiveness to their implicit attitude feedback by measuring their derogation of the IAT and the feedback and their behavioral intentions to change their attitudes. Like past studies (e.g., Howell et al., 2013; 2017) have found, people may exhibit greater defensiveness by questioning the validity and credibility of the IAT and the personal feedback they have received. In addition, people may show their defensiveness through low intentions and interest in engaging in behavioral strategies to help reduce their racial biases. Individual's inclination to respond defensively is likely dependent on various factors. People's different motivations to control prejudice may be one such factor.

### **Motivation to Control Prejudice**

Prejudices and stereotypes stem from our fundamental need to belong. According to Social Identity Theory (SIT; Tajfel & Turner, 1986), people maintain and enhance their self-esteem and social identity by viewing their in-group favorably while disparaging the outgroup. However, because contemporary social norms oppose prejudice, it is likely that people are motivated to regulate their prejudice or at least their prejudiced reactions. The power of social norms is evident in experimental studies that successfully decrease participants' prejudiced opinions by manipulating social norms to be nonprejudiced (Monteith et al., 1996; Walker et al., 2015).

Plant and Devine (1998) distinguished between internal and external motivations to regulate prejudice. Internally motivated, or self-determined desires to regulate prejudice may be thought of as a goal of ultimately achieving a genuine absence of prejudice in oneself. Internally

motivated individuals' desire to decrease prejudice is personally endorsed rather than enforced by social norms. For them, egalitarianism is more for personal satisfaction and a way to express personal values (Legault et al., 2007). These intrinsically motivated people may be practicing more preconscious control over stereotype activation (prejudiced reactions), which may explain why they exhibit less implicit bias as well as explicit prejudice. They also more effectively regulate their prejudice and have more positive interracial interactions regardless of the level of public accountability (Butz & Plant, 2009) and are more likely to anticipate positive interactions with Black people in the future (Plant, 2004). Internal motivations to regulate prejudice have been found to be positively related to warmth toward racial outgroups as well (Pahlke et al., 2020).

In contrast, people with non-self-determined or externally motivated desires to regulate prejudice are driven by their concern of appearing prejudiced and desire for approval from others. Individuals that are high on external motivations for prejudice are more sensitive to external constraints on prejudice such as anti-prejudice social norms (Plant & Devine, 1998). In such situations, these individuals may modify their behaviors to conform without necessarily suppressing or examining their biases internally (Pahlke et al., 2020). Perhaps for this reason and because they are less practiced with nonprejudiced reactions (Monteith et al., 1998), externally motivated people may be less able to control their prejudiced reactions, as evidenced by their higher degree of implicit bias compared to internally motivated people (Legault et al., 2007; Butz & Plant, 2009; Hausmann & Ryan, 2004; Legault & Green-Demers, 2012) and greater expression of resentment in response to politically-correct pressure of pro-Blackness (Plant & Devine, 2001). Their prejudice regulation also seems to depend on public accountability as well. In contrast to internally motivated people, those with more external motivation tend to control

prejudice only when their actions and thoughts could be judged by outside observers as prejudiced (Plant & Devine, 1998). Moreover, external motivations are related to interracial interaction avoidance and anxiety (Plant, 2004).

Legault and colleagues (2007) broadened the taxonomy of motivation to regulate prejudice to include six forms rather than the internal-external dichotomy as developed by Plant and Devine (1998). Legault et al.'s conceptualization draws on Self-Determination Theory (SDT; Ryan & Deci, 2002) which emphasizes the importance of autonomy in prejudice regulation. Self-determined motivations allow an individual to act in a way that aligns with their goals or values. Autonomously chosen goals to be non-prejudiced would foster more internalized motivations to regulate prejudice, which should lead to more consistent non-prejudiced behaviors.

Based on SDT, Legault et al. (2007) argued that there is a continuum of motivation to be non-prejudiced that varies on the level of self-determinedness. They proposed six styles of regulation ranging from complete self-determinedness to amotivation. At the pinnacle of self-determination, individuals freely try to behave in unprejudiced ways and such efforts brings enjoyment and a sense of satisfaction. The internal control of their behaviors is salient. In contrast, non-self-determined, or more externally-motivated, nonprejudiced behaviors are subject to situational and external influences, like social norms or by the presence of others, so these nonprejudiced attitudes or behaviors are less consistent and stable across time and situations. Extrinsically-motivated nonprejudice may infringe on a person's personal standards of non-prejudice (Plant, Devine & Brazy, 2003).

In addition, Legault et al. (2007) presented three forms of regulation that vary on their level of self-determination. Amotivation is placed at the lowermost position on the

internalization continuum represents a complete lack of intention to be non-prejudiced.

Amotivation corresponds with having low internal and external motivations for nonprejudice (Devine et al., 2002). People with a prejudice regulation style of amotivation do not have any goals to regulate prejudice, either because they see no value in it or do not perceive there to be external incentives to control prejudice. Amotivation has been positively associated with both explicit and implicit prejudice (Legault et al., 2007).

These varying levels of self-determination in one's motivation to control prejudice may at least partly explain different levels of defensiveness upon receiving prejudice feedback. It may be that because more self-determined or internally-motivated individuals are more concerned with correcting their biases with an ultimate goal of achieving a genuine absence of prejudice (Monteith et al., 1998), they may turn to self-criticism and self-reflection rather than defensiveness in response to prejudice feedback. More externally-motivated people may feel more threatened and experience negative emotions leading to greater defensive reactions. Therefore, because self-determined individuals regulate their prejudice to meet their personal standards, they may report greater intention and interest to decrease their biases than externally-motivated people. Externally-motivated people on the other hand, strive to meet other-imposed standards; therefore, they may question the validity of the IAT and their feedback more compared to people with more self-determined internalized motivation. The current study will also examine developmental contexts that impact individuals' self-determination to motivate prejudice regulation. One possible contextual factor is the environment in which the person grew up in, specifically how their parents may have talked about race.

### **Racial/Ethnic Socialization**

Racial/ethnic socialization (RES) is a social, cognitive, and developmental process of children learning about race and ethnicity in racially diverse societies like the United States (Spencer, 2006). The kind of context parents create for children during their racial socialization process can greatly influence children's racial attitudes (Castelli et al., 2009; Degner & Dalege, 2013; Meusen & Dhont, 2015; Miklikowska, 2016). Children's RES context can be shaped by how the family discusses racial issues, what kind of direct instructions parents give their children about race, and how parents interact with people of their own and other races as well (Pahlke et al., 2020). The influence of parents' racial attitudes on their children's racial attitudes is the strongest during late adolescence to early adulthood (Castelli et al., 2009; Degner & Dalege, 2013; Miklikowsak, 2016). However, despite the increased racial diversity and movements promoting racial equality in the United States, such as Black Lives Matter, race seems to remain an extremely challenging subject to discuss with children for many White parents; a majority of White parents report either never having talked about race and racism with their children or using a colorblind approach to race (Pahlke et al., 2012; Lesane-Brown et al., 2010; Vittrup, 2016, 2018).

The colorblind or "racemute" approach of RES follows a colorblind ideology which asserts that recognition of race leads to racism (Bartoli et al., 2016; Hagerman, 2014). The colorblind ideology is highly endorsed by White Americans including white parents resulting in their tendency to avoid and discourage children from discussing race and racism and beliefs that overt discussion of race creates undesirable racial disharmony (Apfelbaum et al., 2012). Many white parents avoid explicit discussions of race with their children possibly because they believe their children are too young or because they believe that children cannot see race. This avoidance, however, seems to continue even during adolescence, as White adolescents reported

having received intentional and explicit messages around color-blindness attitudes and behaviors from their parents (Bartoli et al., 2016). This is concerning because children become aware of ethnic differences and exhibit racial biases during early childhood (Nesdale, 2013; Bigler & Liben, 2007), and failing to detect and acknowledge children's racial attitudes and beliefs can result in a missed opportunity to prepare children for future interracial interaction and promote positive racial attitudes.

Moreover, such beliefs of colorblind ideology minimize and deny the existing impact of racism and discrimination while blaming Black Americans for cultural deficits (Bonilla-Silva, 2003). The colorblind ideology asserts that race does not matter, and so the racial differences that exist are the result of individuals' actions and choices rather than the consequence of systemic racism (Vittrup, 2018; Zucker & Patterson, 2018). Indeed, White children that grew up in segregated White communities and in colorblind contexts did not notice their whiteness or believe that racism still exists in America (Hagerman, 2014). Because colorblind ideology permits people to ignore racial inequalities, colorblindness has been associated with greater prejudice (Richeson & Nussbaum, 2004; Ryan et al., 2007). For instance, White children of mothers that were unwilling to discuss race with them showed pro-European American and anti-African American biases (Pahlke et al., 2012). Colorblindness also predicted White Americans' downplaying people's reaction to subtle racial insults as overreacting (Zou & Dikter, 2013). Racemute or colorblind racial socialization has also been linked to external motivations to respond without prejudice as well (Apfelbaum et al., 2008; Norton et al., 2006).

Although White parents are often reluctant to discuss race or racism, they often do engage in conveying egalitarian messages to their children. Egalitarianism emphasizes the similarities, rather than differences, between racial/ethnic groups (Hughes et al., 2006) and the

importance of individual characteristics and qualities over racial group membership as the basis of judgment (Boykin & Toms, 1985). Egalitarian messages assert racial equity (e.g., “people are equal regardless of their race or ethnic background”) and that race should not lead to discrimination (Barr & Neville, 2008; Hughes et al., 2017). Past studies have found that parents’ egalitarian socialization is positively associated with warmth towards outgroup members and with internally motivated desire to control prejudice (Pahlke et al., 2020).

However, the egalitarian approach of racial socialization emphasizes a rather idealized version of racial equity and may not also include discussion of systemic racism, race-based injustices, and discrimination. Because egalitarianism pursues racial equity by focusing on individual characteristics rather than a person’s skin color, people’s different lived experiences, including race-based discrimination, are not necessarily regarded. Moreover, depending on the context and framing of the message, egalitarian socialization messages could also be colorblind as well (e.g., “There is only one race, the human race”; “It does not matter if you are Black, White, or purple, what matters is what is on the inside”; Zucker & Patterson, 2018). Such colorblind egalitarian messages are well intentioned but could downplay the importance of race in a person’s life and also ignore the existence of systemic racism (Zucker & Patterson, 2018). In this aspect, colorblindness and egalitarianism are not completely distinct approaches to racial socialization.

In contrast to colorblind and egalitarian racial socialization which ignores institutional racism, the color-conscious approach to racial socialization in White families acknowledges racial discrimination as well as the existence of White privilege (Hagerman, 2017). Although both color-conscious and colorblind approaches convey the message that race should not matter, unlike the colorblind approach which completely avoids discussion of race, color-conscious

racial socialization messages promote the idea that race is an important component of individuals' identities and their daily life but should not influence treatment or outcomes (e.g., "people of all races should be treated equally, but unfortunately this often does not happen"; Hughes et al., 2006; Neblett et al., 2008; Vittrup, 2018; Zucker & Patterson, 2018). Parents taking on a color-conscious approach explicitly discuss race and racial inequality in either a historical (e.g., the history of slavery in America) or contemporary context (e.g., the BLM movement; Vittrup, 2016). Contrary to colorblind parents' beliefs that discussion of race can lead to more racism in children, parents' lack of discussion about race may be an indicator to children that racialized violence and inequality are acceptable (Zucker & Patterson, 2018). Instead, explicitly discussing and acknowledging racism can promote racial bias reduction (Hughes et al., 2007). Thus, color-consciousness is a clearly distinctive racial socialization approach from colorblindness, whereas egalitarianism can overlap with ideas of colorblindness under certain contexts. Thus, the current study will assess participants' color-conscious racial socialization experiences.

RES in white families has not been explored widely relative to other racial/ethnic minorities. This may be due to the fact that White Americans have been historically dominant politically and economically and that Whiteness has been the cultural norm of the United States (Bonilla-Silva, 2012), which likely has allowed White people to not consider the subject of race as much compared to racial/ethnic minorities. Considering the differences in race-related experiences of White Americans and racial minorities in the U.S., White RES will be distinct from that of the minorities. Parental RES during childhood is also an important developmental experience which may affect children's beliefs about race and interracial interactions through adulthood.

In early childhood, parents are a prominent source for children to learn about race and ethnicity (Caughy et al., 2006). However, as children enter adolescence, they seek more independence (e.g., Mahoney et al., 2009), become highly sensitive to peer influence (Steinberg, 2008), and become equipped with advanced cognitive development which allows them to form their own opinions and individuate from parent's beliefs (Steinberg & Morris, 2001). Establishing oneself as a separate individual from parents, or separateness, can be defined in terms experiencing distance from parents physically, functionally, materially, and emotionally (Kagitcibasi, 1996; Siffge-Krenke, 2010; Steinberg & Silverberg, 1986). This process of separation continues to be an important developmental task in emerging adulthood (ages 18-25) as emerging adults take up more adult responsibilities and expand social networks through school and work (Buhl, 2008; Lamborn & Groh, 2009; Arnett, 2000). For college students, it may mark their first time living away from home and family and they may be exposed to more diverse ideas and people (Lloyd & Gaither, 2018). Increased diversity experiences through interracial interaction and academic courses could influence young adults' racial/ethnic socialization as well. Such experiences could result in experiencing distance from parents, and as individuals separate from parents, they are less likely to imitate parents' beliefs (Koepeke & Denissen, 2012). Therefore, they are likely to depend less on parents' RES messages.

However, many emerging adults are not yet completely independent from their parents as they continue with their higher education (i.e., college) and at least partially depend on parents financially (Komidar et al., 2014). Such ambivalence during emerging adulthood may cause variation in the level of separation and individuation from parents. Indeed, in Beyers and Goossens's 3-year longitudinal study (2002), they found five trajectory classes that varied on the levels of emotional and functional separation with some late adolescents and emerging adults

developmentally increasing in their levels of emotional and functional separation from parents while some had a high initial and increasing level of separateness.

Thus, the current study seeks to address the gap in the literature to better understand White Americans' conception of prejudice focusing on the moderating effect of emotional separation from parents. We hypothesize that the influence of parental RES messages on motivation to control prejudice and defensive reaction will be stronger for young adults with lower levels of emotional separation from parents.

### **Current Study**

The current study examined parental messages about race that young adult participants grew up hearing and how these messages create a powerful context for their racial socialization. Many white parents still struggle and even fear discussions of race and racism with their children; some believe that recognition of race leads to racism and instead choose to be “colorblind,” completely disregarding how race may affect lived experiences (e.g., Pahlke et al., 2012). Such fear may motivate children to control their prejudice, but only out of fear of appearing racist (i.e., external motivations) rather than out of genuine interest in decreasing prejudice. In contrast, parents' egalitarian messages which promote equality and color-conscious messages that acknowledge race-based societal inequalities yet promote racial equality may contribute to children developing self-determined internal motivations to decrease their prejudice. However, it is yet unknown whether RES and motivations for controlling prejudice predict defensiveness in response to feedback around prejudice.

I hypothesized that parents' colorblind messages will predict greater defensiveness via low self-determined (intrinsic) motivation for prejudice control, while color-conscious messages will predict lower defensiveness via high self-determined (intrinsic) motivation for prejudice

control. Although we predicted egalitarian messages to promote greater intrinsic motivation to be less prejudiced, due to their similarities to both racemute and color-conscious messages, we predicted egalitarian messages to be related to self-determinedness less strongly than color-conscious messages but more strongly compared to racemute messages. To test these hypotheses, I collected data with White young adults. I hypothesized that these processes may vary in young adults depending on their levels of emotional separation from parents, being weaker for young adults with higher emotional separation from parents. Specifically, I predicted that when high on emotional separation, the indirect effects of racemute messages on defensiveness will be weaker compared to egalitarian and color-conscious messages considering that the millennials and Gen Z's are more likely to recognize the impact of race in social systems and support racial justice movements such as Black Lives Matter compared to previous generations (Apollon, 2011; Gen Forward Survey, 2020). Age and conservatism were included in the main analyses as covariates.

## METHOD

### Participants

Participants were young adults between 18 and 25 years of age that self-identified as White/Caucasian American that were born in the United States recruited through the psychology subject pool at the University of Alabama and Amazon Mechanical Turk (MTurk) from spring 2022 through fall 2022. A total of 1,046 adults (821 from the psychology subject pool and 225 from MTurk) completed the study. We excluded 209 participants because they did not self-identify as White/Caucasian. Nineteen participants were excluded because they were not born in the U.S., and 35 participants were excluded because they did not meet the age criteria. Forty-seven participants from the subject pool and 14 participants from Amazon MTurk were removed from the data analyses because they failed six out of ten attention checks. The final sample was composed of 564 young adults recruited from subject pool (23.0% male, 71.5% female,  $M_{\text{age}} = 18.9$ ,  $SD = 1.2$ ) and 158 young adults recruited from Amazon MTurk (27.8% male, 71.5% female,  $M_{\text{age}} = 24.6$ ,  $SD = 1.1$ ). Using the MacArthur Scale of Subjective Social Status (Goodman et al., 2001), subject pool participants reported their subjective socioeconomic status to be middle class ( $M = 4.52$ ,  $SD = 1.47$ , median = 4.0, scale/observed range = 1-10) while MTurk participants reported their subjective socioeconomic status to be middle to upper class ( $M = 6.24$ ,  $SD = 2.45$ , median = 6.0, scale/observed range = 1-10).

## Procedures

After consenting to participate, participants completed a demographic questionnaire, the RES questionnaire, and the Motivation to be Nonprejudiced Scale. Then, participants completed the Black-White/Good-Bad IAT and were given false feedback indicating a moderate implicit bias preferring European Americans. Next, participants answered a series of questions about their reaction to the feedback. Lastly, they completed the Emotional Autonomy Scale. After participants completed the entire survey, they were debriefed about the false IAT feedback and were provided with additional resources for reducing prejudice. Participants were awarded research participation credits or \$0.75 as compensation in they completed via Amazon MTurk.

## Measures

**Demographic variables.** Participants were asked to report their race, ethnicity, age, gender, whether they were born in the United States, the state that they spent most of their childhood in, their political orientation, and subjective socioeconomic status (Appendix B). Participants' political orientation was measured with a single slider item that ranged from *1 Very Liberal* to *7 Very Conservative*. Participants' subjective socioeconomic status was assessed using the MacArthur Scale of Subjective Social Status (Goodman et al., 2001). The measure consists of a ladder with 10 rungs representing people with different levels of socioeconomic status. Participants were instructed to fill in the circle next to the rung where they felt their family's socioeconomic status stands relative to others in the U.S.

**Parental racial socialization.** Parental racial socialization messages were assessed using a modified version of the Parental Racial-Ethnic Socialization Scale (Hughes & Chen, 1997; Hughes & Johnson, 2001; Pahlke, Bigler & Suizzo, 2012; Pahlke, Patterosn & Hughes, 2020). Participants were asked to rate the frequency of hearing each message about race from their

parents (i.e., “How often did your parents explicitly or directly told you these things?”) on a scale from 1 (*never*) to 5 (*very often*). The current study used two subscales from the original measure: egalitarian (8 items; e.g., “Told you that you should try to make friends with people of all races and ethnic backgrounds”; “Told you that it is important to appreciate people of all racial and ethnic groups”), racemute (6 items; e.g., “Told you that you should avoid discussions of race or ethnicity”; “Told you that talking openly about race is racist”). We added items to measure parental messages of color-consciousness (10 items; e.g., “American society is not always fair to all races and ethnicities”; “Sometimes people are treated badly just because of their race or ethnicity”). Subscales of egalitarianism ( $\alpha = .79$ ) and racemute ( $\alpha = .83$ ) from the original measure demonstrated good reliability in past studies (Pahlke et al., 2020).

To examine the psychometric properties of the revised RES measure, pilot data were collected with a sample of 473 adults that self-identified as White/Caucasian and residing in the U.S. Participants were recruited through Amazon Mechanical Turk in the fall of 2021. A confirmatory factor analyses (CFA) of the modified measure that included new items for color-consciousness was conducted to confirm the underlying constructs of racial/ethnic socialization of the revised measure (see Appendix A for pilot data results and discussion). The revised subscales of egalitarianism (5 items;  $\alpha = .747$ ), racemute (4 items;  $\alpha = .828$ ), and color-consciousness (8 items;  $\alpha = .851$ ) demonstrated good reliability.

We replicated the confirmatory factor model obtained from the pilot data for the most part using the current sample. Five items for egalitarianism were kept. Three items (“White people have more opportunities than people of other racial or ethnic groups in this country,” “About something unfair that he/she witnessed was due to racial or ethnic discrimination against another racial or ethnic groups,” “Something he/she saw that showed poor treatment of another

ethnic or racial group”) were taken out, and one item (“In the past, people from other racial or ethnic groups were discriminated against because of their race or ethnicity”) was added into color-consciousness to improve model fit. One item (“Talking openly about race is rude or impolite”) was taken out of racemute to improve model fit. The final model demonstrated a good fit (CFI= .952, RMSEA = .063, SRMR= .044). Table 1 presents the factor loadings of the items. The revised subscales of egalitarianism (5 items;  $\alpha = .877$ ), color-consciousness (6 items;  $\alpha = .849$ ), and racemute (4 items;  $\alpha = .814$ ) demonstrated great reliability in the current sample as well. Items are presented in Appendix C.

**Table 1**  
*Factor Loadings of the Items Ratings to the Parental Racial Ethnic Socialization Scale*

| Items                                                                           | Egalitarian | Color<br>Conscious | Racemute |
|---------------------------------------------------------------------------------|-------------|--------------------|----------|
| People are equal, regardless of their race or ethnic background.                | .683        | 0                  | 0        |
| I should try to make friends with people of all races and ethnic backgrounds.   | .750        | 0                  | 0        |
| It is important to appreciate people of all racial and ethnic backgrounds.      | .861        | 0                  | 0        |
| About the importance of getting along with people of all races and ethnicities. | .812        | 0                  | 0        |
| Everyone should have an equal chance and an equal say in most things.           | .692        | 0                  | 0        |
| Sometimes people are treated badly just because of their race or ethnicity.     | 0           | .594               | 0        |
| American society is not always fair to all races and ethnicities.               | 0           | .604               | 0        |
| About discrimination or prejudice against other racial or ethnic groups.        | 0           | .661               | 0        |

|                                                                                                                         |   |      |      |
|-------------------------------------------------------------------------------------------------------------------------|---|------|------|
| In the past, people from other racial or ethnic groups were discriminated against because of their race or ethnicity.   | 0 | .725 | 0    |
| About the discrimination people from other racial or ethnic groups have experienced in the past.                        | 0 | .756 | 0    |
| People from other racial or ethnic groups are sometimes still discriminated against because of their race or ethnicity. | 0 | .819 | 0    |
| Discrimination against minorities is no longer a problem in the United States.                                          | 0 | 0    | .755 |
| Talking about racial issues causes unnecessary tension.                                                                 | 0 | 0    | .698 |
| Talking openly about race is racist.                                                                                    | 0 | 0    | .658 |
| You should avoid discussions of race or ethnicity.                                                                      | 0 | 0    | .690 |

**Motivation to control prejudice.** Participants' internal and external motivation to control prejudice were measured using two subscales from the Motivation to be Nonprejudiced Scale (MNPS; Legault et al., 2007). Internal motivations to control prejudice was measured using the intrinsic motivation subscale (4 items; e.g., "For the enjoyment I feel when relating to other groups"), and external motivations to control prejudice was measured using the external regulation subscale (4 items; e.g., "Because biased people are not well-liked"). After a brief introduction of the concept of prejudice, participants were asked to rate how much each item corresponded to their "ultimate reasons for avoiding prejudice" on a 7-point Likert scale (1= *does not correspond at all*; 4= *corresponds moderately*; 7= *corresponds exactly*). Internal and external motivations were calculated by averaging the scores for each subscales. The measure has shown good construct and concurrent validity and internal reliability ( $\alpha = .76- .90$ ) in

samples of university students (Legault et al., 2007). The two subscales also demonstrated good internal reliability in the current sample as well ( $\alpha = .845-.854$ ). Items are presented in Appendix D.

The original study plan was to calculate a single score as an index of overall self-determined regulation of prejudice by computing weighted values for each motivational dimension based on its position on the continuum. However, preliminary analyses of this single score showed that it was positively correlated with all RES messages. However, when subscale scores were separated out, internal motivations were positively correlated with egalitarian and color-conscious messages, whereas external motivations positively correlated with color-conscious and racemute messages. Moreover, the strength of the correlations between external motivations and color-conscious ( $r = .099$ ) and racemute messages ( $r = .356$ ) varied, whereas the strength of the three correlations between the single score and RES messages were across the board ( $r = .230 - .319$ ). Thus, based on the bivariate correlation results, it was determined that separate internal and external motivation scores would better capture complex associations motivations to control prejudice and the relations with RES messages and defensiveness.

**Implicit Association Test.** The Black-White/Good-Bad IAT developed by Greenwald et al. (1998) was used. This race IAT uses response latencies between target and evaluations. Participants were asked to classify Black and White faces and pleasant unpleasant words using two computer keys. Each block categorized “African Americans” and “European Americans” with either pleasant (e.g., glorious, excellent) or unpleasant words (e.g., detest, tragic). Then, for each trial, participants were instructed classify either a Black face or a White face to the category that the face fits in (e.g., Black face and “African Americans or Glorious”; White face and “European Americans or Excellent”). Photos were sourced from the Chicago Face Database.

Twelve pictures of Black male and female and White male and female with neutral facial expressions were selected. Pictures were then cropped to show the faces only from the forehead to nose. We used the same pleasant and unpleasant stimulus words used by Greenwald et al. (1998). The IAT was created using iatgen (Carpenter et al., in press).

**Response to the IAT feedback.** After completing the IAT, participants were shown false feedback indicating that they have a moderate implicit bias preferring European Americans (i.e., “During the Implicit Association Test (IAT) you just completed: Your responses suggested a moderate automatic preference for European Americans compared to African Americans”). After receiving their false IAT feedback, participants were asked to indicate the extent to which they agreed with the following items to assess their reaction to the feedback. Six items assessed derogation of the feedback (e.g., “Do you believe the IAT is a valid measure of your attitude?”; “The implicit attitude feedback I just received is an accurate reflection of my implicit attitudes (reverse coded)”). Participants were also asked to indicate their willingness to change their behaviors or partake in certain behaviors in reaction to the feedback (17 items; e.g., “The implicit attitude feedback I just received will affect my behavior”; “I am eager to learn how to change my implicit bias”; “I acknowledge that implicit bias can influence my judgments”). Participants rated each item on a scale from 1 (Strongly Disagree) to 7 (Strongly Agree). Derogation of the IAT feedback and behavioral willingness did not combine to form a latent factor of “defensiveness”; therefore, we conducted SEM analyses that included both feedback derogation and behavioral intention simultaneously. Both subscales demonstrated excellent internal reliability in the current sample ( $\alpha = .914-.917$ ). Items are presented in Appendix E.

**Emotional Separation.** Participants’ emotional separation from parents were measured using the subscales of the Emotional Autonomy Scale (EAS; Steinberg & Silverberg, 1986)

following Beyers et al.'s (2005) higher order constructs of separation and detachment. The separation scale consists of a parental deidealization subscale (5 items; e.g., "My parents hardly ever makes mistakes"), a nondependency subscale (4 items, e.g., I go to my parents for help before trying to solve a problem myself") and three items from individuation subscale (e.g., "There are some things about me that my parents don't know"). Participants rated each item on the 4-point Likert scale ranging from *don't agree at all* to *completely agree*. The total score was calculated averaging the 12 items. The separation scale demonstrated good construct validity and internal reliability (Beyers et al., 2005; Lamborn & Groh, 2009; Ingoglia et al., 2011). The measure was internally reliable for the current sample ( $\alpha = .714$ ). The items are presented in Appendix F.

## RESULTS

### **Missing Data**

The percentages of missing values for the MTurk sample were 0-5.1% for the predictor and outcome variables and 0-1.3% for demographic variables used as covariates. The percentages of missing values for the subject pool sample were 0-4.8% for the predictor and outcome variables and .9-2.1% for demographic variables used as covariates. Missing value analyses using expectation maximization estimation indicated that data of both MTurk and SONA samples were missing completely at random (MCAR). Participants missing endogenous variables in the SEM analyses were included using maximum likelihood estimation in Mplus.

### **Descriptive Analyses**

Descriptive statistics and correlations among the variables are presented in Table 2. Egalitarian messages were positively correlated with color-conscious messages but negatively correlated with racemute messages. Racemute and color-conscious messages were positively correlated with each other. Egalitarian messages were positively correlated with feedback derogation, behavioral willingness, and internal motivations, but uncorrelated with external motivations. Color-conscious messages were negatively correlated with feedback derogation, but positively correlated with behavioral willingness and both motivations. Racemute messages were negatively correlated with feedback derogation and positively correlated with external motivations. Feedback derogation and behavioral willingness were negatively correlated with each other. Feedback derogation was negatively correlated with external motivations only.

Behavioral willingness was positively correlated with both motivations, although the strength of the correlation was stronger with internal motivations. Emotional autonomy was negatively correlated with all three RES messages. The normality of all variables was examined. All variables met criteria as acceptable in regard to skewness and kurtosis for SEM analyses (Kline, 2011).

As seen in Table 3, independent samples t-tests indicated significant group differences in age, conservatism, feedback derogation, external motivation, and all three RES messages between subjects from the subject pool and subjects from Amazon MTurk. Amazon MTurk subjects were significantly older and more conservative than the subject pool subjects. Compared to the subject pool participants, Amazon MTurk subjects reported significantly higher color-conscious and racemute messages, external motivations, and feedback derogation compared to subject pool participants. The MTurk sample also reported significantly lower egalitarian messages and emotional autonomy.

There were also gender differences. As seen in Table 4, compared to men, women reported higher behavioral willingness, internal motivations, and feedback derogation. Males reported higher emotional autonomy than females. Correlations amongst the variables separated for men and women are presented in Table 5. Fisher's *r*-to-*z* transformations (Lenhard & Lenhard, 2014) were used to compare correlations for males and females. To note some gender differences found, correlations between color-conscious and racemute messages ( $z = 2.68, p = .007$ ), racemute messages and behavioral willingness ( $z = 2.79, p = .005$ ), color-conscious messages and external motivations ( $z = 2.94, p = .003$ ), emotional autonomy and racemute messages ( $z = -2.83, p = .005$ ), external motivations and behavioral willingness ( $z = 3.75, p = .000$ ) were significant only for men. The association between emotional autonomy and

behavioral willingness significant only for women ( $z = -3.11, p = .002$ ). The correlations between feedback derogation and behavioral willingness and the correlations between internal motivations and external motivations had the same direction for both genders, but significantly differed in their strength.

**Table 2**  
*Descriptive Statistics and Correlations Between Variables*

|                  | 1        | 2        | 3        | 4        | 5        | 6        | 7        | 8       | 9       | 10       | 11 | Mean<br>(SD)    |
|------------------|----------|----------|----------|----------|----------|----------|----------|---------|---------|----------|----|-----------------|
| 1. Age           | -        |          |          |          |          |          |          |         |         |          |    | 20.16<br>(2.63) |
| 2. Sub SES       | .339***  | -        |          |          |          |          |          |         |         |          |    | 4.89<br>(1.87)  |
| 3. Conserv       | .057     | -.033    | -        |          |          |          |          |         |         |          |    | 5.42<br>(1.88)  |
| 4. Egal          | -.213*** | -.155*** | .071     | -        |          |          |          |         |         |          |    | 3.89<br>(.86)   |
| 5. Col-Con       | .082*    | .004     | -.050    | .546***  | -        |          |          |         |         |          |    | 3.29<br>(.81)   |
| 6. RM            | .596***  | .255***  | .150***  | -.154*** | .108**   | -        |          |         |         |          |    | 2.33<br>(.98)   |
| 7. Derogat       | -.536*** | -.243*** | .013     | .099*    | -.146*** | -.507*** | -        |         |         |          |    | 4.81<br>(1.66)  |
| 8. Behav<br>Will | .037     | .114**   | -.170*** | .180***  | .398***  | .028     | -.176*** | -       |         |          |    | 4.75<br>(1.06)  |
| 9. Int Mot       | -.057    | -.004    | -.076*   | .342***  | .348***  | -.031    | -.042    | .494*** | -       |          |    | 5.21<br>(1.14)  |
| 10. Ext Mot      | .210***  | .038     | .167***  | .071     | .099**   | .356***  | -.238*** | .090*   | .229*** | -        |    | 4.19<br>(1.43)  |
| 11. Emo Aut      | -.280*** | .020     | -.272*** | -.198*** | -.155*** | -.318*** | .231***  | .078*   | -.006   | -.203*** | -  | 2.63<br>(.48)   |

*Note.* Sub SES = Subjective Socioeconomic Status; Conserv = Conservatism; Egal = Egalitarian; Col-Con = Color-Conscious; RM = Racemute; Derogat = Feedback Derogation; Behav Will = Behavioral Willingness; Int Mot = Internal Motivations; Ext Mot = External Motivations; Emo Aut = Emotional Autonomy.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .001$

**Table 3***Means, Standard Deviations, and Differences Amongst Variables by Source*

| Variables              | Amazon Mechanical Turk |       |           | Subject Pool |       |           | <i>t</i>  | <i>df</i> |
|------------------------|------------------------|-------|-----------|--------------|-------|-----------|-----------|-----------|
|                        | <i>n</i>               | Mean  | <i>SD</i> | <i>n</i>     | Mean  | <i>SD</i> |           |           |
| Age                    | 158                    | 24.55 | 1.05      | 552          | 18.90 | 1.21      | 53.27***  | 708       |
| Subjective SES         | 157                    | 6.24  | 2.45      | 564          | 4.52  | 1.47      | 11.02***  | 719       |
| Conservatism           | 156                    | 5.69  | 2.34      | 559          | 5.34  | 1.72      | 2.07*     | 713       |
| Egalitarian            | 158                    | 3.56  | .57       | 564          | 3.99  | .90       | -5.70***  | 720       |
| Color-conscious        | 158                    | 3.45  | .60       | 564          | 3.24  | .85       | 2.81**    | 720       |
| Racemute               | 158                    | 3.50  | .61       | 564          | 2.00  | .79       | 22.17***  | 720       |
| Internal motivations   | 158                    | 5.10  | .90       | 564          | 5.24  | 1.20      | -1.36     | 720       |
| External motivations   | 158                    | 4.81  | .97       | 564          | 4.01  | 1.49      | 6.35***   | 720       |
| Emotional autonomy     | 158                    | 2.34  | .27       | 564          | 2.72  | .49       | -9.05***  | 720       |
| Behavioral willingness | 152                    | 4.85  | .74       | 560          | 4.72  | 1.13      | 1.34      | 710       |
| Feedback derogation    | 150                    | 2.98  | .92       | 537          | 2.86  | 1.32      | -18.68*** | 685       |

*Note.* SES = Socioeconomic Status.\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

**Table 4***Means, Standard Deviations, and Differences Amongst Variables by Gender*

| Variables              | Male     |       |           | Female   |       |           | <i>t</i> | <i>df</i> |
|------------------------|----------|-------|-----------|----------|-------|-----------|----------|-----------|
|                        | <i>n</i> | Mean  | <i>SD</i> | <i>n</i> | Mean  | <i>SD</i> |          |           |
| Age                    | 173      | 20.80 | 2.60      | 536      | 19.94 | 2.60      | 3.75***  | 707       |
| Subjective SES         | 174      | 5.07  | 1.89      | 542      | 4.83  | 1.85      | 1.47     | 714       |
| Conservatism           | 173      | 5.40  | 1.70      | 537      | 5.42  | 1.93      | -.15     | 708       |
| Egalitarian            | 174      | 3.79  | .81       | 543      | 3.93  | .87       | -1.94    | 715       |
| Color-conscious        | 174      | 3.24  | .80       | 543      | 3.31  | .81       | -.96     | 715       |
| Racemute               | 174      | 2.33  | 1.03      | 543      | 2.32  | .96       | .041     | 715       |
| Internal motivations   | 174      | 5.01  | 1.14      | 543      | 5.28  | 1.14      | -2.70**  | 715       |
| External Motivations   | 174      | 4.15  | 1.28      | 543      | 4.20  | 1.47      | -.41     | 715       |
| Emotional autonomy     | 174      | 2.66  | .47       | 543      | 2.62  | .48       | .79      | 715       |
| Behavioral willingness | 171      | 4.53  | 1.07      | 536      | 4.82  | 1.05      | -3.07**  | 705       |
| Feedback derogation    | 165      | 4.57  | 1.65      | 517      | 4.88  | 1.66      | -2.08*   | 680       |

*Note.* SES = Socioeconomic Status.\**p* < .05, \*\**p* < .01, \*\*\**p* < .001

**Table 5**  
*Correlations Between Variables by Gender*

|               | 1              | 2        | 3           | 4               | 5               | 6               | 7               | 8              | 9              | 10             | 11              |
|---------------|----------------|----------|-------------|-----------------|-----------------|-----------------|-----------------|----------------|----------------|----------------|-----------------|
| 1. Age        | -              | .339***  | .029        | <b>-.249***</b> | <b>.014</b>     | .602***         | -.538***        | <b>.003</b>    | <b>-.088*</b>  | .186***        | -.254***        |
| 2. Sub SES    | .311***        | -        | -.075       | -.155***        | -.006           | .248***         | -.212***        | .129**         | .019           | .062           | .044            |
| 3. Conser     | .144           | .091     | -           | .058            | -.062           | .147**          | .023            | -.168***       | -.058          | <b>.202***</b> | -.273***        |
| 4. Egal       | <b>-.059</b>   | -.144    | .093        | -               | .570***         | -.183***        | .116**          | .185***        | .361***        | .063           | -.195***        |
| 5. Col-Con    | <b>.319***</b> | .026     | -.038       | .454***         | -               | <b>.050</b>     | <b>-.106*</b>   | .395***        | .333***        | <b>.042</b>    | -.110*          |
| 6. RM         | .594***        | .258**   | .150*       | -.061           | <b>.278***</b>  | -               | -.515***        | <b>-.036</b>   | -.055          | .343***        | <b>-.267***</b> |
| 7. Derogat    | -.505***       | -.310*** | -.003       | .029            | <b>-.280***</b> | -.488***        | -               | <b>-.124**</b> | -.025          | -.252***       | .213***         |
| 8. Behav Will | <b>.204**</b>  | .095     | -.184*      | .140            | .403***         | <b>.208**</b>   | <b>-.377***</b> | -              | .474***        | <b>.019</b>    | <b>.150**</b>   |
| 9. Int Mot    | <b>.097</b>    | -.060    | -.137       | .271***         | .394***         | .033            | -.126           | .529***        | -              | <b>.194***</b> | .025            |
| 10. Ext Mot   | .315***        | -.045    | <b>.008</b> | .075            | <b>.291***</b>  | .425***         | -.192*          | <b>.337***</b> | <b>.358***</b> | -              | -.178***        |
| 11. Emo Aut   | -.384***       | -.033    | -.256**     | -.186*          | -.273***        | <b>-.479***</b> | .283***         | <b>-.123</b>   | -.090          | -.286***       | -               |

*Note.* Correlations between variables for male are presented below the diagonal and correlations between variables for female are presented above the diagonal. Bolded correlations indicated gender differences in the magnitude of the correlations.

Sub SES = Subjective Socioeconomic Status; Conser = Conservatism; Egal = Egalitarian; Col-Con = Color-Conscious; RM = Racemute; Derogat = Feedback Derogation; Behav Will = Behavioral Willingness; Int Mot = Internal Motivations; Ext Mot = External Motivations; Emo Aut = Emotional Autonomy.

\*  $p < 0.05$ , \*\*  $p < 0.01$ , \*\*\*  $p < .001$

### **Path Analyses Predicting Defensiveness to IAT Feedback**

To address the hypotheses that different RES messages would differentially predict defensiveness via either internal or external motivations, structural equation modeling (SEM) analyses with maximum likelihood (ML) estimation were conducted in Mplus version 7.4 (Muthén & Muthén, 2011). Preliminary analyses found that there were group differences in the variables of interest between subjects from MTurk and the subject pool and that the MTurk sample is significantly older and more conservative than the subject pool sample. The directions of the correlations of age and conservatism with other variables align with the direction of the mean difference, indicating the significant group differences in means are due to Amazon MTurk subjects' older age and higher conservatism. Therefore, age and conservatism were included in the model as covariates to control for sample differences.

For model parsimony, non-significant paths were deleted. The final model had a good model fit ( $\chi^2(15) = 62.803, p = .000, CFI = .945; RMSEA = .067; SRMR = .039$ ). R-square statistics indicated that 15.7% of the variance in internal motivations, 14.7% of variance in external motivations, 31.6% of the variance in behavioral willingness, and 35.8% of the variance in feedback derogation were explained by the independent variables in the model. As seen in Figure 1, internal motivations were positively associated with egalitarian and color-conscious messages, whereas external motivations were positively associated with egalitarian and racemute messages. Behavioral willingness was positively associated with internal motivations and color-conscious messages and negatively associated with conservatism and egalitarian messages. Feedback derogation was positively associated with conservatism and negatively associated with age, external motivations, color-conscious and racemute messages.

To ensure that there was no significant sample effects, multigroup path analyses were conducted to test model invariance between MTurk and subject pool samples. The CFI

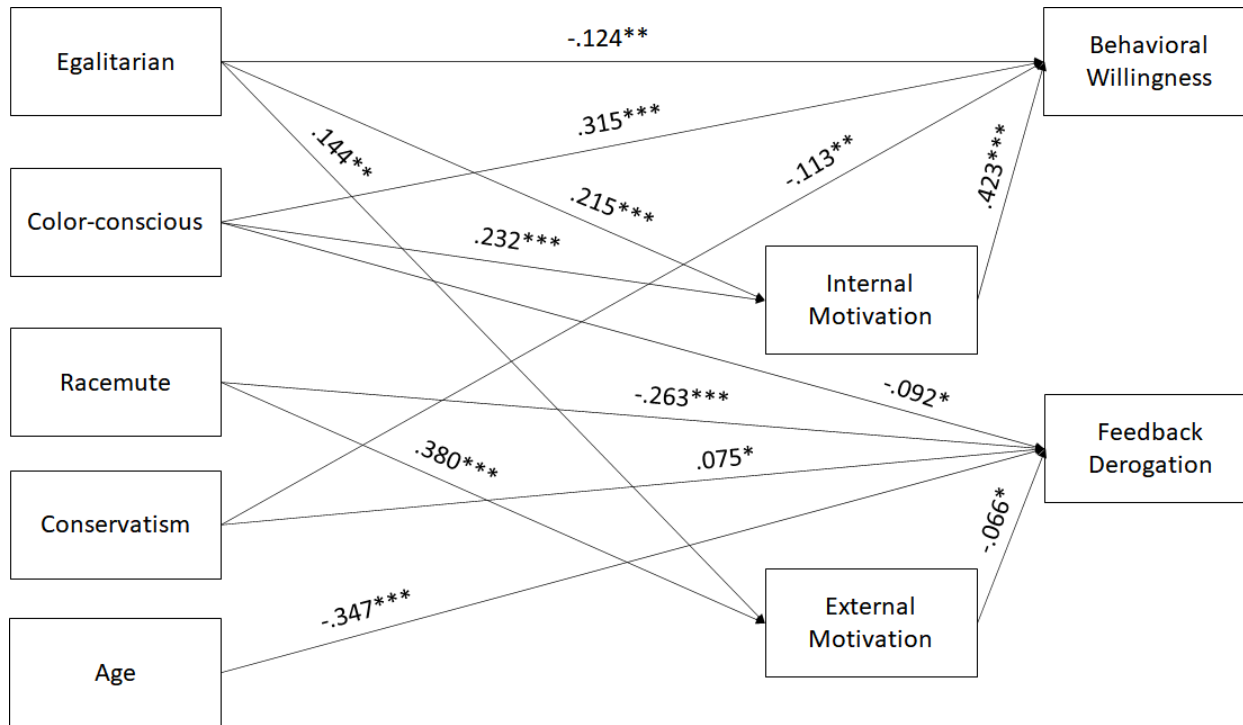
difference test was used to compare models. The more restrictive model was justified when  $\Delta\text{CFI} < 0.01$  (Cheung & Rensvold, 2022). To examine group differences in the relations amongst constructs, each path in the model was constrained one at a time. The fully unconstrained model provided a good fit ( $\chi^2(20) = 77.600, p = .000, \text{CFI} = .933; \text{RMSEA} = .091; \text{SRMR} = .058$ ). Twelve of the twenty paths could be constrained across samples in the final model (see Figure 2). There were six paths that we could not constrain. The association between egalitarianism and internal motivations was significant and positive for both MTurk and subject pool samples but more so for MTurk sample. The path from conservatism to behavioral willingness was significant for both samples, but the association was positive for the MTurk sample, but negative for the subject pool sample. The following paths were significant only for the MTurk sample: color-consciousness to external motivation ( $\beta = .367, p < .001$ ), racism to internal motivations ( $\beta = .206, p < .01$ ), internal motivations to feedback derogation ( $\beta = -.432, p < .001$ ), and external motivations to behavioral willingness ( $\beta = .210, p < .001$ ). The following paths were significant only for the subject pool sample: color-consciousness to internal motivations ( $\beta = .279, p < .001$ ) and conservatism to feedback derogation ( $\beta = .178, p < .001$ ). The final model still demonstrated an adequate fit ( $\chi^2(32) = 98.198, p = .000, \text{CFI} = .923; \text{RMSEA} = .077; \text{SRMR} = .060$ ).

Because preliminary analyses found that there were gender differences in behavioral willingness, feedback derogation, and internal motivations, multigroup path analyses were conducted to test model invariance between men and women. The fully unconstrained model provided a good fit ( $\chi^2(16) = 63.784, p = .000, \text{CFI} = .945; \text{RMSEA} = .092; \text{SRMR} = .040$ ). Then, to examine gender differences in the relations amongst constructs, each path in the model was constrained one at a time. As seen in Figure 3, the final model constrained all paths to be the

same for men and women, except for the path between external motivations and behavioral willingness. External motivations significantly predicted greater behavioral willingness only for men, but not for women. The final model demonstrated a good fit ( $\chi^2(35) = 85.007, p = .000, CFI = .942; RMSEA = .063; SRMR = .045$ ).

**Figure 1**

*Path analysis of Racial/Ethnic Socialization Messages and Motivations to Control Prejudice to Behavioral Willingness and Feedback Derogation*

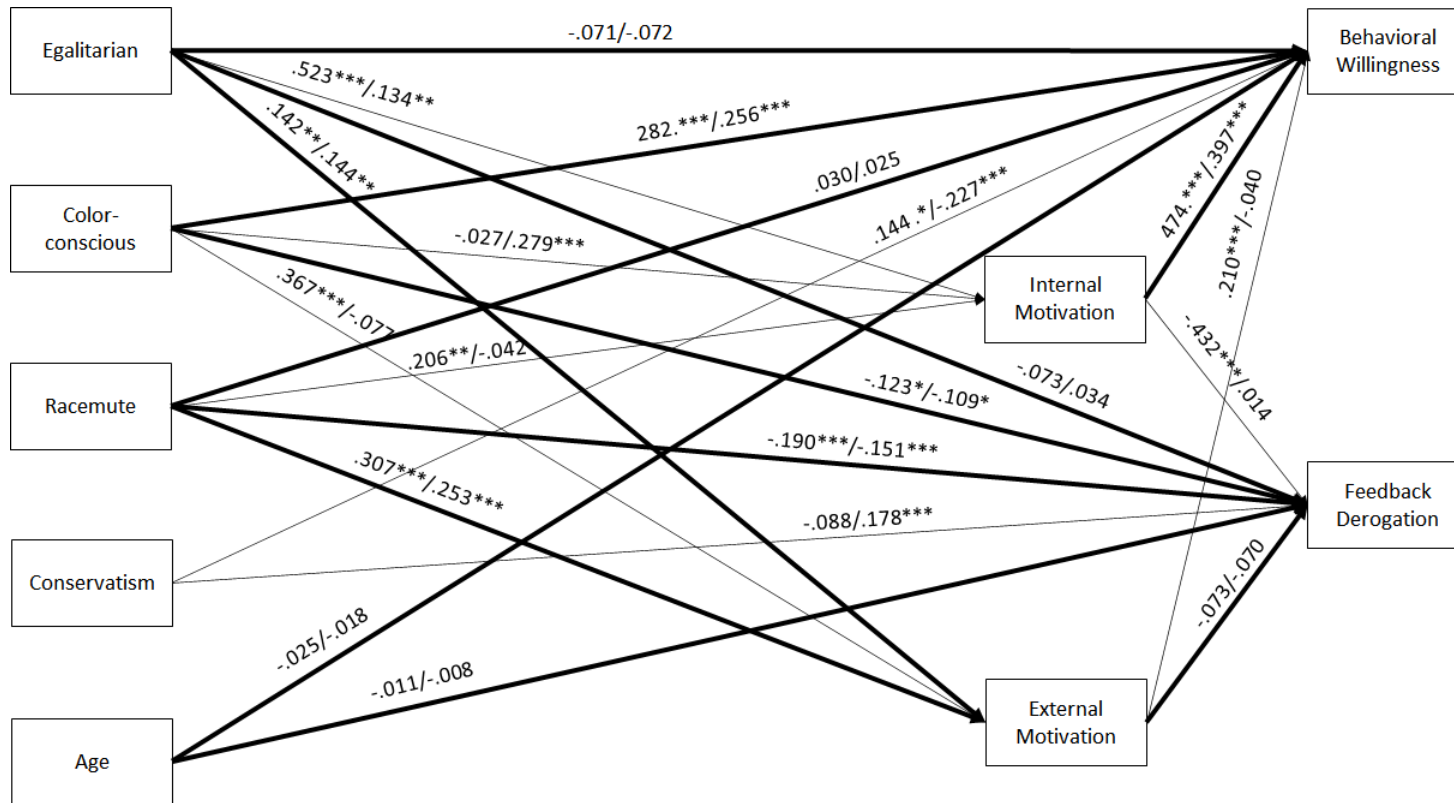


*Note.* Standardized coefficients are reported.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Figure 2**

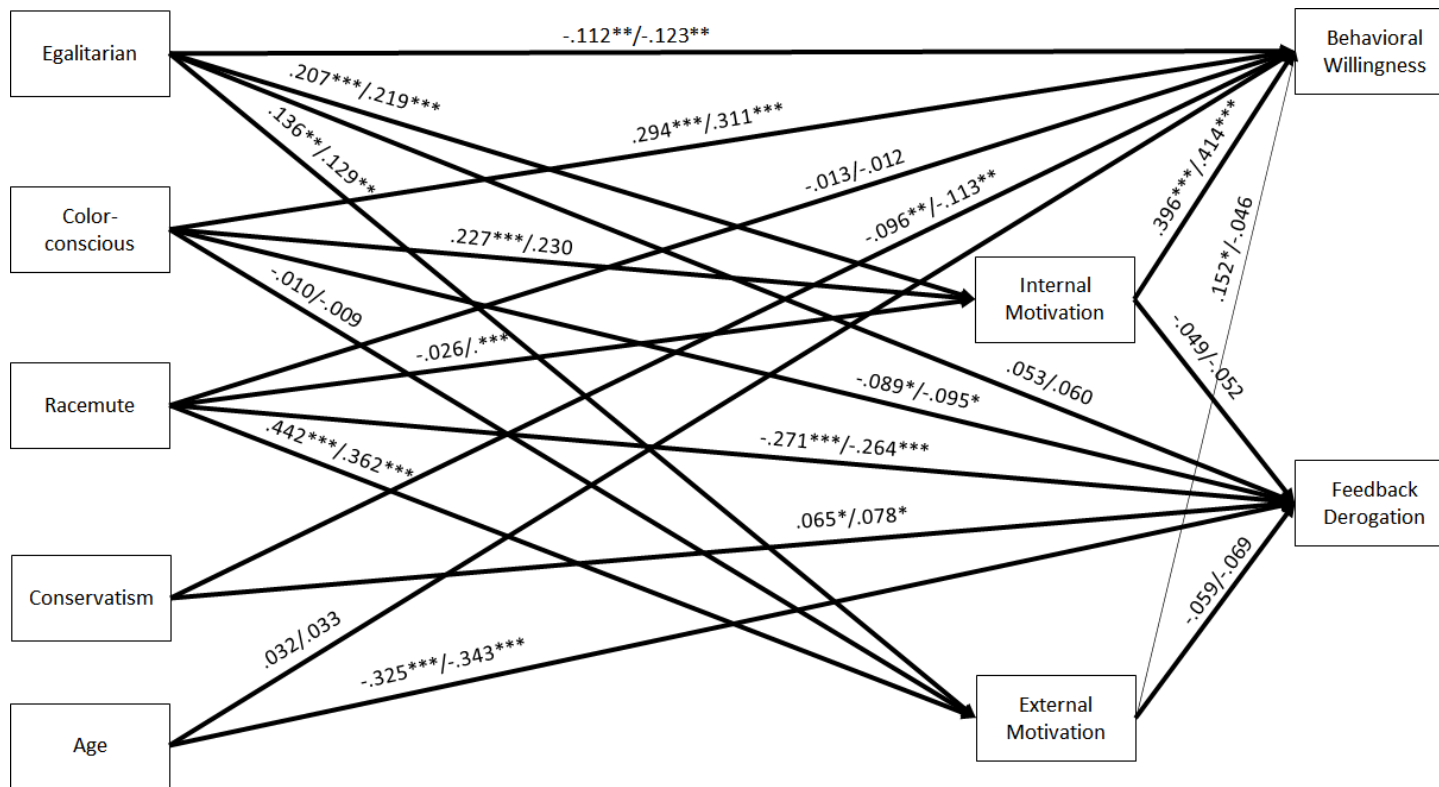
*Multigroup Path Analysis of Racial/Ethnic Socialization Messages and Motivations to Control Prejudice to Behavioral Willingness and Feedback Derogation by Recruitment Source*



*Note.* Standardized coefficients are reported for the Amazon Mechanical Turk sample first and for the subject pool sample second. Bolded paths indicate that they were constrained.  
 \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

**Figure 3**

*Multigroup Path Analysis of the Racial/Ethnic Socialization Messages and Motivations to Control Prejudice to Behavioral Willingness and Feedback Derogation by Gender*



*Note.* Standardized coefficients are reported for male first and for female second. Bolded paths indicate that they were constrained.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

## **Effects of Emotional Autonomy and Interactions Between RES Messages and Emotional Autonomy**

To test the hypothesis that the associations between RES messages, motivations to control prejudice, and defensiveness would vary depending on levels of emotional autonomy from parents, a series of preliminary bootstrapping analyses were conducted to examine the moderating role of emotional autonomy, using the SPSS PROCESS macro following the guidelines of Hayes (2018). We found three significant moderated mediations. The indirect effects of color-conscious and egalitarian messages through internal motivations to behavioral willingness were conditional on the level of emotional autonomy. The indirect effect of racism messages through external motivations to behavioral willingness was also conditional on the level of emotional autonomy.

Based on these initial PROCESS analyses, interaction terms between emotional autonomy and RES messages were included in SEM model simultaneously. For model parsimony, non-significant paths were deleted. As seen in Figure 4, emotional autonomy's interactions with egalitarian messages and racism messages remained in the final model to predict internal motivations and feedback derogation. Emotional autonomy was positively associated with internal motivations and behavioral willingness. The interaction term between emotional autonomy and egalitarian messages was negatively associated with internal motivations, behavioral willingness, and feedback derogation. The interaction term between emotional autonomy and racism messages was positively associated with feedback derogation. The final model demonstrated a good model fit ( $\chi^2(27) = 158.406, p = .000, CFI = .967; RMSEA = .083; SRMR = .058$ ).

To probe each of the significant interaction terms, we ran three separate moderation analyses for each using the PROCESS macro (Hayes, 2018) in SPSS. Remaining RES messages were included as covariates in each moderation analysis. The first simple slope analysis indicated that parents' egalitarian messages' was more strongly related to internal motivations when emotional autonomy was low (see Figure 5;  $b = .5487, p < .001, 95\% \text{ CI } [.4012, .6962]$ ), compared to average ( $b = .3620, p < .001, 95\% \text{ CI } [.2481, .618]$ ), or high levels of emotional autonomy ( $b = .1753, p < .01, 95\% \text{ CI } [.0522, .2983]$ ).

The second simple slope analysis examined the effect of the interaction between egalitarian messages and emotional autonomy on feedback derogation. Probing revealed that egalitarian messages were more strongly related to feedback derogation when emotional autonomy was low (see Figure 6;  $b = .5066, p < .001, 95\% \text{ CI } [.3020, .7113]$ ), compared to average ( $b = .3302, p < .001, 95\% \text{ CI } [.1716, .4887]$ ), or higher levels of emotional autonomy ( $b = .1537, p = .08, 95\% \text{ CI } [-.0173, .3247]$ ).

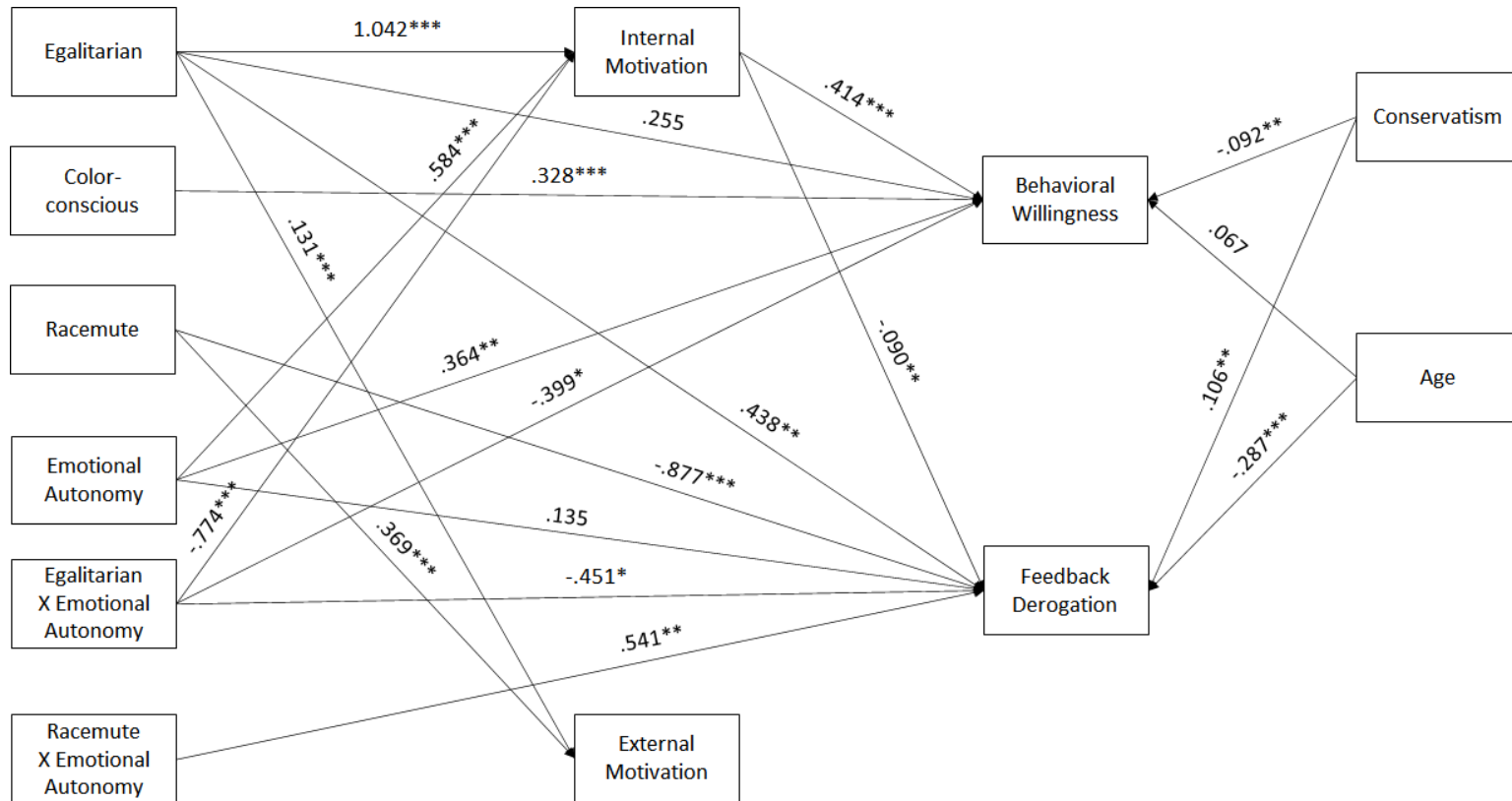
The third simple slope analysis examined the interaction effect between egalitarian messages and emotional autonomy on behavioral willingness. Probing indicated that the direction of the relationship between egalitarian messages and behavioral willingness differed depending on how emotionally autonomous a young adult is from their parents. Egalitarian messages were positively related to behavioral willingness when emotional autonomy was low (see Figure 7;  $b = .1495, p < .05, 95\% \text{ CI } [.0132, .2859]$ ), but negatively related to behavioral willingness emotional autonomy was high ( $b = -.1186, p < .05, 95\% \text{ CI } [-.2322, -.0050]$ ).

The last simple slope analysis examined the interaction effect between racemute messages and emotional autonomy on feedback derogation. Probing revealed that racemute messages were more strongly related to feedback derogation when emotional autonomy was low

(see Figure 8;  $b = -.9512$ ,  $p < .001$ , 95% CI [-1.1029, -.7996]) compared to average ( $b = -.7048$ ,  $p < .001$ , 95% CI [-.8241, -.5958]) or high ( $b = -.4586$ ,  $p < .001$ , 95% CI [-.6304, -.2869]) levels of emotional autonomy.

**Figure 4**

*Path Analysis of the Racial/Ethnic Socialization Messages, Interactions between Messages and Emotional Autonomy, and Motivations to Control Prejudice to Behavioral Willingness and Feedback Derogation*

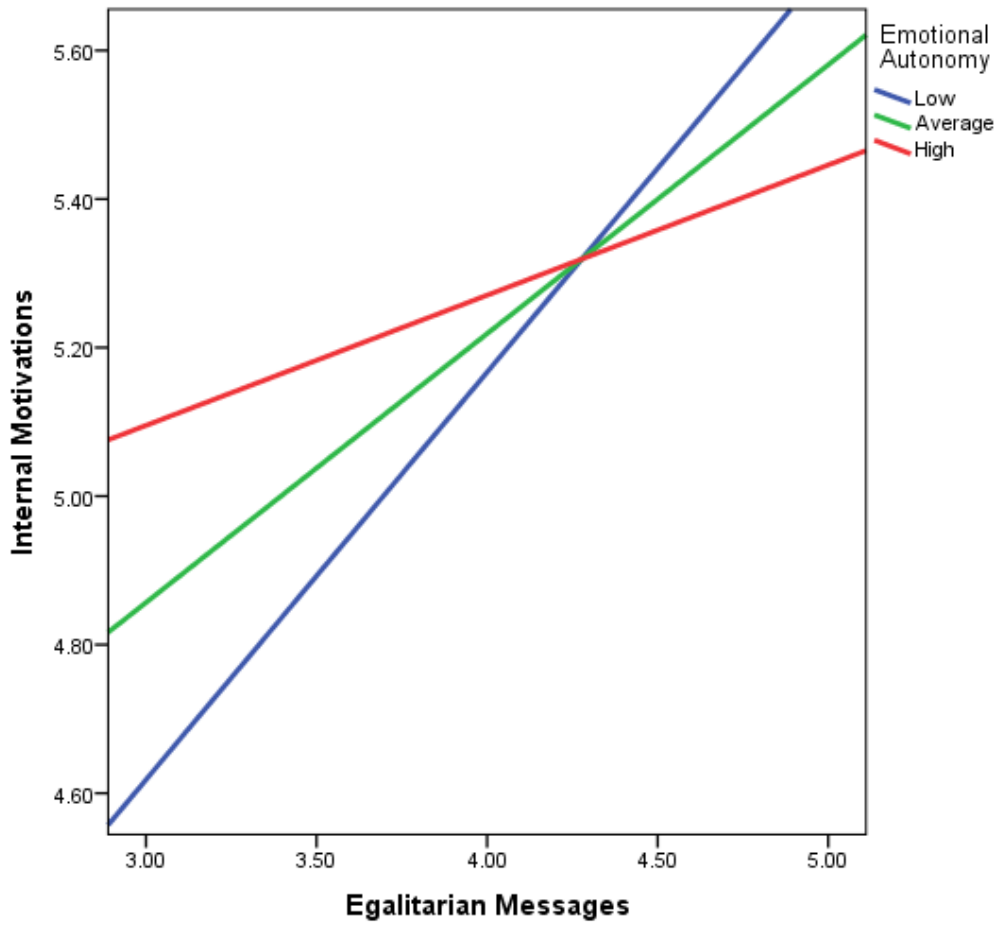


Note. Standardized coefficients are reported.

\*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

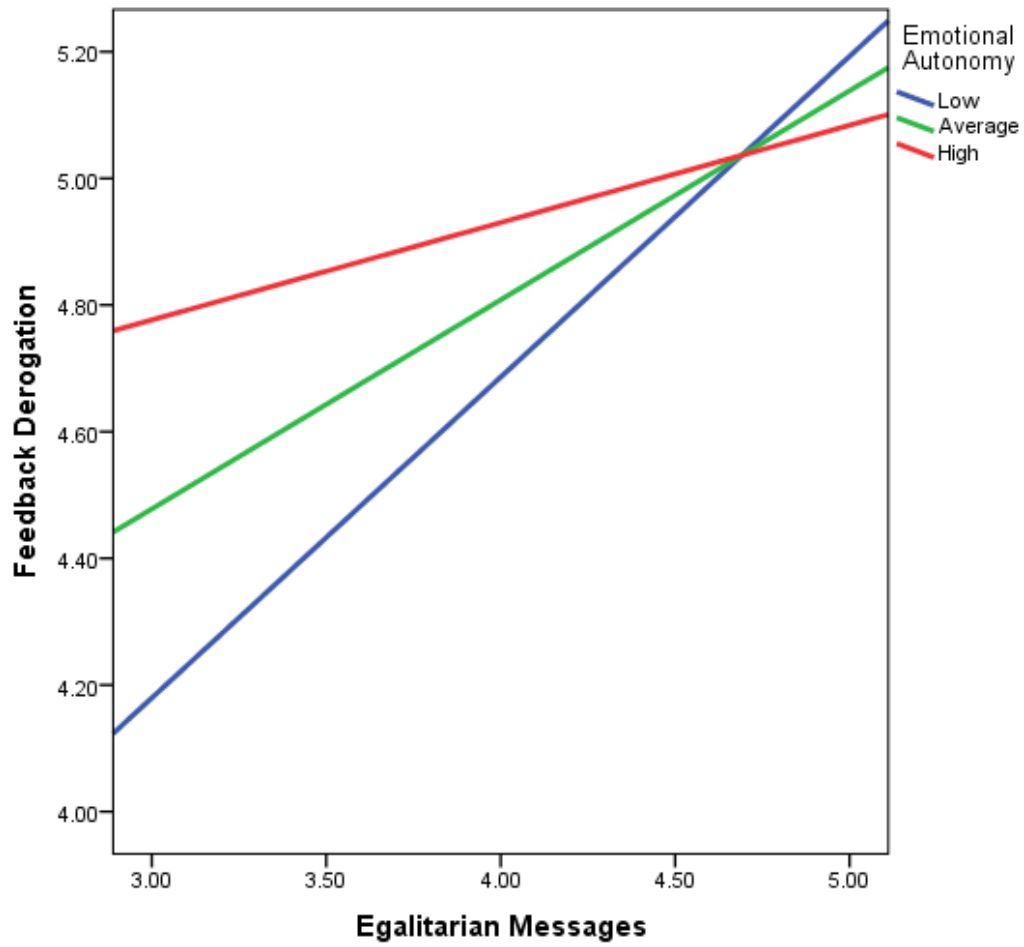
**Figure 5**

*Interaction of Egalitarian Messages and Emotional Autonomy Predicting Internal Motivations*



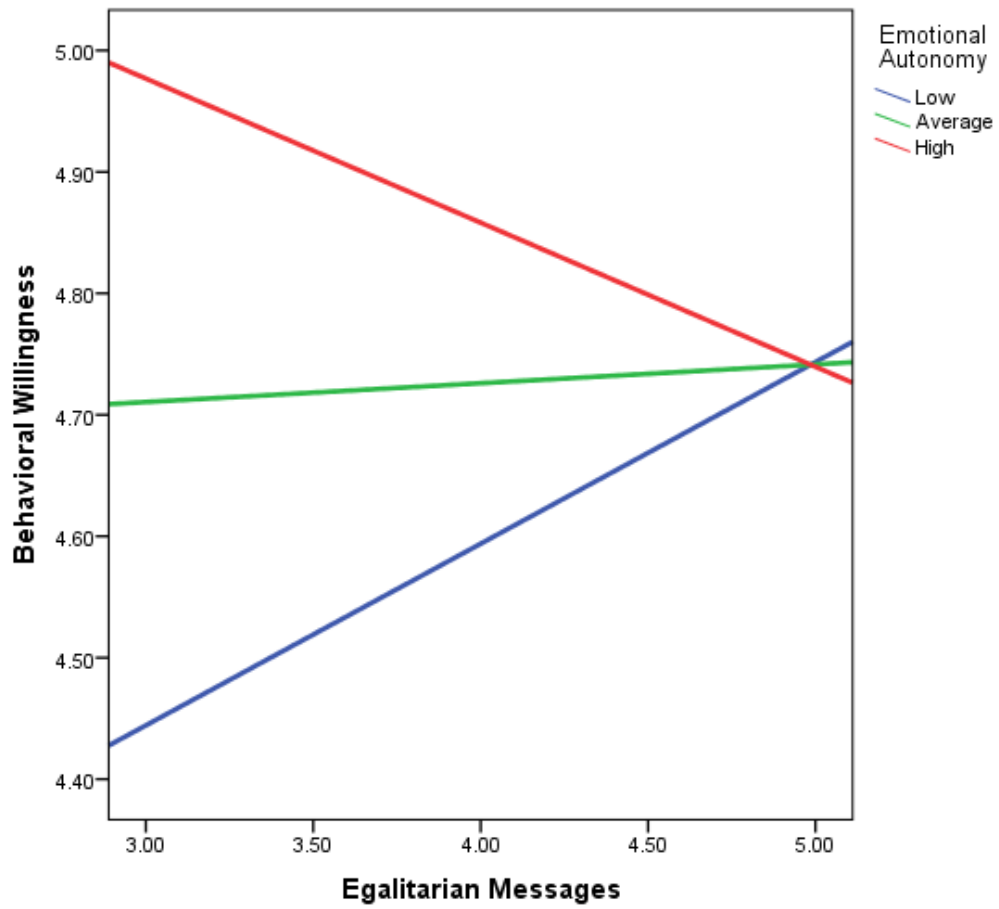
**Figure 6**

*Interaction of Egalitarian Messages and Emotional Autonomy Predicting Feedback Derogation*



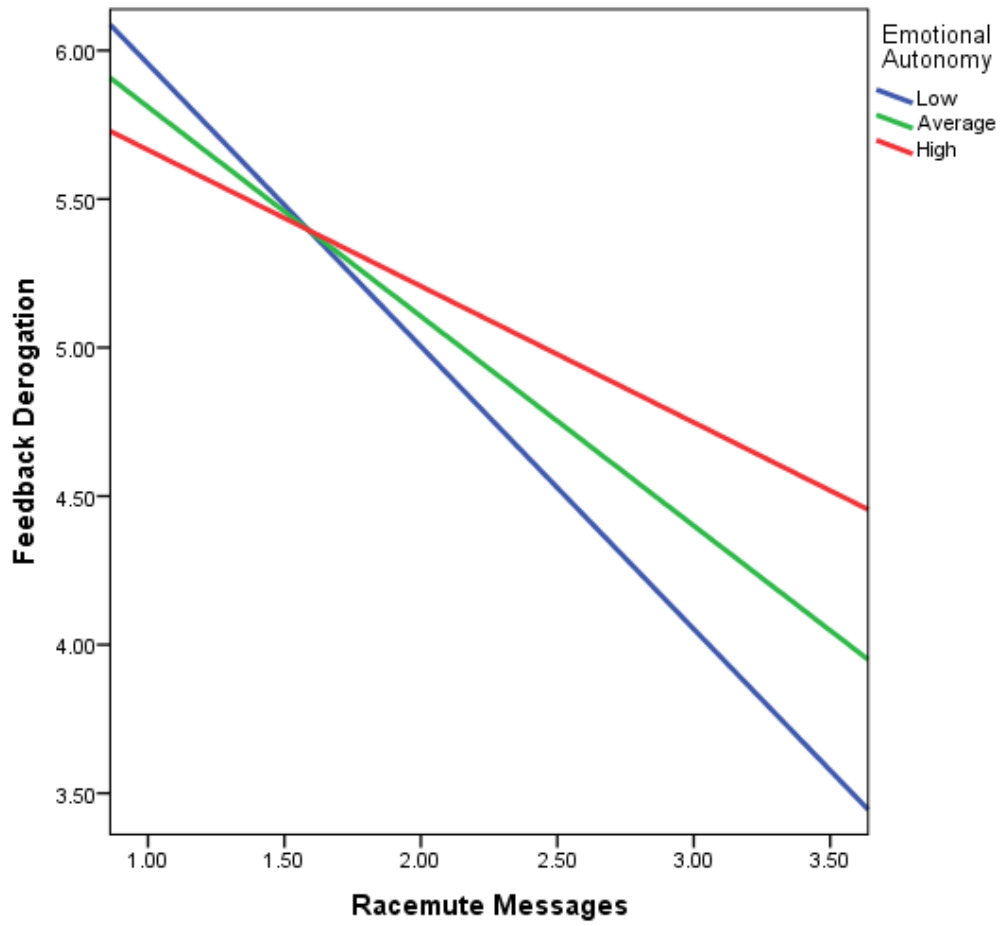
**Figure 7**

*Interaction of Egalitarian Messages and Emotional Autonomy Predicting Behavioral Willingness*



**Figure 8**

*Interaction of Racemute Messages and Emotional Autonomy Predicting Feedback Derogation*



## Post-hoc Exploratory Analyses on Sample Differences

In our multigroup path analysis comparing recruitment sources, we identified significant recruitment source differences in some of the relations between our variables of interest.

Preliminary analyses also indicated that the MTurk and subject pool samples differed on SES and conservatism. It is feasible that some of the path differences observed between samples could be due to SES or political orientation (Feldman & Huddy, 2005; Nail et al., 2003).

Therefore, we examined the paths that multigroup analyses suggested should be left unconstrained by seeing if either SES or conservatism were moderators instead. To do so, we used the PROCESS macro (Hayes, 2018) in SPSS and controlled for recruitment source and alternative RES messages in analyses. Initial analyses examined if there were three-way interactions. If the three-way interaction was not significant, two-way interactions were examined in separate analyses. Simple slope analyses used the 16<sup>th</sup>, 50<sup>th</sup>, and 84<sup>th</sup> percentile on the moderators.

First, to better understand why samples may have differed on the relation between color-conscious messages and internal motivations, I examined subjective SES would moderate this path. The interaction of color-conscious messages X subjective SES ( $F(1, 706) = 4.9563, p = .0263, \Delta R^2 = .0058$ ) was significant. Simple slope analyses revealed that the association of color-conscious messages with internal motivations was stronger at 16<sup>th</sup> percentile 50<sup>th</sup> of subjective SES ( $b = .4192, p < .001, 95\% \text{ CI } [.2263, .5720]$ ) than at the 50<sup>th</sup> ( $b = .2960, p < .001, 95\% \text{ CI } [.1762, .4158]$ ) or 84<sup>th</sup> percentile ( $b = .1728, p < .05, 95\% \text{ CI } [.0026, .3430]$ ).

Next analyses examining if conservatism moderated how color-conscious messages were related to internal motivations found a significant interaction ( $F(1, 706) = 6.5585, p = .0106, \Delta R^2 = .0077$ ). Simple slope analyses revealed that the association of color-conscious messages

with internal motivations was weaker at 16<sup>th</sup> percentile of conservatism ( $b = .1599, p = .06, 95\% \text{ CI } [-.0060, .3528]$ ) than at the 50<sup>th</sup> ( $b = .3545, p < .001, 95\% \text{ CI } [.2309, .4782]$ ) or 84<sup>th</sup> percentile ( $b = .4194, p < .001, 95\% \text{ CI } [.2741, .5648]$ ).

Next, I examined how SES and conservatism would moderate the paths from color-conscious messages to external motivations. Again, both the color-conscious messages X conservatism ( $F(1, 706) = 5.8465, p = .0159, \Delta R^2 = .0069$ ) and color-conscious messages X subjective SES ( $F(1, 706) = 8.2236, p = .0043, \Delta R^2 = .0097$ ) interactions were significant. Simple slope analyses revealed that although the slopes were not significant, the association of color-conscious messages with external motivations changed direction at different levels of conservatism. At 16<sup>th</sup> percentile of conservatism, color-conscious messages were negatively associated with external motivations ( $b = -.1920, p = .07, 95\% \text{ CI } [-.4004, .0164]$ ) while the association was positive at 50<sup>th</sup> ( $b = .0389, p = .62, 95\% \text{ CI } [-.1165, .1943]$ ) and 84<sup>th</sup> percentile ( $b = .1159, p = .21, 95\% \text{ CI } [-.0667, .2984]$ ). Next, examining the moderating effect of subjective SES, simple slope analyses revealed that, similar to conservatism, the slopes were not significant, but that the association of color-conscious messages with external motivations changed direction at different levels of subjective SES. At 16<sup>th</sup> percentile of subjective SES, color-conscious messages were negatively associated with external motivations ( $b = -.1884, p = .05, 95\% \text{ CI } [-.3799, .0031]$ ) while the association was positive at 50<sup>th</sup> ( $b = .0104, p = .89, 95\% \text{ CI } [-.1397, .1605]$ ) and 84<sup>th</sup> percentile ( $b = .2092, p = .05, 95\% \text{ CI } [-.0040, .4224]$ ).

When examining the path from external motivations to behavioral willingness, I found a significant three-way interaction involving external motivations, conservatism, and subjective SES ( $F(1, 693) = 4.7695, p = .0293, \Delta R^2 = .0054$ ). The conditional effects of external motivations were significant at 16<sup>th</sup> percentile of subjective SES and 16<sup>th</sup> percentile of conservatism ( $b$

= .1458,  $p < .05$ , 95% CI [.0269, .2646]) and at 84<sup>th</sup> percentile of subjective SES and 84<sup>th</sup> percentile of conservatism ( $b = .1129$ ,  $p < .05$ , 95% CI [.0136, .2122]). At 50<sup>th</sup> percentile of subjective SES, the conditional effects of external motivations were significant at 50<sup>th</sup> ( $b = .0737$ ,  $p < .05$ , 95% CI [.0162, .1311]) and 84<sup>th</sup> ( $b = .0772$ ,  $p < .05$ , 95% CI [.0062, .1483]) percentile of conservatism, but not at 16<sup>th</sup> percentile of conservatism ( $b = .0630$ ,  $p = .11$ , 95% CI [-.0151, .1410]) indicating that at average level of subjective SES, medium to higher levels of conservatism strengthened the association between external motivation and behavioral willingness. At 16<sup>th</sup> percentile of conservatism and 84<sup>th</sup> percentile of SES ( $b = -.0198$ ,  $p = .74$ , 95% CI [-.1362, .0965]) and at 84<sup>th</sup> percentile of conservatism and 16<sup>th</sup> percentile of SES ( $b = .0416$ ,  $p = .38$ , 95% CI [-.0513, .1344]), the conditional effects of external motivations were not significant.

For the paths from racemute messages to internal motivations and from internal motivations to feedback derogation, the main effect of the recruitment source was significant while controlling for subjective SES and conservatism. Both paths were significant only for MTurk participants, indicating group differences in these relationships that cannot be explained by conservatism nor subjective SES.

## DISCUSSION

Racism has been a persistent problem in America, but recent nationwide racial justice movements established being anti-prejudice as the societal norm and raised general awareness and interests in the impact of racism and ways to combat racism especially among younger generations (Apollon, 2011; Gen Forward Survey, 2020; O'Brien et al., 2010). Although prejudice recognition is an important step in prejudice reduction, many White Americans act defensively upon receiving feedback about their racial prejudice (Howell et al., 2015; 2017). Considering that racial biases start developing at a young age (Bigler & Liben, 2007), we examined parents' explicit messages about race as a possible developmental factor that may contribute to defensive reactions to prejudice feedbacks via motivations to control prejudice in White Americans. The current study examined White American emerging adults' recollection of various messages from their parents regarding racial issues and their relations to internal and external motivations to control prejudice and defensive reactions to the IAT feedback. In particular, we investigated parents' egalitarian, racemute, and color-conscious messages. The egalitarian approach emphasizes racial equity and has been associated with warmth towards racial outgroups and internal motivations to control prejudice (Pahlke et al., 2020). However, it does not necessarily include discussions of systemic racism and racial injustices which makes it somewhat comparable to a racemute approach which asserts that recognition of race leads to racism, and therefore discourages discussion of race. A racemute approach has been linked to external motivations to control prejudice (Apfelbaum et al., 2008; Norton et al., 2006). A color-

conscious approach, on the other hand, acknowledges race, discrimination, and relative privilege as an important component of an individuals' life (Hagerman, 2017).

### **Which Parental RES Messages and Motivations to Control Prejudice Predict Defensiveness?**

As predicted and concurrent with past findings, color-conscious messages were positively related to internal motivations, and race-mute messages were positively related to external motivations (Apfelbaum et al., 2008; Perry et al., 2019). It seems that parental messages that emphasize the importance of race in people's lived experiences develop in their children a self-determined desire to control their prejudice; whereas parental messages that ignore or minimize the existence of racism and its impact on people's lives encourage controlling one's prejudice for external rewards like other's approval.

Contrary to our hypothesis, egalitarian messages were positively associated with both internal and external motivations. Thus, messages that communicate an idealized version of racial equity, while omitting discussion of racial discrimination and societal power structures, seem to be related to both internal and external motivations. Zucker and Patterson (2018) found that in hypothetical scenarios that offered an opportunity for RES, White parents responded in color-blind ways, avoiding discussion of racism or importance of race in lived experiences by using egalitarian messages (e.g., "we need to love everybody and treat them the same"). Our result corroborates Zucker and Patterson's finding (2018) and suggests that egalitarian messages may not be completely distinct from colorblind or color-conscious messages depending on the context and framing of the messages. For such reason, egalitarian messages may be related to both internal and external motivations.

We also found that White American adults that recalled receiving color-conscious messages from parents growing up were more inclined to modify their behaviors or engage in behaviors known to decrease prejudice upon receiving feedback about their racial bias. This may be explained by their internal motivation for prejudice reduction. Consistent with our hypothesis, color-conscious messages were also negatively associated with feedback derogation. Together, results indicate that adults that retrospectively reported having heard color-conscious messages from parents while growing up were more receptive to feedback about prejudice and are more likely to put forth effort to engage in behaviors for prejudice reduction. Our results add to past findings that discussing about race and racial bias with parents increased positive outgroup attitudes and decreased anti-Black attitudes in children (Perry et al., 2020; Vittrup & Holden, 2011). Explicit discussion of racial inequalities at home will likely increase one's awareness of one's own racial biases and how they might influence their daily attitudes and actions in relation to race. Such awareness may encourage more color-conscious individuals to utilize feedback on prejudice rather than perceiving it as a threat and derogating it which would contribute to prejudiced attitude reduction.

Contrary to our hypothesis, egalitarian messages were negatively associated with behavioral willingness. These findings were surprising as past research found that egalitarian messages were positively associated with warm attitudes towards racial outgroup members (Pahlke et al., 2020), and racism/colorblindness was associated with greater prejudice (Pahlke et al., 2012; Richeson & Nussbaum, 2004). However, we should note that the bivariate correlations indicated a positive correlation between egalitarian messages and behavioral willingness, suggest that the negative association in our model may reflect a spurious association or that when all three RES approaches were considered simultaneously, recalling more

egalitarian messages from parents at average levels of the other messages is associated with lower willingness to engage in behaviors for racial bias reduction. It may be that discussion of racial equity in an idealized way that fails to also teach children to recognize and challenge racial discrimination and injustice in the world at high levels can actually have an opposite effect of parents' good intention of promoting positive racial attitudes. Future research should examine the interactions of these messages or profiles of these messages. There may be latent subgroups that endorse more than one RES approach highly (e.g., high on egalitarianism and color-consciousness), rather than just one (e.g., high on egalitarianism only). It may be that high egalitarian messages, when also accompanied by high color consciousness messages, would not be linked to lower behavioral willingness.

The racemute approach discourages discussion of race or racism and may even engender fear of such discussion (Apfelbaum et al., 2012; Bartoli et al., 2016). In an unexpected way, the fear of discussing race may partly explain why racemute messages were negatively related to feedback derogation. In a real-life setting, criticizing feedback about prejudice may require engagement with the feedback as well as further discussion of race related topics. Therefore, the negative relation between racemute messages and feedback derogation may be due to the desire to avoid such engagement. Indeed, White individuals have shown a tendency to avoid talking about race during social interactions in the past in the effort to appear unbiased (Apfelbaum et al., 2008; Norton et al., 2006).

Similarly, we also expected external motivations, which are driven by a desire to avoid being perceived as prejudiced by *others*, would be associated with questioning the validity of the IAT feedback indicating racial bias (Plant & Devine, 2001), perhaps because fear of judgment and stigmatization based on the IAT feedback would translate to a negative reaction to the

feedback. However, it may be that external motivations were negatively related to feedback derogation precisely because of the desire to maintain or improve one's reputation as anti-prejudice. It may be that derogating the feedback could hurt one's reputation, and resisting derogation is more "politically correct" thing to do in the current political and societal climate, in order to maintain a positive self-image and social reputations. Thus, the negative association of external motivation with feedback derogation may be demonstrating White Americans' self-presentational concerns about appearing racist or close-minded; controlling defensive reactions to prejudice feedback may have been perceived as the "right" or more desirable answer determined by the current anti-racist cultural norms. However, given that both racemute RES and external motivations have been associated with higher levels of racial biases (Charnin, 2015; Plant & Devine, 2000), responses to feedback may not necessarily lead to actions for prejudice reduction. We also found no significant association between external motivations and behavioral willingness in the path model which further supports our speculation.

### **Moderating Effects of Emotional Autonomy from Parents**

The second major aim of the current study was also to examine the effect of emotional autonomy, or emotional separation, from parents in the relationship between parental RES and defensiveness to prejudice feedback. Considering that one of the important developmental tasks of emerging adults is to establish oneself as a separate individual from parents, we expected that the influence of parent's RES messages would be weaker on the level of defensiveness when emotional autonomy was high. We found several instances in which emotional autonomy weakened the association between RES with motivations and responses to feedback. For instance, egalitarian messages' positive association with internal motivations and positive association with feedback derogation was weaker when emotional autonomy from parents was

high than when it was low. Additionally, the negative association of racism with feedback derogation were weakened by higher emotional autonomy to parents. As young adults separate oneself from parents emotionally and functionally, they depend less on parents when problem solving and also acknowledge that parents can be wrong as well (Beyers et al., 2005). This may diminish the impact of parents' beliefs and messages on young adults' lives as a whole, including their attitudes or beliefs about race. With regards to RES, there are several possible ways that young adults may come to realize that their parents' racism and egalitarian views fall short in addressing contemporary racial issues. Entering adulthood, emerging and young adults are likely to be more cognitively equipped to comprehend complicated and nuanced aspects of race (King & Kitchener, 2015). Being exposed to new and more diverse ideas, people, and experiences will likely allow emerging adults to better understand the history and complexity of racial issues in America akin to color-consciousness (Lloyd & Gaither, 2018). Moreover, through increased interracial interactions, White young adults may have also learned that colorblindness is not the most culturally sensitive or effective strategy to promote positive interracial relationships (Stearns et al., 2009). Indeed, strategically engaging in colorblindness to protect oneself from the perception of being biased could backfire and lead to negative interpersonal perceptions by racial minority members (Apfelbaum et al., 2008; Major et al., 2013). In addition, interracial interactions and relationships and academic courses also likely increase young adults' knowledge and awareness of different race-based lived experiences which may then develop racial attitudes and beliefs separate from that of their parents. This may explain why we found moderating effect of emotional autonomy only on egalitarian and racism messages, but not color-conscious messages.

## Gender Differences

Gender differences in the associations between RES, motivation, and responses to feedback were also examined in the bivariate correlations and the path analysis. Examination of bivariate associations by gender revealed a positive correlation between color-conscious and racemute messages for men. Theoretically, color-consciousness and racemuteness are two contrasting approaches to race and racism. The color-conscious approach recognizes and acknowledges the ongoing impact of race and racism on individuals and communities, whereas the racemute approach downplays or ignores the significance of race and believes that recognition of racial differences perpetuates racism (Apfelbaum et al., 2012; Hagerman, 2017). Yet, the messages representing the two approaches were positively correlated with each other, and both were negatively associated with feedback derogation in the SEM model.

More recent White RES literature indicates that White parents often engage in mixture of contradictory RES approaches, communicating both color-conscious and racemute messages to their children (Abaied & Perry, 2021). In their examination of qualitative responses regarding parents' RES ideology and their discussion of race with children by White parents of children ages 8-12, Abaied and Perry (2021) found that although a majority of the participating parents endorsed color-consciousness, over 35% of them also communicated mixed messages combining color-consciousness with colorblindness (e.g., "I would tell her race doesn't matter, and judging someone by how they look, including the color of their skin, is simply wrong"). Therefore, the positive correlation between the two seemingly contradictory messages may be reflecting what is happening in White families.

To explain why this correlation was present only in men, we suggest considering the intersecting identities of being male and also White in America. Whiteness in America and

color-blindness are intertwined. Having been the dominant cultural norm in America historically, Whiteness is not as racialized compared to other races (Bonilla-Silva, 2012). Allen (2004) asserts, “‘White,’ ‘normal,’ and ‘human,’ converge into a disturbingly synonymous relationship which serves to mystify the actual particularities of white existence” (p. 126). For this reason, White Americans may not think about the meaning of Whiteness for their identity nor how their Whiteness may influence their daily lives; whereas, racial identity development is a common and important task for racial/ethnic minorities in America (Hughes et al., 2016). It may be that, even if White Americans highly endorse ideas and values of color-consciousness, the application may be limited to consideration of other racial groups and not their own due to the “neutrality” of Whiteness. Moreover, America’s strongly held value of individualism, which represents the “idea that each person is largely the source or origin of him or herself” (Scheurich, 1993, p. 6), may maintain colorblind mentalities even in individuals wanting to be more color-conscious. In addition to the status of racial privilege, White men are also at the intersectionality of privilege through their gender, positioning them at the highest rank of social hierarchy. One possible explanation is that White male participants in our sample recollected both color-conscious and racemute messages from parents, and they switch between the two attitudes depending on the context. For instance, White men may recall parents’ messages that acknowledge the importance of recognizing and combating systemic racism in one situation, but then recall messages that downplay the significance of race in another.

Abaied and Perry (2021) warned potential negative consequences of parents’ RES mixed messages; the negative influence of color-blind messages (e.g., reduced racial bias awareness and persistence of racial biases; Hughes et al., 2007; Neville et al., 2013) may undermine the benefits of color-conscious messages on developing positive racial attitudes and encouraging

advocacy for racial justice (Perry et al., 2020; Vittrup & Holden, 2011), which then may increase defensiveness to feedback about own racial prejudices. However, in the current sample, parents' racemute messages were negatively correlated with feedback derogation in both genders and positively correlated with behavioral willingness in men. Moreover, racemute messages, along with color-conscious messages, were negatively associated with feedback derogation in the SEM model. Nevertheless, we are unable to explain if and how the negative associations both messages have with defensiveness are qualitatively different (e.g., desire to avoid engagement vs. actual acceptance of the feedback's validity). There is also currently limited research on White parents' contradictory RES messages, although such approaches may be common among White American families (Abaied & Perry, 2021). Further investigations are needed to better understand the actual effects of parents combining color-conscious and racemute messages on children's developing racial beliefs and attitudes.

Overall, there was no significant differences between gender in the relationship amongst variables in the path analysis, except for the path between external motivations and behavioral willingness. Only in men, external motivations were positively associated with behavioral willingness; there was no significant relationship between them for women. In our sample, women endorsed internal motivations significantly more than men did; no gender differences were found for external motivations. Plant and Devine (2009) found that those who were high on external motivations were interested in hiding their prejudice, and therefore spent more time on a program that is supposed to reduce prejudice only if it decreased detectable prejudice, but not when it decreased undetectable prejudice; whereas those who were high on internal motivations did not differ in the time spent on the program regardless of whether it decreased detectable or undetectable prejudice. Plant and Devine (2009) speculated that internally motivated people may

not feel that they need help in reducing their prejudice. Likewise, it may be that more internally motivated women did not feel the need to change their behaviors, whereas external motivation may be more primary in men, which may have increased their willingness to change behaviors that are more detectable.

### **Effects of Demographic Variables**

The samples from MTurk and from subject pool showed statistically significant demographic differences, as well as mean level differences in several of our variables of interest. The MTurk sample was older, more conservative, and reported higher subjective SES compared to the subject pool sample. The most notable mean level difference between the two samples was found for racemute messages. The MTurk sample recalled racemute messages from parents more than the subject pool sample, with the mean level difference of 1.5. In order to understand such difference, the developmental and socio-historical context of each sample should be considered. Following the death of George Floyd in 2020, coupled with the Covid-19 pandemic and the racist attacks on Asians in the U.S., many issues around race were brought to the forefront of American consciousness. Moreover, the Black Lives Matter movement, one of the largest movements in U.S. history (Buchanan et al., 2020), brought attention to systemic racism as well. Most of the subject pool participants were adolescents during this time, while the majority of the MTurk participants were already adults. It may be that the younger subject pool participants' parents decreased their communication of racemute messages, affected by these nation-wide racial events. Many MTurk participants spent their childhood and adolescence around the time America elected Barack Obama as its first Black president. The prevalent White common sense was that America entered a "post-racial" era with this election, and color-blind ideology gained

dominance (Bonilla-Silva & Ashe, 2014). This may be why MTurk participants, who grew up during this era, recalled more racemute messages from parents.

In order to account for possible sample effects from the differences coming from two different recruitment sources, we included age and conservatism as controls in our SEM models. Our analyses revealed significant effects of these demographic variables in predicting our outcomes. Conservatism was negatively associated with behavioral willingness and positively associated with feedback derogation. It seems that the stronger one identifies as politically conservative, the greater the likelihood of defensively reacting to the IAT result indicating racial bias. This may be due conservative values that prioritize individualism, personal responsibility, self-reliance, and conservation of the social status quo, which also align with the primary beliefs reflected in modern racism, a contemporary form of more covert anti-Black prejudice (Schlenker et al., 2012). Primary beliefs reflected in modern racism are that Black/African Americans are too demanding and that racial discrimination against them no longer exists in America (Henry & Sears, 2002). Modern racism and political conservatism are correlated with each other as they both share the belief that those who fail to succeed in society are personally responsible, rather than due to systemic racial inequalities (Feldman & Huddy, 2005; Nail et al., 2003). Therefore, receiving feedback about their prejudice may be more challenging for political conservatives to accept as the feedback challenges conservative's perception of post-racism American society. This is not to say that political conservatives are racists. Rather, we posit that political conservatism may be associated with heightened threat sensitivity to any race related matter due to the current societal events.

Even after controlling for age and conservatism, there were several associations among our variables of interest that differed between the MTurk and subject pool samples. When we

probed each path, we found that several of these paths were significantly moderated by conservatism and subjective SES. There was not a clear or consistent pattern in how conservatism and subjective SES moderated the relationships, which calls for further investigation into the role of demographic variables in how different RES messages may be related to motivations to control prejudice, as well as defensive reactions to prejudice feedback.

### **Limitations and Future Directions**

Limitations of the current study should be noted. Several limitations involve the methodology used. This was a cross-sectional study so we cannot speak to the longitudinal associations among variables. Because we asked participants to retrospectively recall different messages they heard from their parents while growing up, it is possible that other factors examined in the current study influenced this recollection. For instance, the type of motivations to control prejudice may influence what is remembered about parents' RES messages. In addition, if an individual has already been actively engaging in anti-prejudice activities prior to participation, these activities may be reflected in their responses to feedback and also affect their motivations and remembered RES. Also, emotional autonomy was studied as a moderator of RES messages' links with motivations and defensiveness. However, it is also possible that emerging adults' changing attitudes and ideas regarding race may also drive more the emotional separation from parents.

Additionally, we used single informants for this study; participants self-reported on all measures and had to recall messages about race they heard from parents growing up. Since we did not collect parents' reports of their RES approach, we cannot draw any conclusion as to whether participants' recollection accurately represent the actual parental messages around race or not. Parents' RES messages may be misrepresented in children (Hughes et al., 2008), and

there may be discrepancies between parents' intended messages and children's interpretations (Bartoli et al., 2016; Casteli et al., 2018, 2009; Hughes, 2009). Therefore, we contend that participants' recollections of parents' RES messages are more important for understanding their childhood experiences of RES. Their recollections may be the most proximal predictor of defensiveness to prejudice feedback.

It is also important to note that we limited RES assessment to what parents said to their children and did not consider more implicit messages that may have been received from parents. Although the current study was mainly interested in examining the influence of parents' explicit RES messages on defensiveness to prejudice feedback in adulthood, children can still learn about and affected by their perception of parents' racial attitudes that they observe (Castelli et al., 2009; Hello et al, 2004). Future work could employ multi-informant method involving both parents and children that ask them both explicit and implicit messages about race that are communicated at home.

We also cannot draw any conclusion regarding the consequences of feedback derogation and behavioral willingness. We only measured how likely they are to find the IAT results to be valid and their willingness to engage in behaviors connected with implicit bias reduction; therefore, we do not know if low feedback derogation and high behavioral willingness will lead to actual changes in the participants' behaviors, their interracial interactions, or racial attitudes and biases. Additionally, we are unable to explain how low feedback derogation due to external motivations and parents' racemute messages differ from low feedback derogation as a result of internal motivations and parents' color-conscious messages. As mentioned above, external motivations and racemute messages may lead to lower feedback derogation due to the desire to avoid engaging with the feedback, while internal motivations and color-conscious messages may

encourage individuals to acknowledge and accept the validity of the feedback. We suggest future studies to also explore different reasons individuals may have for not derogating the feedback in order to better understand these relationships.

We also found some very surprising, even contradictory results that were not aligned with our hypotheses or past findings (i.e., external motivation and racemute messages' negative association with feedback derogation, positive correlation between racemute and color-conscious messages for men). To better interpret these results, we suggest future studies to include and consider additional factors such as explicit prejudice and the participants' actual IAT results. For instance, it may be that participants that recalled more racemute messages actually performed more slowly and made more errors when matching African American faces with pleasant words compared to Caucasian faces. If so, the fake feedback may have actually matched their true performance, and this accuracy in feedback may explain the negative association between racemute messages and feedback derogation. Researchers may also consider using mixed-methodology employing both quantitative and qualitative methods in order to capture more details, nuances, and contexts involved in White RES.

Furthermore, Abaied and Perry's findings (2021) of White parents' mixing color-conscious and colorblind messages suggest that we cannot understand RES messages in isolation. In the current study, the goal was to examine unique associations of RES messages with the variables of interest. The critical next step may be to study these RES messages in conjunction or in combination with each other to better understand the complexity of White parents' RES patterns and to develop family level prevention programs that encourage healthy conversations around race. Similarly, future investigations may examine latent profiles of motivations to control prejudice. Rather than internal and external motivations being mutually

exclusive, it is possible for individuals to be high on both motivations. There may be variation in how, for instance, a highly internally motivated individual engages with the prejudice feedback compared to an individual that is both externally and internally motivated. It will be important for research to consider these motivations in combination.

A final limitation that must be acknowledged is the significant sample effects. We recruited participants from Amazon MTurk and psychology subject pool, and there were significant group differences in some of the relations between our variables of interest. Although we were able to partly explain the differences in the relationships with conservatism and subjective SES, we were unable to explain the sample effects on the path from racism messages to internal motivations and path from internal motivations to feedback derogation. Future investigations should be careful in collecting data from multiple sources that may differ demographically and ensure to account for these differences in analyses. We also suggest that future research consider SES and conservatism as potential moderators of how SES, motivations, and responses to prejudice feedback are related. The norms within political or socioeconomic communities may differentiate how motivations manifest through behavior.

## **Conclusion**

Overall, our findings suggest that there is complexity in the messages that White parents in American communicate to their children about race and the implications of these messages for later motivations and responses to prejudice feedback. Simply emphasizing that everyone is equal may result in defensiveness even when an opportunity to reduce one's racial prejudice arises. Moreover, it seems that as individuals establish emotional autonomy from parents, the influence of parents' egalitarian and racism messages on motivations and behaviors weakens. The current study's findings have theoretical implications for understanding how parents can talk

with their children about race in a way that makes them willing to acknowledge and act to reduce their own racial biases. Interventions at the family level that seek to educate parents about various approaches to RES and provide a framework for discussing race with their children can potentially foster color-conscious thinking in parents, which could then be passed on to their children. Such intervention also has the potential to assist White families in gaining a deeper comprehension of the existence of racism within American society.

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## APPENDICES I: PILOT STUDY AND MEASURES

### Appendix A

#### **Pilot Data Results and Discussion**

All data were analyzed using Mplus, version 7.0 and SPSS version 23.

#### **Participants**

Participants included in the pilot data analyses were 473 adults currently residing in the United States that self-identified as White/Caucasian recruited through Amazon Mechanical Turk (33.8% male,  $M_{\text{age}} = 24.5$ ,  $SD = 1.53$ ).

#### **Measures**

**Demographic variables.** Participants reported their race, ethnicity, age, gender, whether they were born in the United States, the state that they spent most of their childhood in, and their political orientation.

**Parental racial socialization.** A modified Parental Racial-Ethnic Socialization Scale (Hughes & Chen, 1997; Hughes & Johnson, 2001; Pahlke, Bigler & Suizzo, 2012; Pahlke, Patterosn & Hughes, 2020) was used to assess messages about race that participants heard from parents (Appendix B).

**Internal/External motivation to control prejudice.** Participants' internal and external motivation to control prejudice was measured using the Motivation to Respond Without Prejudice Scale (Plant & Devine, 1998; Appendix G). The scale includes five items measuring external motivation to control prejudice (e.g., "Because of today's PC (politically correct)

standards I try to appear nonprejudiced toward Black people”; “I try to hide any negative thoughts about other ethnic groups in order to avoid negative reactions from others”) and four items measuring internal motivation to control prejudice (e.g., “I attempt to act in nonprejudiced ways toward Black people because it is personally important to me”; “Being nonprejudiced toward people of other racial or ethnic groups is important to my self-concept”). Participants were asked to indicate their level of agreement with each item on a scale from 1 (strongly disagree) to 9 (strongly agree). The measure has shown good convergent and discriminant validity and reliability ( $\alpha = .76-.85$ ) in samples of college students (Plant & Devine, 1998). In our sample, external motivation demonstrated adequate reliability ( $\alpha = .74$ ). One reverse coded item was removed from internal motivation to increase reliability to an acceptable level ( $\alpha = .63$ ).

**Attitudes towards Blacks.** Participants’ attitudes towards Black people were assessed using the Attitudes Towards Blacks scale (ATB; Brigham, 1993; Appendix H). The ATB is a 20-item scale containing 10 positively worded (e.g., “If I had a chance to introduce Black visitors to my friends and neighbors, I would be pleased to do so”) and 10 negatively worded items (e.g., “I would rather not have Black people live in the same apartment building I live in”). Participants responded to each item on a scale from 1 (strongly disagree) to 7 (strongly agree). The ATB has demonstrated good concurrent validity and internal reliability ( $\alpha = .88$ ; Brigham, 1993). The ATB also showed good internal reliability in our sample as well ( $\alpha = .862$ ).

### **Confirmatory Factor Analyses**

A confirmatory factor analysis was conducted to test the hypothesized factor structure of the revised RES questionnaire. Maximum likelihood estimation was chosen. The first model demonstrated adequate model fit (CFI= .900; RMSEA=.066; SRMR=.061).

Based on the model modification indices, a series of confirmatory factor analyses was then conducted. In the final model, three items (“One should be kind and respectful to all people,” “In the past, people from other racial or ethnic groups were discriminated against because of their race or ethnicity,” “Talking openly about race is rude or impolite”) were deleted because they loaded onto all three factors. The final model also included three sets of freed correlations among unique factors (items 2 and 6, 9 and 10, 11 and 18). These items were allowed to correlate in the model because each pair was made up of items from a single factor. The final model demonstrated a good model fit (CFI= .953; RMSEA= .05; SRMR= .04). The final standardized estimated model obtained are provided in Table A1.

### **Descriptive Statistics and Correlations**

Means and standard deviations can be found in Table A2. Scores on subscales were normally distributed. Bivariate correlations were computed to examine the interrelations amongst relevant variables (see Table A2). There were several correlations which had directions opposite of our expectations. Although the egalitarian approach of parental RES was positively related to a color-conscious approach and internal motivations as was expected, contrary to our expectations, egalitarian messages were also positively correlated with racemute messages and external motivation, and negatively correlated with positive attitudes towards Blacks. We anticipated that racemute and color-conscious messages would be negatively related to each other, but instead they were positively correlated. Both messages were positively associated with internal motivations and external motivations and negatively associated with positive attitudes towards Black people.

We speculated that these correlations contradicting our prediction may be due to response bias. Some participants may have consistently provided extreme answers to the RES questions

while other have consistently provided low endorsement or neutral responses to the items. Thus, we mean centered the parental RES item responses to control for within person variation and computed bivariate correlations again using the within person centered RES variables. After centering, egalitarian messages were negatively correlated with racemute and color-conscious approaches and negatively correlated with external motivations. Egalitarian messages were also associated with greater positive attitudes towards Black. Racemute messages were negatively related to color-conscious messages and positively related with external motivations. Racemute messages were associated with less positive attitude towards Blacks. Color-consciousness messages were positively related to external motivations, but unrelated to internal motivation or attitudes toward Blacks. Considering that the directions of correlations for the RES variables were more so as predicted after within-person centering, it suggests that our RES measure was valid and able to capture the different RES messages participants received from their parents growing up (see Table A3).

Another possible explanation for the uncentered variables' correlation results is that although color-consciousness recognizes and emphasizes value in racial differences and thus is theorized to be more associated with internal motivations over external motivations, it may have multifaceted psychological outcomes. Wilton and colleagues (2019) found that despite its common association with positive intergroup outcomes, exposure to multiculturalism, a philosophy that advocates valuing group differences, resulted in greater race essentialist beliefs compared to color-blindness. Moreover, exposure to multiculturalism decreased the likelihood of finding racial equality as a problem compared to exposure to color-blindness. Others also have found multiculturalism's association with greater racial stereotyping (e.g., Gutierrez & Unzueta, 2010; Wolsko et al., 2000). Multiculturalism and color-consciousness are similar in that they are

believed to promote diversity and reduce bias by affirming and stressing the importance of racial differences. However, this emphasis on racial variation may promote the idea that racial groups are discrete and unconnected and reinforce beliefs about the inherence of race.

We also speculate that these unexpected results may have stemmed from the limitation of our measure for motivation to control prejudice. We used Plant and Devine's (1998) measure which dichotomizes the sources of motivation to internal and external. Dichotomous conceptualization of sources of motivation may not be nuanced enough to capture the complex and various reasons why people express or suppress their prejudice. Legault et al.'s (2007) expanded taxonomy of motivation to be unprejudiced demonstrated that there exist alternative forms of prejudice regulation on an internal-external motivation continuum rather than a simple dichotomy. In order to capture participants' more nuanced sources of motivation to regulate prejudice, we will use Legault and colleagues' (2007) measure for the main study.

### **Path Analyses**

Mplus was used to examine how egalitarian, race-mute, and color-conscious racial socialization approaches were related to internal motivation and external motivation. All three types of racial ethnic socialization significantly predicted greater internal motivation. Only race-mute and color-conscious approaches significantly predicted external motivation. Color-conscious approach's association with external motivation was not what we have predicted. This may be again, due to the limitation of the internal and external motivation dichotomy. It also may be that color-consciousness is related to both internal and external motivation to control prejudice. Results are shown in Figure A1.

**Table A1***Factor Loadings of the Items Ratings to the Parental Racial Ethnic Socialization Scale*

|                                                                                                                                  | <b>Egalitarian</b> | <b>Color<br/>Conscious</b> | <b>Racemute</b> |
|----------------------------------------------------------------------------------------------------------------------------------|--------------------|----------------------------|-----------------|
| <b>Items</b>                                                                                                                     |                    |                            |                 |
| People are equal, regardless of their race or ethnic background.                                                                 | .577               | 0                          | 0               |
| I should try to make friends with people of all races and ethnic backgrounds.                                                    | .671               | 0                          | 0               |
| It is important to appreciate people of all racial and ethnic backgrounds.                                                       | .681               | 0                          | 0               |
| About the importance of getting along with people of all races and ethnicities.                                                  | .678               | 0                          | 0               |
| Everyone should have an equal chance and an equal say in most things.                                                            | .633               | 0                          | 0               |
| White people have more opportunities than people of other racial or ethnic groups in this country.                               | 0                  | .646                       | 0               |
| American society is not always fair to all races and ethnicities.                                                                | 0                  | .594                       | 0               |
| Sometimes people are treated badly just because of their race or ethnicity.                                                      | 0                  | .613                       | 0               |
| About discrimination or prejudice against other racial or ethnic groups.                                                         | 0                  | .678                       | 0               |
| About the discrimination people from other racial or ethnic groups have experienced in the past.                                 | 0                  | .653                       | 0               |
| People from other racial or ethnic groups are sometimes still discriminated against because of their race or ethnicity.          | 0                  | .658                       | 0               |
| About something unfair that he/she witnessed was due to racial or ethnic discrimination against another racial or ethnic groups. | 0                  | .707                       | 0               |

|                                                                                    |   |      |      |
|------------------------------------------------------------------------------------|---|------|------|
| Something he/she saw that showed poor treatment of another ethnic or racial group. | 0 | .613 | 0    |
| Discrimination against minorities is no longer a problem in the United States.     | 0 | 0    | .736 |
| Talking about racial issues causes unnecessary tension.                            | 0 | 0    | .690 |
| Talking openly about race is rude or impolite.                                     | 0 | 0    | .575 |
| Talking openly about race is racist.                                               | 0 | 0    | .775 |
| You should avoid discussions of race or ethnicity.                                 | 0 | 0    | .730 |

---

*Note.* \*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table A2***Descriptive statistics and bivariate correlations among Uncentered Variables*

|                    | 1       | 2        | 3        | 4       | 5        | 6 | Mean<br>(SD)   |
|--------------------|---------|----------|----------|---------|----------|---|----------------|
| 1. Egalitarian     | -       |          |          |         |          |   | 3.68<br>(.73)  |
| 2. Racemute        | .302*** | -        |          |         |          |   | 3.30<br>(.88)  |
| 3. Color-Conscious | .597*** | .573***  | -        |         |          |   | 3.44<br>(.74)  |
| 4. IMS             | .295*** | .241***  | .304***  | -       |          |   | 6.48<br>(1.41) |
| 5. EMS             | .289*** | .541***  | .546***  | .466*** | -        |   | 6.20<br>(1.44) |
| 6. ATB             | -.122** | -.575*** | -.386*** | .042    | -.412*** | - | 4.35<br>(.84)  |

*Note.* IMS= Internal motivation to control prejudice; EMS= External motivation to control prejudice; ATB= Attitude towards Black.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Table A3***Descriptive Statistics and Bivariate Correlations Among Centered Variables*

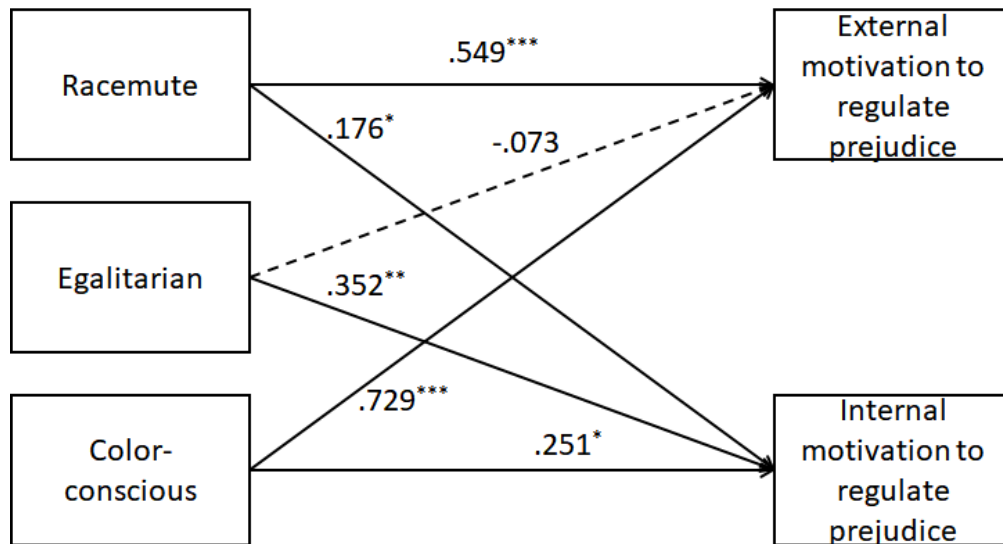
|                         | 1        | 2        | 3     | 4       | 5        | 6 | Mean<br>(SD)   |
|-------------------------|----------|----------|-------|---------|----------|---|----------------|
| 1. cEgalitarian         | -        |          |       |         |          |   | .23<br>(.53)   |
| 2. cRacemute            | -.567*** | -        |       |         |          |   | -.15<br>(.56)  |
| 3. cColor-<br>Conscious | -.129**  | -.404*** | -     |         |          |   | -.001<br>(.34) |
| 4. IMS                  | .007     | -.001    | .037  | -       |          |   | 6.48<br>(1.41) |
| 5. EMS                  | -.297*** | .192***  | .107* | .466*** | -        |   | 6.20<br>(1.44) |
| 6. ATB                  | .427***  | -.344*** | .088  | .042    | -.412*** | - | 4.35<br>(.84)  |

*Note.* cEgalitarian= centered Egalitarian; cRacemute= centered Racemute; cColor-Conscious= centered Color-conscious; IMS= Internal motivation to control prejudice; EMS= External motivation to control prejudice; ATB= Attitude towards Black.

\*  $p < .05$ , \*\*  $p < .01$ , \*\*\*  $p < .001$ .

**Figure A1**

*Path Analysis of the Parental Racial Ethnic Socialization Messages' Relation to External and Internal Motivation to Regulate Prejudice*



Note. \*  $p < .05$ ; \*\*  $p < .01$ ; \*\*\*  $p < .001$ .

Appendix B

What is your age in years? \_\_\_\_\_

What is your gender? \_\_\_\_\_

What is your level of educational attainment?

- a) Some high school
- b) High school graduate
- c) Some college
- d) Associate's degree
- e) Bachelor's degree
- f) Master's degree
- g) Doctoral degree

Which of the following best describes your race? You may select more than one if applicable.

- a) African American/Black
- b) American Indian/ Alaska Native
- c) Asian
- d) Native Hawaiian/ other Pacific Island
- e) White/Caucasian
- f) Other \_\_\_\_\_
- g) Prefer not to answer

Were you born in the United States? (Yes/No)

If you were not born in the U.S., where were you born? \_\_\_\_\_

Select a state where you spent most of your childhood.

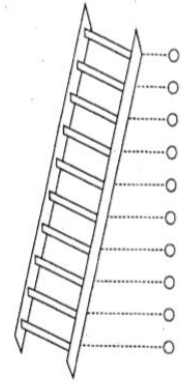
I would describe myself as ... (slider item)

|                   |  |  |  |  |  |              |
|-------------------|--|--|--|--|--|--------------|
| Very conservative |  |  |  |  |  | Very Liberal |
|                   |  |  |  |  |  |              |

Imagine that this ladder represents how American society is set up.

- At the top of the ladder are families who are the best off— they have the most money, the most schooling, and the jobs that bring the most respect.

- At the bottom are families who are the worst off— they have the least money, little or no education, no job, or jobs that no one wants or respects.



Think about your family in American society. Please tell us where you think your family would be on this ladder compared to other families in America. Fill in the circle that best represents where your family would be on this ladder.

Appendix C

**Parental Racial Socialization**

**Directions:** For each item, please answer how often your parents (mother or father) explicitly or directly told you these things.

| My parents explicitly or directly told me...                                                                                   | About how often did your parents tell you this? |        |            |       |            |
|--------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------|------------|-------|------------|
|                                                                                                                                | Never                                           | Rarely | Some-times | Often | Very Often |
| 1. People are equal, regardless of their race or ethnic background.                                                            | 1                                               | 2      | 3          | 4     | 5          |
| 2. I should try to make friends with people of all races and ethnic backgrounds.                                               | 1                                               | 2      | 3          | 4     | 5          |
| 3. It is important to appreciate people of all racial and ethnic backgrounds.                                                  | 1                                               | 2      | 3          | 4     | 5          |
| 4. It is best to have friends who are the same race or ethnic group as we are.                                                 | 1                                               | 2      | 3          | 4     | 5          |
| 5. It is a bad idea to marry someone who is of a different ethnic background or race than ours.                                | 1                                               | 2      | 3          | 4     | 5          |
| 6. The importance of getting along with people of all races and ethnicities.                                                   | 1                                               | 2      | 3          | 4     | 5          |
| 7. Everyone should have an equal chance and an equal say in most things.                                                       | 1                                               | 2      | 3          | 4     | 5          |
| 8. One should be kind and respectful to all people.                                                                            | 1                                               | 2      | 3          | 4     | 5          |
| 9. White people have more opportunities than people of other racial or ethnic groups in this country.                          | 1                                               | 2      | 3          | 4     | 5          |
| 10. American society is not always fair to all races and ethnicities.                                                          | 1                                               | 2      | 3          | 4     | 5          |
| 11. Sometimes people are treated badly just because of their race or ethnicity.                                                | 1                                               | 2      | 3          | 4     | 5          |
| 12. If people from minority groups have a hard time getting ahead, it's really a matter of some people not trying hard enough. | 1                                               | 2      | 3          | 4     | 5          |
| 13. People of any race could be well off if they would only try harder.                                                        | 1                                               | 2      | 3          | 4     | 5          |

| My parents explicitly or directly told me...                                                                                         | About how often did your parents tell you this? |        |           |       |            |
|--------------------------------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------|-----------|-------|------------|
|                                                                                                                                      | Never                                           | Rarely | Sometimes | Often | Very Often |
| 14. Discrimination against minority is no longer a problem in the United States.                                                     | 1                                               | 2      | 3         | 4     | 5          |
| 15. About discrimination or prejudice against <i>other</i> ethnic or racial groups.                                                  | 1                                               | 2      | 3         | 4     | 5          |
| 16. In the past, people from <i>other</i> racial or ethnic groups were discriminated against because of their race or ethnicity.     | 1                                               | 2      | 3         | 4     | 5          |
| 17. About the discrimination people from <i>other</i> racial or ethnic groups have experienced in the past.                          | 1                                               | 2      | 3         | 4     | 5          |
| 18. People from <i>other</i> racial or ethnic groups are sometimes still discriminated against because of their race or ethnicity.   | 1                                               | 2      | 3         | 4     | 5          |
| 19. Talking about racial issues causes unnecessary tension.                                                                          | 1                                               | 2      | 3         | 4     | 5          |
| 20. Talking openly about race is rude or impolite.                                                                                   | 1                                               | 2      | 3         | 4     | 5          |
| 21. Talking openly about race is racist.                                                                                             | 1                                               | 2      | 3         | 4     | 5          |
| 22. You should avoid discussions of race or ethnicity.                                                                               | 1                                               | 2      | 3         | 4     | 5          |
| 23. Something unfair that he/she witnessed was due to racial or ethnic discrimination against <i>another</i> ethnic or racial group. | 1                                               | 2      | 3         | 4     | 5          |
| 24. Something he/she saw showed poor treatment of <i>another</i> ethnic or racial groups.                                            | 1                                               | 2      | 3         | 4     | 5          |
| 25. About the possibility that some people might treat you badly or unfairly of your race or ethnicity.                              | 1                                               | 2      | 3         | 4     | 5          |
| 26. About discrimination or prejudice against your ethnic or racial group.                                                           | 1                                               | 2      | 3         | 4     | 5          |
| 27. About discrimination or prejudice against <i>our</i> ethnic or racial group.                                                     | 1                                               | 2      | 3         | 4     | 5          |
| 28. About important people in the history of <i>other</i> racial or ethnic groups.                                                   | 1                                               | 2      | 3         | 4     | 5          |

| My parents explicitly or directly told me...                                                                 | About how often did your parents tell you this? |        |           |       |            |
|--------------------------------------------------------------------------------------------------------------|-------------------------------------------------|--------|-----------|-------|------------|
|                                                                                                              | Never                                           | Rarely | Sometimes | Often | Very Often |
| 29. To read books about the history or traditions of different ethnic and racial groups, other than our own. | 1                                               | 2      | 3         | 4     | 5          |
| 30. To learn about the history or traditions of <i>other</i> racial or ethnic groups.                        | 1                                               | 2      | 3         | 4     | 5          |
| 31. About the history of <i>other</i> racial or ethnic groups in our country.                                | 1                                               | 2      | 3         | 4     | 5          |
| 32. About appreciation of the values and beliefs of people of different races and ethnic groups.             | 1                                               | 2      | 3         | 4     | 5          |

Appendix D

**Motivation to Control Prejudice**

**Directions:** The following survey concerns various reasons or motivations people might have for trying to behave in nonprejudiced ways. We want to be clear that we are not evaluating you or your individual responses. All your responses will be completely confidential. We are simply trying to get an idea of the types of motivations that people in general have for responding in nonprejudiced ways. If we are to learn anything useful, it is important that you respond to each of the questions openly and honestly. Please rate the extent to which each item corresponds to your ultimate reasons for avoiding prejudice.

|                                                           | 1<br>Does not<br>correspond<br>at all | 2 | 3 | 4<br>Corresponds<br>moderately | 5 | 6 | 7<br>Corresponds<br>exactly |
|-----------------------------------------------------------|---------------------------------------|---|---|--------------------------------|---|---|-----------------------------|
| 1. For the enjoyment I feel when relating to other groups |                                       |   |   |                                |   |   |                             |
| 2. Pleasure of being open-minded                          |                                       |   |   |                                |   |   |                             |
| 3. For the joy I feel when learning about new people      |                                       |   |   |                                |   |   |                             |
| 4. For the interest I feel when discovering people/groups |                                       |   |   |                                |   |   |                             |
| 5. I appreciate what being understanding adds to my life  |                                       |   |   |                                |   |   |                             |
| 6. Striving to understand others is part of who I am      |                                       |   |   |                                |   |   |                             |
| 7. Because I am tolerant and accepting of differences     |                                       |   |   |                                |   |   |                             |
| 8. Because I am an open-minded person                     |                                       |   |   |                                |   |   |                             |
| 9. Because I value nonprejudice                           |                                       |   |   |                                |   |   |                             |

|                                                                                                                   |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| 10. Because I admire people who are egalitarian (believing that all people are equal)                             |  |  |  |  |  |  |  |
| 11. I place importance on having egalitarian beliefs                                                              |  |  |  |  |  |  |  |
| 12. Because tolerance is important to me                                                                          |  |  |  |  |  |  |  |
| 13. Because I feel like I should avoid prejudice                                                                  |  |  |  |  |  |  |  |
| 14. Because I would feel guilty if I were prejudiced                                                              |  |  |  |  |  |  |  |
| 15. Because I would feel ashamed if I were prejudiced                                                             |  |  |  |  |  |  |  |
| 16. Because I would feel bad about myself if I were prejudiced — So that people will admire me for being tolerant |  |  |  |  |  |  |  |
| 17. Because I don't want people to think I'm narrow-minded                                                        |  |  |  |  |  |  |  |
| 18. Because biased people are not well-liked                                                                      |  |  |  |  |  |  |  |
| 19. Because I get more respect/acceptance when I act unbiased                                                     |  |  |  |  |  |  |  |
| 20. I don't know; it's not a priority                                                                             |  |  |  |  |  |  |  |
| 21. I don't know; I don't really bother trying to avoid it                                                        |  |  |  |  |  |  |  |
| 22. I don't know why; I think it's pointless                                                                      |  |  |  |  |  |  |  |

|                                                       |  |  |  |  |  |  |  |
|-------------------------------------------------------|--|--|--|--|--|--|--|
| 23. I don't know, it's<br>not very important<br>to me |  |  |  |  |  |  |  |
|-------------------------------------------------------|--|--|--|--|--|--|--|

Appendix E

**The Implicit Association Test Feedback Questionnaire**

|                                                                                | 1<br>Strongly<br>disagree | 2 | 3 | 4 | 5 | 6 | 7<br>Strongly<br>agree |
|--------------------------------------------------------------------------------|---------------------------|---|---|---|---|---|------------------------|
| <b>Do you believe the IAT...</b>                                               |                           |   |   |   |   |   |                        |
| Is a valid measure of your attitude?                                           |                           |   |   |   |   |   |                        |
| Doesn't really measure anything important?                                     |                           |   |   |   |   |   |                        |
| Is a valid measure of your bias?                                               |                           |   |   |   |   |   |                        |
| Is meaningless?                                                                |                           |   |   |   |   |   |                        |
| The IAT is a good tool for teaching people about implicit bias?                |                           |   |   |   |   |   |                        |
| My score is due to the order the stimuli were presented in?                    |                           |   |   |   |   |   |                        |
| It is not clear what the IAT measures?                                         |                           |   |   |   |   |   |                        |
| The IAT is a scientifically valid way to measure prejudice?                    |                           |   |   |   |   |   |                        |
| <b>The IAT feedback I just received...</b>                                     |                           |   |   |   |   |   |                        |
| Is an accurate reflection of my attitudes.                                     |                           |   |   |   |   |   |                        |
| Is based in scientific evidence.                                               |                           |   |   |   |   |   |                        |
| Does not represent my true values.                                             |                           |   |   |   |   |   |                        |
| Is distorted.                                                                  |                           |   |   |   |   |   |                        |
| Is exaggerated.                                                                |                           |   |   |   |   |   |                        |
| Is too extreme.                                                                |                           |   |   |   |   |   |                        |
|                                                                                | 1<br>Strongly<br>disagree | 2 | 3 | 4 | 5 | 6 | 7<br>Strongly<br>agree |
| <b>How skeptical are you of the score you received?</b>                        |                           |   |   |   |   |   |                        |
| <b>The implicit attitude feedback I just received will affect my behavior.</b> |                           |   |   |   |   |   |                        |
| <b>I am...</b>                                                                 |                           |   |   |   |   |   |                        |

|                                                                                                                                                             |                        |   |   |   |   |   |                      |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------|------------------------|---|---|---|---|---|----------------------|
| Eager to learn how to change my implicit bias.                                                                                                              |                        |   |   |   |   |   |                      |
| Not interested in learning how to change my implicit bias.                                                                                                  |                        |   |   |   |   |   |                      |
| Responsible to change my implicit bias.                                                                                                                     |                        |   |   |   |   |   |                      |
| <b>Researchers have proposed the following behaviors to reduce implicit racial bias. How willing are you to partake in each of the following behaviors?</b> |                        |   |   |   |   |   |                      |
|                                                                                                                                                             | 1<br>Very<br>Unwilling | 2 | 3 | 4 | 5 | 6 | 7<br>Very<br>Willing |
| Make an active effort to reverse those thoughts when a negative stereotype about Black people comes to mind.                                                |                        |   |   |   |   |   |                      |
| Deliberately try to keep stereotypes from influencing my behavior.                                                                                          |                        |   |   |   |   |   |                      |
| Seek out diverse experiences.                                                                                                                               |                        |   |   |   |   |   |                      |
| Avoid watching television shows and movies that portray African Americans in a negative, stereotypical way.                                                 |                        |   |   |   |   |   |                      |
| Acknowledge that implicit bias can influence my judgments.                                                                                                  |                        |   |   |   |   |   |                      |
| Read articles/blogs written by Black people.                                                                                                                |                        |   |   |   |   |   |                      |
| Expose yourself to diverse experiences.                                                                                                                     |                        |   |   |   |   |   |                      |
| Seek out movies, TV or books featuring Black people.                                                                                                        |                        |   |   |   |   |   |                      |
| Seek out situations to have personal contact with Black people.                                                                                             |                        |   |   |   |   |   |                      |
| Replace stereotypical thinking by thinking of how stereotypes might not be true.                                                                            |                        |   |   |   |   |   |                      |
| Counter stereotypes by thinking of counter-stereotypical people.                                                                                            |                        |   |   |   |   |   |                      |

|                                                                               |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| Think about how implicit bias might influence my behavior.                    |  |  |  |  |  |  |  |
| Take the implicit Association Test again later to see if my bias has changed. |  |  |  |  |  |  |  |

Appendix F

**Emotional Autonomy Scale**

Indicate your degree of agreement with each item.

|                                                                                                                                       | 1<br>Strongly<br>disagree | 2 | 3 | 4<br>Strongly<br>Agree |
|---------------------------------------------------------------------------------------------------------------------------------------|---------------------------|---|---|------------------------|
| 1. My parent hardly ever makes mistakes                                                                                               |                           |   |   |                        |
| 2. My parents and I agree on everything.                                                                                              |                           |   |   |                        |
| 3. Even when my parents and I disagree, my parents are always right.                                                                  |                           |   |   |                        |
| 4. I try to have the same opinions as my parents.                                                                                     |                           |   |   |                        |
| 5. When I become a parent, I'm going to treat my children in exactly the same way that my parents have treated me.                    |                           |   |   |                        |
| 6. I go to my parents for help before trying to solve a problem myself.                                                               |                           |   |   |                        |
| 7. It's better for kids to go to their best friend than to their parents for advice on some things.                                   |                           |   |   |                        |
| 8. When I've done something wrong, I depend on my parents to straighten things out for me.                                            |                           |   |   |                        |
| 9. If I was having a problem with one of my friends, I would discuss it with my mother or father before deciding what to do about it. |                           |   |   |                        |
| 10. There are some things about me that my parents don't know.                                                                        |                           |   |   |                        |
| 11. My parents know everything there is to know about me.                                                                             |                           |   |   |                        |
| 12. My parents would be surprised to know what I'm like when I'm not with them.                                                       |                           |   |   |                        |

|                                                                                                   |  |  |  |  |
|---------------------------------------------------------------------------------------------------|--|--|--|--|
| 13. There are things that I will do differently from my mother and father when I become a parent. |  |  |  |  |
| 14. I wish my parents would understand who I really am.                                           |  |  |  |  |

Appendix G

**Internal vs. External Motivations to Control Prejudice**

**Directions:** The following questions concern various reasons or motivations people might have for trying to respond in nonprejudiced ways toward Black people. Some of the reasons reflect internal-personal motivations whereas others reflect more external – social motivations. Of course, people may be motivated for both internal and external reasons; we want to be clear that we are not evaluating you or your individual responses. All your responses will be completely confidential. We are simply trying to get an idea of the types of motivations that students in general have for responding in nonprejudiced ways. If we are to learn anything useful, it is important that you respond to each of the questions openly and honestly. Please give your response according to the scale below.

|                                                                                                                 | 1<br>Strongly<br>disagree | 2 | 3 | 4 | 5 | 6 | 7 | 8 | 9<br>Strongly<br>agree |
|-----------------------------------------------------------------------------------------------------------------|---------------------------|---|---|---|---|---|---|---|------------------------|
| Because of today’s PC (politically correct) standards I try to appear nonprejudiced toward Black people.        |                           |   |   |   |   |   |   |   |                        |
| I try to hide any negative thoughts about other ethnic groups in order to avoid negative reactions from others. |                           |   |   |   |   |   |   |   |                        |
| If I acted prejudiced toward Black people, I would be concerned that others would be angry with me.             |                           |   |   |   |   |   |   |   |                        |
| I attempt to appear nonprejudiced toward Black people in order to avoid disapproval from others.                |                           |   |   |   |   |   |   |   |                        |
| I try to act nonprejudiced toward Black people because of pressure from others.                                 |                           |   |   |   |   |   |   |   |                        |
| I attempt to act in nonprejudiced ways toward Black people because it is personally important to me.            |                           |   |   |   |   |   |   |   |                        |
| According to my personal values, using stereotypes about Black people is Ok.                                    |                           |   |   |   |   |   |   |   |                        |
| I am personally motivated by my beliefs to be nonprejudiced toward Black people.                                |                           |   |   |   |   |   |   |   |                        |

|                                                                                                     |  |  |  |  |  |  |  |  |  |
|-----------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|--|--|
| Because of my personal values, I believe that using stereotypes about Black people is wrong.        |  |  |  |  |  |  |  |  |  |
| Being nonprejudiced toward people of other racial or ethnic groups is important to my self-concept. |  |  |  |  |  |  |  |  |  |

## Appendix H

### Attitude Towards Blacks

This questionnaire measures how people think and feel about a number of social and personal situations. It is not a test, so there are no right or wrong answers. For each item, please indicate your degree of agreement.

|                                                                                                                    | 1<br>Strongly<br>disagree | 2 | 3 | 4 | 5 | 6 | 7<br>Strongly<br>agree |
|--------------------------------------------------------------------------------------------------------------------|---------------------------|---|---|---|---|---|------------------------|
| 1. If a Black person were put in charge of me, I would not mind taking advice and direction from him/her           |                           |   |   |   |   |   |                        |
| 2. If I had a chance to introduce Black visitors to my friends and neighbors, I would be pleased to do so.         |                           |   |   |   |   |   |                        |
| 3. I would rather not have Black people live in the same apartment building I live in.                             |                           |   |   |   |   |   |                        |
| 4. I would probably feel somewhat self-conscious dancing with a Black person in a public place.                    |                           |   |   |   |   |   |                        |
| 5. I would not mind it at all if a Black family with about the same income and education as me moved in next door. |                           |   |   |   |   |   |                        |
| 6. I think that Black people look more similar to each other than White people do.                                 |                           |   |   |   |   |   |                        |
| 7. Interracial marriage should be discouraged to avoid the “who-am-I?” confusion which the children feel.          |                           |   |   |   |   |   |                        |
| 8. I get very upset when I hear a White person make a prejudicial remark about blacks.                             |                           |   |   |   |   |   |                        |
| 9. I favor open housing laws that allow more racial integration of neighborhoods.                                  |                           |   |   |   |   |   |                        |
| 10. It would not bother me if my new roommate was Black.                                                           |                           |   |   |   |   |   |                        |

|                                                                                                                                                                   |  |  |  |  |  |  |  |
|-------------------------------------------------------------------------------------------------------------------------------------------------------------------|--|--|--|--|--|--|--|
| 11. It is likely that Black people will bring violence to neighborhoods when they move in.                                                                        |  |  |  |  |  |  |  |
| 12. I enjoy a funny racial joke, even if some people might find it offensive.                                                                                     |  |  |  |  |  |  |  |
| 13. The federal government should take decisive steps to override the injustices Black people suffer at the hands of local authorities.                           |  |  |  |  |  |  |  |
| 14. Black and White people are inherently equal.                                                                                                                  |  |  |  |  |  |  |  |
| 15. Black people are demanding too much too fast in their push for equal rights.                                                                                  |  |  |  |  |  |  |  |
| 16. White people should support Black people in their struggle against discrimination and segregation.                                                            |  |  |  |  |  |  |  |
| 17. Generally, Black people are not as smart as whites.                                                                                                           |  |  |  |  |  |  |  |
| 18. I worry that in the next few years I may be denied my application for a job or a promotion because of preferential treatment given to minority group members. |  |  |  |  |  |  |  |
| 19. Racial integration (of schools, businesses, residences, etc.) has benefitted both White and Black people.                                                     |  |  |  |  |  |  |  |
| 20. Some Black people are so touchy about race that it is difficult to get along with them.                                                                       |  |  |  |  |  |  |  |

## APPENDIX II: IRB APPROVAL

April 4, 2022

Joo Young Yang, M.A.  
Department of Psychology  
College of Arts & Sciences  
The University of Alabama  
Box 870348

Re: IRB # 21-12-5247 "Family and Messages about Race"

Dear Ms. Yang:

The University of Alabama Institutional Review Board has granted approval for your proposed research. Your protocol has been given expedited approval according to 45 CFR part 46. You have also been granted the requested waiver of one element of informed consent as well as a waiver of documentation of informed consent. Approval has been given under expedited review category 7 as outlined below:


*(7) Research on individual or group characteristics or behavior (including, but not limited to, research on perception, cognition, motivation, identity, language, communication, cultural beliefs or practices, and social behavior) or research employing survey, interview, oral history, focus group, program evaluation, human factors evaluation, or quality assurance methodologies.*

The approval for your application will lapse on April 3, 2023. If your research will continue beyond this date, please submit a continuing review to the IRB as required by University policy before the lapse. Please note, any modifications made in research design, methodology, or procedures must be submitted to and approved by the IRB before implementation. Please submit a final report form when the study is complete.

Please use reproductions of the IRB approved informed consent form to obtain consent from your participants.

Good luck with your research.

Sincerely,



Carpantato T. Myles, MSM, CIM, CIP  
Director & Research Compliance Officer

166 Rose Administration Building | Box 870127 | Tuscaloosa, AL 35487-0127 | 205-348-8461  
Fax 205-348-8882 | Toll Free 1-877-820-3066 | rscompliance@research.ua.edu

April 7, 2022

Joo Young Yang, M.A.  
Department of Psychology  
College of Arts & Sciences  
The University of Alabama  
Box 870348

Re: IRB # 21-12-5247-A: "Family and Messages About Race"

Dear Ms. Yang:


The University of Alabama Institutional Review Board has reviewed the revision to your previously approved expedited protocol. The board has approved the change in your protocol.

Please remember that your protocol will expire on April 3, 2023.

Should you need to submit any further correspondence regarding this proposal, please include the assigned IRB application number. Changes in this study cannot be initiated without IRB approval, except when necessary to eliminate apparent immediate hazards to participants.

Good luck with your research.

Sincerely,



Carpantato T. Myles, MSM, CIM, CIP  
Director & Research Compliance Officer