Effects of Perceived Racism, Cultural Intelligence, and Personality: Student Characteristics and Views at an Evangelical Christian University

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Abstract

Perceived racism has been characterized as the individual subjective experiences with racial discrimination that may include attributions and intentions of others. The present study was designed to ascertain the racial experiences at a mid-sized Christian university located in an urban area of the southeast, examining what factors may drive differences in perception and experiences. Perceived racism was measured using a brief version of the Perceived Ethnic Discrimination Questionnaire (PEDQ-CVB). Given our multi-ethnic community and a hypothesized role in perception, cultural intelligence was measured using the Cultural Intelligence Scale. Personality variables were considered using the HEXACO-60, and participant resilience was measured using the Brief Resilience Scale. As expected, racial differences in perceived racism emerged with individuals identifying as Black scoring higher on the scales of the PEDQ-CVB than White individuals. On some scales Asian/Pacific Islander respondents reporting lower levels of perceived discrimination than White individuals. Hierarchical regression analysis indicated that cultural intelligence and some but not all personality factors accounted for a sizable proportion of race-associated variance in PEDQ-CVB full and subscale scores. Resilience was not associated with perceived ethnic discrimination. However, higher levels of resilience were associated three personality characteristics—Agreeableness and Extraversion, and inversely related to Emotionality. The implications of the results for contemporary discussions on race-related issues are discussed.

Keywords

Perceived Discrimination, Race, Resilience, Personality, Cultural
1. Introduction

While the definition of racism has changed as laws, social norms, and behavioral patterns have evolved (Hogg & Vaughan, 2014), the core conceptual framework of racism includes an ideology of racial superiority and dominance (Wilson, 1999). Throughout history, when one group operates under the assumption of cultural and/or biological superiority to other racial or ethnic groups, such assumptions often lead to justifications for rules and behaviors that place the perceived inferior group as deserving of inferior treatment, diminished social status, or ostracism (Clair & Denis, 2015). Thus, operational definitions of racism have usually centered on the stigmatization of individuals as well as specified groups as defined by phenotypic characteristics (e.g., skin color, shape of the eyes) or ethnicity (Clark et al., 1999).

At any rate, considerable evidence suggests that individuals who are a member of given racial or ethnic minority groups have experienced a variety of acts which are defined in terms of racial or ethnic discrimination (Anderson, 2019; Brondolo et al., 2015; Kandula, 2006; Lyles et al., 2011; Ro & Choi, 2009; Shariff-Marco et al., 2010). Further, individuals have reported a wide variety of experiences that are discriminatory in nature including workplace hostility and discrimination, verbal or physical harassment, stigmatization, and social exclusion (Brondolo et al., 2005; Krieger et al., 2011; Kwok et al., 2011). Even the recent Covid-19 pandemic, with presumed origins in China, has led to a spike in anti-Asian hate crimes involving harassment and physical harm (Lee & Waters, 2021), and often driven by possible institutional racism and xenophobia (Gover et al., 2020; Tessler et al., 2020). In a recent survey conducted by the Pew Research Center (Horowitz et al., 2020), 73% of Black Americans endorse the position that race and racial issues is not given sufficient attention. Not surprisingly, this marked a 6% change from 2019, the preceding year. For Hispanic and Asian Americans, the proportion was lower, 46% and 35%, respectively. The proportion of White Americans who believed that too little attention was paid to racial issues was 26%. Perhaps unsurprisingly, White Americans are less predisposed to wrap their identify in terms of race racial identity or, unless instructed to do so, explicitly identify as member of a racial group. With this in mind, it has been argued that this makes it more challenging to consider the implications of race in their personal life (Bonilla-Silva, 2009). Given this, it is commonplace for White individuals to support the position that race is of trivial importance (Carr, 1997). Last, it has been argued that such beliefs tacitly support the position that racism is not a significant societal issue (Neville et al., 2000).

Confounding the study of racism and its effects are competing frameworks that define who, in fact, can be racist. More commonly, society and many but
not all scholars have argued that racism is simply a system of beliefs and behaviors predicated on the assumption of group differences including the presumption of outgroup inferiority, especially as it related to biological differences (Bollina-Silva, 2009; Herbst, 1997). However, recent discussions of racism include the premise that only the dominant group in a given society, operating through systems of oppression, can be racist (Malott & Schaefe, 2015). Thus, in modern America as in the past, only Whites through dominance in social and political power structures are capable of explicit and implicit racist beliefs.

The perception of racism may include experiences with institutional or cultural racism as well as interpersonal experiences. At the interpersonal level, such racism includes such experiences as physical or inferred threat and social exclusion (Brondolo et al., 2005). Perceived racism has been defined as subjective experiences of racial discrimination (Harrington & Fugère, 2010). As a hypothetical construct, perceived racism includes both objective experiences of behaviors that reasonably can be considered racist as well as an individual’s perception of the emotional state of another and their intentions (Combs et al., 2006). Thus, perceived racism reflects self-reported encounters interpreted as racist interactions (Brondolo et al., 2008).

Cultural Mistrust & Cultural Intelligence

Arising from experiences with discrimination, cultural mistrust refers to a sense of suspicion toward individuals from the dominant culture (Terrell & Terrell, 1996). Cultural mistrust appears to be associated with perceived racism, with mistrust acting as a buffer to discrimination (Harrington & Fugère, 2010). When interracial interactions are considered, past research has suggested that African Americans have higher levels of suspicion and are more likely to question intent when interacting with White individuals (Terrell & Terrell, 1996). Further, the prevalence of clinical symptoms of depression is higher than that of White as well as other racial groups (Dwight-Johnson et al., 2001), with such differences largely attributed to higher levels of perceived racism among minorities (Harrington & Fugère, 2010). The link exists even after statistical control of gender, age, and socioeconomic conditions are considered (Klonoff et al., 1999).

Long considered a “national of immigrants”, by any metric the United States can be considered a multi-ethnic and multicultural society (Schaefer, 2015). At the turn of the millennium, former director of the US Census Bureau Kenneth Prewitt noted that in the United States, “we’re on our way to becoming the first country in history that is literally made up of every part of the world.” (Prewitt, 2000). In 2017, almost 50 million individuals residing in the United States were born elsewhere (Pew Research Center, 2018). Given the multicultural nature of contemporary society, more recent research has turned to an examination of the factors that impact intercultural interactions (Gelfand et al., 2007). Further, consideration of cultural competency may lead to additional understanding as to the individual differences in effectiveness in dealing with culturally diverse situations in a pluralistic society (Ang et al., 2007).
Traditionally, intelligence and its measurement has focused on cognitive and attentional tasks (Humphreys, 1979; Wechsler, 1944). However, there has been a clear and growing recognition that the full consideration of intelligence should include emotional (Goleman, 2006; Mayer et al., 2004) and practical intelligence (Neisser, 1976; McDaniel et al., 2001; Sternberg et al., 2000). Cultural intelligence (CQ), is defined as the abilities of a given individual to function and manage effectively in culturally diverse settings (Ang et al., 2007). Although early research tended to view intelligence narrowly as the ability to solve problems in academic settings, there is a consensus that intelligence may be displayed in places other than the classroom (Sternberg & Detterman, 1986). This growing interest in “real world” intelligence includes intelligence that focuses on specific content domains such as social intelligence (Thorndike, 1920; see also, Goleman, 2006), emotional intelligence (Mayer et al., 2000) and practical intelligence (Sternberg et al., 2000).

Thus, CQ is considered as one of multiple intelligences that are required in the modern world (Ang et al., 2007; Mayer et al., 2000). While certainly relevant to social interactions, emotional intelligence reflects the ability of the individual to effectively perceive and manage emotions, irrespective culture or culturally relevant contextual variables (Ang et al., 2007). However, intra-cultural emotional cues are symbolically constructed (Ang et al., 2007) and are conveyed trans-generationally within the culture (Fitch, 1998). Therefore, when engaging with multiple and perhaps less familiar cultures, such emotional cues may effectively be lost in translation leading to misunderstandings (Earley & Ang, 2003). Conversely, CQ is considered culture free and is reflective of set of abilities germane to successful interpersonal communication in situations characterized by cultural diversity. Indeed, such abilities acquire additional importance in a highly multicultural society.

Much as modern society seeks to reduce perceived racial discrimination among its members, as the United States becomes increasingly diverse, the variation among members of society in the ability to adapt and navigate effectively across cultural boundaries is of increasing importance (Alexandra et al., 2021; Bernardo & Presbitero, 2017; Li, 2020). As noted earlier, CQ, reflecting competency in the ability to adapt and successfully function in multicultural environments is increasingly an important driver of social cohesion and interpersonal success in settings such as the workplace (Earley & Ang, 2003). This includes both the quality of interaction (Charas, 2015) and interpersonal trust (Afsar et al., 2020). As such, higher levels of CQ may lead to less reliance on cultural mistrust as a coping mechanism.

The purpose of the present study was to explore the relationship between perceived racism and the race of college students at an urban Christian university. In this study, the following research questions were considered: a) Is there a relationship between the scores of perceived racism as measured by the Perceived Ethnic Discrimination Questionnaire-Community Version (PEDQ-CV) and its component subscales and the race/ethnicity of participants? b) Is there a rela-
tionship between the scores of perceived racism as measured by the PEDQ-CV and the personality characteristics of the participants? c) Is there a relationship between the scores of perceived racism as measured by the PEDQ-CV and the scores on the Cultural Intelligence Scale (CIS) subscales of the participants? Thus, we examined the role of the race/ethnicity of the respondents alone, the effects of race with the role of the personality characteristics or the CQ of the individuals partialed out.

2. Method

2.1. Participants

The present study initially included 289 undergraduate and graduate students enrolled at a small Christian university in South Florida. The students were recruited via the official campus LISTSERV, with all participants and their responses treated in a manner consistent with the standards of the American Psychological Association (2017). Of these, 212 students completed the full questionnaire. The details associated with the characteristics of the participants are presented in Table 1. The participants included students from a number of disciplines with approximately 85% reported being a member of the Christian faith. The reported race of approximately 45% of the students was White, with almost 25%, 11%, and 6% of the reporting a race of Black, Hispanic/Latino, or Asian/Pacific Islander, respectively. The remaining 11.3% reported mixed or multi-racial ancestry. This racial breakdown is noteworthy as the undergraduate campus population consists of White undergraduates who comprise 61.6% of the campus population.

2.2. Measurements

2.2.1. HEXACO Personality Inventory-Revised (HEXACO-60)

The personality traits of the respondents were measured using the HEXACO Personality Inventory-Revised (Ashton & Lee, 2009). An acceptable alternative to longer instruments, the HEXACO consists of 60 items measuring the six dimensions of personality. The participants rated all items on a five-point scale from completely disagree to completely agree. The dimensions of personality included (a) Honesty/Humility (α = .71), Agreeableness (α = .74), Conscientiousness (α = .71) Openness to Experience (α = .70), Emotionality (α = .72), and Extraversion (α = .76).

2.2.2. Cultural Intelligence Scale (CIS)

Cultural intelligence was assessed using the Cultural Intelligence Scale (CIS; Ang & Van Dyne, 2008; Ang et al., 2011). Consisting of 20 items, the CQS includes four dimensions of cultural intelligence metacognitive (MET; α = .76), cognitive (COG; α = .84), motivational (MOT; α = .76), and behavioral (BEH; α = .84). Respondents are instructed to rate each statement ranging from 1 (strongly disagree to 7 (strongly agree), with higher scores suggestive of higher levels of cultural intelligence. Examples of each dimension include a) metacognitive, “I adjust my
| Table 1. Participant characteristics. |
|--------------------------------------|
|                                      | n  | %     |
| Male                                 | 27 | 12.7% |
| Female                               | 185| 87.3% |
| Religious Beliefs                    |    |       |
| Atheist/Agnostic                     | 14 | 6.6%  |
| Christian                            | 182| 85.8% |
| Muslim                               | 2  | 0.9%  |
| Hindu                                | 2  | 0.9%  |
| Other                                | 12 | 5.7%  |
| Location of Home                     |    |       |
| Florida                              | 154| 72.6% |
| Southeastern US                      | 5  | 2.4%  |
| Northeastern US                      | 15 | 7.1%  |
| Mid-Western US                       | 30 | 14.2% |
| Western US                           | 5  | 2.4%  |
| Another Country                      | 3  | 1.4%  |
| Academic Rank                        |    |       |
| Freshman                             | 43 | 20.3% |
| Sophomore                            | 48 | 22.6% |
| Junior                               | 34 | 16.0% |
| Senior                               | 32 | 15.1% |
| Graduate Students                    | 55 | 25.9% |
| Area of Study                        |    |       |
| Life Sciences                        | 43 | 20.3% |
| Physical Sciences                    | 2  | 0.9%  |
| Health Sciences                      | 33 | 15.6% |
| Business                             | 23 | 10.8% |
| Communications                       | 5  | 2.4%  |
| Fine Arts                            | 8  | 3.8%  |
| Education or Counseling              | 13 | 6.1%  |
| Liberal Arts/Humanities              | 15 | 7.1%  |
| Ministry                             | 13 | 6.1%  |
| Other (not specified)                | 57 | 26.9% |

Note: Life Sciences biology, biochemistry, behavioral neuroscience, psychology. Physical sciences math, computer science, forensic science, chemistry Health sciences nursing, health & human performance, pharmacy Business accounting, management, marketing, international Communications communication journalism, public relations, broadcasting Fine Arts theatre, cinema arts, art, music, dance Liberal Arts/ Humanities English, history, philosophy, political science/politics.
cultural knowledge as I interact with people from a culture that is unfamiliar to me.

b) cognitive, “I know the cultural values and religious beliefs of other cultures.”

c) motivational, “I enjoy interacting with people from different cultures.

and d) behavioral, “I change my nonverbal behavior when a cross-cultural situation requires it.”

2.2.3. Brief Resilience Scale (BRS)

As a way of measuring the ability to recover from adversity, resilience was measured using the six item Brief Resilience Scale (Smith et al., 2008). The participants were instructed to respond to a series of statements on a five-point Likert scale ranging from strongly agree to strongly agree. Original assessment of the instrument suggested adequate reliability and measurement of resilience as a unitary construct.

2.2.4. Perceived Ethnic Discrimination Questionnaire-Community Version Brief (PEDQ-CVB)

Perceived racism was measured using the Perceived Ethnic Discrimination Questionnaire-Community Version Brief (PEDQ-CVB; Brondolo et al., 2005). Modified for its brevity from the Perceived Ethnic Discrimination Questionnaire (PEDQ, Contrada et al., 2001), the PEDQ-CVB was developed for use across a variety of communities, multiple levels of literacy, and for use with students as well as community-dwelling adults. Consisting of a 34 item assessment designed to measure lifetime experiences of both interpersonal as well as group social experiences of ethnic discrimination, the scale includes subscales designed to delineate experiences along four dimensions including discrimination in work and/or school environments (Work/School; W/S), threat of an actual harassment up to and including actual harm (Threat/Aggression; T/A), stigmatization (Stigmatization/Discrimination; S/D), and social exclusion (Exclusion/Rejection; E/R). The questionnaire begins with the question, “Because of your race or ethnicity…” and for each item, the respondent is required to indicate how often he or she experienced an event on a five-point scale ranging from “never happened” to “happened very often.” Individual items included a predicate that involves a possible experience such as, “have people who speak a different language made you feel like an outsider?” Other sample items on the questionnaire include “How often… have others actually hurt you?” (Threat/Aggression subscale) and “How often… have you been treated unfairly by co-workers?” (Stigmatization/Discrimination subscale). Adequate validity and reliability have been reported across both student and community samples and a variety of ethnic/racial backgrounds (Atkins, 2014; Ghaffari & Çiftçi, 2010; Kwok et al., 2011).

As noted elsewhere (Keum et al., 2018), interactions with the police can serve as an important source of ethnicity-related stress for individuals of color. Thus, given the events associated with the 2020 period, an additional item was included to explore the possibility of perceived discrimination from police (e.g., “How often… have policeman or security officers been unfair to you?”). Last, the descriptive statistics associated with each scale are provided in Table 2.
Table 2. Means, standard deviations, and ranges for all measures.

| Scale or Subscale                  | M (SD)     | Range |
|------------------------------------|------------|-------|
| Brief Resilience Scale             | 19.08 (4.80) | 8 - 30 |
| Cultural Intelligence Scale        |            |       |
| Meta-Cognition                     | 5.37 (1.03) | 2 - 7 |
| Cognition                          | 3.96 (1.25) | 1.5 - 6.5 |
| Motivational                       | 5.26 (1.06) | 2.6 - 7 |
| Behavioral                         | 4.83 (1.25) | 1.2 - 7 |
| HEXACO-60                          |            |       |
| Honesty/Humility                   | 3.80 (0.54) | 1.4 - 4.9 |
| Emotionality                       | 3.36 (0.67) | 1.7 - 5 |
| Extraversion                       | 3.19 (0.71) | 1.5 - 4.5 |
| Agreeableness                      | 3.31 (0.44) | 1.9 - 4.4 |
| Conscientiousness                  | 3.75 (0.57) | 2.7 - 4.8 |
| Openness to Experience             | 3.71 (0.60) | 1.8 - 5 |
| PEDQ-CV                            |            |       |
| Work/School                        | 8.42 (4.57) | 4 - 20 |
| Threat/Aggression                  | 6.28 (3.60) | 4 - 20 |
| Exclusion/Rejection                | 10.98 (4.51) | 4 - 20 |
| Stigmatization/Discrimination      | 7.44 (4.15) | 4 - 20 |
| Total Score                        | 33.11 (14.59) | 16 - 73 |

2.3. Analyses

All statistical analyses were performed using SPSS 23 (IBM, 2015). Following data screening and examination of assumptions associated with parametric statistical procedures (Howell, 2013), the data were considered using the following plan. A series of Analyses of Variance (ANOVAs) were performed, using Welch’s procedure (Welch, 1951) to compared group differences, if any, among the race categories. Given our interest in the issue, racial differences in resilience were examined first. Next, the dependent measures considered were the police/campus security measure and the main score and various subscales of the PEDQ-CVB. Post hoc multiple comparisons of the means were performed using the procedure of Games and Howell (1976). Following these racial comparisons, the next step in in the analytic plan was to examine the specific contributions of race, personality, and cultural competency on PEDQ-CVB scores. Thus, the goal here was to determine the amount of variance in PEDQ-CVB scores accounted for by the race of the respondent, race after partialing out the personality of the respondent, and race after the perceived cultural competency was partialed out. A final model was calculated as a check with the order of entry of the variables
reversed since it is possible that the order of entry of predictor variables influenced the regression results (Hultsch et al., 1990). However, these analyses did not alter our results and are not considered further.

3. Results

3.1. Race & Resilience

Given the expectation that adverse experiences impact resilience, the scores on the BRS were examined by considering the relationship between resilience and PEDQ-CVB scores, the personality scales, and the CIS scales. Overall, scores on the BRS were not correlated with any of the PEDQ-CVB subscales. However, resilience was associated with Agreeableness ($r = .363, p < .001$) and Extraversion ($r = .469, p < .001$), and inversely related to Emotionality ($r = -.578, p < .001$). This latter result may be indicative of the need for emotional stability in building resilience. In addition, resilience was associated with the MET ($r = .259, p < .001$), COG ($r = .142, p = .039$), MOT ($r = .263, p < .001$) and BEH ($r = .197, p = .004$) of the CIS.

Next, we explored the possibility of group differences in resilience as a function of race/ethnicity. The assumption of homogeneity of variance was violated; therefore, the Welch F-ratio is reported here. Significant differences in resilience scores as a function of racial group were found, $F(4, 50.57) = 4.55, p = .003$. Post hoc examination of the means using Games and Howell’s procedure revealed significantly higher resilience scores among black respondents ($M = 21.09, SD = 4.13$) than among White respondents ($M = 18.28, SD = 5.07$). All remaining comparisons were nonsignificant. This result is consistent with research suggesting that White Americans on average are less resilient than Black Americans (Keyes, 2009).

3.2. Race & Cultural Intelligence

Given the interest in CQ, the scales of the CIS were examined with race of the respondent as the independent variable. Following homogeneity of variance tests and the use of Welch’s procedure, group differences emerged on all four scales—MET—$F(4, 49.579, p < .001$, COG—$F(4, 53.14) = 6.41, p < .001$, MOT—$F(4, 49.214) = 3.55, p < .05$, and BEH—$F(4, 51.607) = 4.73, p < .005$. For the MET scale, White respondents ($M = 4.99, SD = 1.04$) scored significantly lower than their Black ($M = 5.94, SD = .80$) and Hispanic ($M = 5.85, SD = .66$) counterparts. When the COG scale of the CIS was considered, Black respondents ($M = 4.68, SD = 1.26$) outscored their White ($M = 3.68, SD = 1.21$), Hispanic ($M = 3.76, SD = 1.40$), and Asian/Pacific Islander ($M = 3.60, SD = .79$) counterparts, but the latter three groups were not significantly different. Turning to the MOT scale, the only difference was between Black ($M = 5.54, SD = .95$) and Asian American/Pacific Islander ($M = 4.55, SD = .88$) participants. Last, when the BEH scale was examined, only the difference between Black ($M = 5.36, SD = 1.02$) and White ($M = 4.55, SD = 1.31$) respondents was significant.
3.3. Race & Interactions with Law Enforcement

Given recent events in society, one additional question of interest was the experiences of students on the campus and/or the community. Therefore, the participants were queried on level of agreement with the question, “Have police or security officers been unfair to you?” Preliminary screening of the data using Levene’s test (Levene, 1960) for equality of variances revealed violation of the homogeneity of variance assumption. Therefore, the means were compared using Welch’s procedure (Welch, 1951). The resulting analysis revealed significant differences as a function of the race of the respondent, $F(4, 45.48) = 8.19, p < .001$.

Subsequent multiple comparisons using Games and Howell’s (1976) procedure revealed the following. Black respondents ($M = 2.31, SD = 1.64$) showed significantly higher levels of agreement with the statement than White respondents ($M = 1.28, SD = .65$). This result was true for Hispanic respondents as well ($M = 2.25, SD = 1.15$). No other group comparisons were significant. However, it is noteworthy that although the mean for White respondents had the lowest level of agreement, the means of all groups were all less than three on a five-point scale. Thus, although some racial differences in experience with police and campus security were reported, generally such encounters were not perceived as excessive.

3.4. Race & Perceived Ethnic Discrimination

Race-related differences in the PEDQ-CVB total as well as subscale scores were explored in a series of one-way ANOVAs. The results for the subscales are presented in Figure 1. Preliminary screening of the data using Levene’s test for equality of variances revealed violation of the homogeneity of variance assumption. Therefore, the means were compared using Welch’s procedure. The resulting analyses revealed significant differences among the groups in PEDQ-CVB total scores, $F(4, 53.57) = 6.41, p < .001$ as well as the W/S $F(4, 50.45) = 5.51, p = .001$, T/A $F(4, 65.85) = 8.85, p < .001$, E/R $F(4, 53.48) = 7.94, p < .001$, and S/D $F(4, 53.57) = 3.32, p = .017$ subscales. Subsequent multiple comparisons using Games and Howell’s (1976) procedure revealed the following. For total scores, Black individuals ($M = 39.40, SD = 15.91$) perceived significantly more discrimination than White ($M = 29.03, SD = 13.50$) and Asian ($M = 28.25, SD = 8.08$) respondents. A similar trend was seen when Hispanic/Latino ($M = 38.79, SD = 12.10$) respondents were compared with their White and Asian but not their Black student counterparts. As seen in Figure 1, this pattern held in consideration of the PEDQ-CVB WS and E/R subscales. Noteworthy here was the finding that the levels of perceived discrimination among Asian respondents were comparable to that of White respondents. In addition, Asian respondents reported lower levels of perceived discrimination than Black individuals on the T/A, E/R and, the S/D scales of the PEDQ-CVB, with lower scores on the T/A scale than White respondents. In comparisons with Hispanic respondents, this held true as well on the W/S and T/A scales. Last, the perceptions of multi-racial...
respondents were intermediate but not significantly different from either extreme on all scales.

3.5. Hierarchical Regression Analyses

On the basis of preliminary analyses, the next step in our analytic plan was to examine the specific contributions of race, personality, and cultural competency on PEDQ-CV scores. Thus, the goal here was to determine the amount of variance in PEDQ-CV scores accounted for by the race of the respondent, race after partialing out the personality of the respondent, and race after the perceived cultural competency was partialed out. Last, since the order of entry of predictor variables may influence the regression results (Hultsch et al., 1990), a final model was calculated as a check with the order of entry of the variables reversed.

3.5.1. PEDQ-CVB Total Scores

The results of the regression analyses are presented in Table 3. Examination of the results revealed that the race of the respondent alone accounted for 10.9% of the variance in PEDQ-CV total scores (Model 1). In our second analysis, the six component scores of the HEXACO were entered first accounting for 21.2% of the variance. Significant contributors to the equation included the Extraversion
Table 3. Summary of hierarchical regression analyses with PEDQ-CVB total scores.

| Model        |  $b$  | $\beta$ | $R^2$ | $\Delta R^2$ | F(d.f)   |
|--------------|-------|---------|-------|--------------|----------|
| Model 1      |  .109 | .312*** | .063  | .031         | 6.31 (4, 207)*** |
| Black        | 10.369| .312*** | .312  | .012         | 10.45 (6, 205)*** |
| Hispanic     | 9.761 | .212**  | .212  | .002         | 9.76 (6, 205)*** |
| Asian        | −.781 | −.012   | .002  | .002         | 9.76 (6, 205)*** |
| Multi-racial | 2.886 | .063    | .063  | .002         | 12.11 (4, 207)*** |
| Model 2      | 2.238 | .023**  | .023  | .002         | 12.11 (4, 207)*** |
| HEXACO (Hon./Hum.) | 1.212 | .045    | .045  | .002         | 12.11 (4, 207)*** |
| HEXACO (Emo.) | .401  | .018    | .018  | .002         | 12.11 (4, 207)*** |
| HEXACO (Extra.) | −7.910| −.387*** | −.387 | −.012        | 12.11 (4, 207)*** |
| HEXACO (Agree.) | 2.599 | .079    | .079  | .002         | 12.11 (4, 207)*** |
| HEXACO (Consc.) | −1.169| −.046   | .046  | .002         | 12.11 (4, 207)*** |
| HEXACO (Open.) | 10.289| .421*** | .421  | .042         | 12.11 (4, 207)*** |
| Black        | 3.321 | .379*** | .379  | .042         | 12.11 (4, 207)*** |
| Hispanic     | 2.238 | .023**  | .023  | .002         | 12.11 (4, 207)*** |
| Asian        | −4.195| −.154*  | −.154 | −.002        | 12.11 (4, 207)*** |
| Multi-racial |  .812 | .060    | .060  | .002         | 12.11 (4, 207)*** |
| Model 3      | 5.990 | .425*** | .425  | .042         | 12.11 (4, 207)*** |
| CIS (Meta-Cognition) | 5.990 | .425*** | .425  | .042         | 12.11 (4, 207)*** |
| CIS (Cognition) | −.340 | .029    | .029  | .002         | 12.11 (4, 207)*** |
| CIS (Motivational) | .781  | .057    | .057  | .002         | 12.11 (4, 207)*** |
| CIS (Behavioral) | −3.709| −.317*** | −.317 | −.012        | 12.11 (4, 207)*** |
| Black        | 7.783 | .234**  | .234  | .042         | 2.78 (4, 203)* |
| Hispanic     | 5.451 | .119    | .119  | .002         | 12.11 (4, 207)*** |
| Asian        | 1.156 | .018    | .018  | .002         | 12.11 (4, 207)*** |
| Multi-racial | 2.011 | .044    | .044  | .002         | 12.11 (4, 207)*** |

Note. ***$p < .001$, **$p < .01$, *$p < .05$. $(\beta = -.387, p < .001)$ and Openness to Experience $(\beta = .421, p < .001)$ subscales. Consideration of the bs for each point increase in extraversion was associated with a 7.91-point reduction in PEDQ-CVB total score. In addition, the standardized coefficients for Black $(\beta = .379, p < .001)$, Hispanic $(\beta = .203, p = .001)$, and Asian $(\beta = -.154, p < .05)$ respondents were significant. The addition of this block did not reduce the amount variance accounted for by race. Indeed, entry of race in the second step led to an increase in the model of 15.1%. In the third model, the scales of the CIS were entered first, accounting for 19% of the variance in PEDQ-CVB total scores. Following the addition of the block of CIS scores to the equation, the contribution of the race of the respondent was reduced to 4.2%. This result is of note, suggesting that individual differences in
perceived cultural competency account for significant proportion of the race-related variance for PEDQ-CVB scores. Thus, the change in variance from 10.9% (Model 1) to 4.2% following the statistical control of the (Model 3) may be indicative cultural competency could account for 61.5% (i.e., [.109 - .042]/.109) of the race associated variance in PEDQ-CVB total scores. Nonetheless, the attitudes and behaviors associated with higher cultural competency are associated the PEDQ-CVB scores, but do not account for the effect of racial experience completely. Specifically, 4.2% of the variance was accounted for by the race of the respondent and result that is significant ($p < .05$). The CIS-MET ($β = .425$, $p < .001$) and CIS-BEH ($β = −.317$, $p < .001$) scales contributed significantly to the equation as did the Black racial category ($β = .234$, $p < .01$).

3.5.2. PEDQ-CVB Work/School Scores

Given the results reported above, we explored the contributions of race, the HEXACO scales, and the CIS scales with each domain of the PEDQ-CVB. The results are reported in Tables 4-7. Turning to the W/S subscale first, once again that the race of the respondent was significant, accounting for 8.8% of the variance (Model 1).

Both the Black and Hispanic categories were significant ($βs = .263$, $p < .001$ & .166, $p < .05$). In Model 2, similar to consideration of the PEDQ-CVB total scores, when the HEXACO scales were entered first as a block, collectively they accounted for 16.5% of the variance. As earlier, significant contributors to the equation included the Extraversion ($β = −.308$, $p < .001$) and Openness to Experience ($β = .389$, $p < .001$) subscales. The addition of race in the second block led to an increase in the model of 13.4%, with the Black ($β = .319$, $p < .001$), Hispanic ($β = .156$, $p < .01$), and Asian ($β = −.213$, $p = .001$) categories significant. Thus, relative to White participants, with all other variables held constant, Black ($b = 3.321$) and Hispanic ($b = 2.238$) individuals reported higher levels of perceived discrimination in the W/S domain, while conversely, Asian participants ($b = −4.195$) reported significantly less discrimination. Once again, in the third model, the scales of the CIS were entered first, accounting for 15.7% of the variance in PEDQ-CVB Work/School scores. Both the CIS-MET and the CIS-BEH subscales contributed significantly to the equation ($βs = .428$ & $−.313$, $ps < .001$). When race was considered, only Black respondents ($β = .171$, $p < .05$) contributed significantly to the equation. As was the case when PEDQ-CVB total scores were considered, following the addition of the block of CIS scores to the equation, the contribution of the race of the respondent was again reduced to 2.8%. Here, the change in variance from 8.8% in Model 1 to 2.8% following the statistical control of CIS scores in Model 3 is suggestive that cultural competency could account for 68.2% of the race associated variance in PEDQ-CVB W/S scores.

3.5.3. PEDQ-CVB Threat/Aggression Scores

Next, we examined the predictors associated with the T/A subscale. In the first model, race accounted 7.3% of the variance in T/A scores. As seen in Table 5,
Table 4. Summary of hierarchical regression analyses with PEDQ-CVB W/S subscale scores.

| Model | b     | β     | R²   | ΔR²   | F(df)  |
|-------|-------|-------|------|-------|--------|
|       | .088  | .263***|      |       | 5.01 (4, 207)*** |
| Model 1 |       |       |      |       |        |
| Black  | 2.739 | .263***|      |       |        |
| Hispanic | 2.390 | .166* |      |       |        |
| Asian  | −1.527| −.077 |      |       |        |
| Multi-racial | .682 | .047 |      |       |        |
| Model 2 | .165  | .319***| .299 | .134 | 9.57 (10, 201)*** |
| HEXACO (Hon./Hum.) | −.194 | −.023 |      |       |        |
| HEXACO (Emo.) | .047 | .007 |      |       |        |
| HEXACO (Extra.) | −1.972| −.308***|      |       |        |
| HEXACO (Agree.) | .417 | .040 |      |       |        |
| HEXACO (Consc.) | −.242| −.030 |      |       |        |
| HEXACO (Open.) | 2.974 | .389***|      |       |        |
| Black  | 3.321 | .319***| .299 | .134 | 9.57 (10, 201)*** |
| Hispanic | 2.238 | .156** |      |       |        |
| Asian  | −4.195| −.213***|      |       |        |
| Multi-racial | .812 | .057 |      |       |        |
| Model 3 | .173  |        | 10.83 (4, 207)*** |
| CIS (Meta-Cognition) | 1.89 | .428***|      |       |        |
| CIS (Cognition) | .073 | .020 |      |       |        |
| CIS (Motivational) | .074 | .017 |      |       |        |
| CIS (Behavioral) | −1.143| −.313***|      |       |        |
| Black  | 1.776 | .171* | .201 | .028 | 6.38 (8, 203)*** |
| Hispanic | 1.039 | .072 |      |       |        |
| Asian  | −1.029| −.052 |      |       |        |
| Multi-racial | .340 | .024 |      |       |        |

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

The βs for Black (.195, p < .01) and Hispanic (.173, p < .05) categories were significant. Turning to the second model, when the HEXACO scores were entered first as a block, they collectively accounted for 10.4% of the variance. The addition of the variance of Race in the second block led to an 8.2% increase in the model with a resulting $R^2$ of 18.5%. Here, significant contributors to the equation included the Extraversion and Openness to Experience subscales as well as significant coefficients for Black, Hispanic, and Asian respondents ($βs = .218, p < .01, .170, & −.153, ps < .05$). It is important to note here the negative slope of the Asian respondents. While the $βs$ for Black and Hispanic participants suggest T/A scores on average 1.782 and 1.927 points higher than White participants,
Table 5. Summary of hierarchical regression analyses with PEDQ-CVB T/A subscale scores.

| Model | $b$  | $\beta$ | $R^2$ | $\Delta R^2$ | $F(df)$ |
|-------|------|---------|-------|--------------|---------|
| Model 1 | .073 | .195** | 4.06 (4, 207)** |
| Black | 1.593 | .195** |  |  | |
| Hispanic | 1.956 | .173* |  |  | |
| Asian | -1.419 | -.091 |  |  | |
| Multi-racial | -.253 | -.022 |  |  | |
| Model 2 | .104 | .100 | 3.95 (6, 205)** |
| HEXACO (Hon./Hum.) | .669 | .100 | | | |
| HEXACO (Emo.) | .267 | .050 | | | |
| HEXACO (Extra.) | -1.132 | -.225** | | | |
| HEXACO (Agree.) | 1.039 | .127 | | | |
| HEXACO (Consc.) | -.257 | -.041 | | | |
| HEXACO (Open.) | 1.435 | .238*** | | | |
| Black | 1.782 | .218** | .185 .082 4.58 (10, 201)*** |
| Hispanic | 1.927 | .170* | | | |
| Asian | -2.337 | -.153* | | | |
| Multi-racial | -.292 | -.026 | | | |
| Model 3 | .147 | .211* | 8.93 (4, 207)*** |
| CIS (Meta-Cognition) | .733 | .211* | | | |
| CIS (Cognition) | -.305 | -.106 | | | |
| CIS (Motivational) | .745 | .220** | | | |
| CIS (Behavioral) | -.758 | -.263** | | | |
| Black | 1.581 | .193* | .187 .040 5.84 (8, 203)*** |
| Hispanic | 1.413 | .125 | | | |
| Asian | -.621 | -.040 | | | |
| Multi-racial | -.118 | -.010 | | | |

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

Asian respondents experience on average 2.337 points less than White respondents. As before, the scales of the CIS were entered first in the third model, collectively accounting for 14.7% of the variance in PEDQ-CVB T/A scores. The CIS-MET scale ($\beta = .428, p < .05$) and the CIS-MOT and CIS-BEH subscales contributed significantly to the equation ($\beta$s = .220 & -.263, $p$s < .01). Inclusion of race produced a final $R^2$ of 18.7%, with contribution of race reduced to 4%—suggesting that cultural competency may account for 45.2% of the race associated variance in PEDQ-CVB T/A scores. In the final model, only Black respondents ($\beta = .193, p < .05$) contributed significantly to the equation.
3.5.4. PEDQ-CVB Exclusion/Rejection Scores

When examining the predictors of the PEDQ-CVB E/R scale, the following results emerged (see Table 6). In the first model, race accounted for 13.3% of the variance in the E/R scale scores. Here, Black ($\beta = .346, p < .001$), Hispanic ($\beta = .258, p < .001$), and multi-racial ($\beta = .155, p = .024$) categories contributed significantly to the equation. Consideration of the second model with HEXACO scores entered in the first block accounted for 24.5% of the variance. Addition, of race in the second block increased $R^2$ to 38.8%. Thus, inclusion of the HEXACO scales did not reduce the amount variance accounted for by race. Instead, entry of race in the second step of Model 2 led to an increase in the model of 14.3%.

Table 6. Summary of hierarchical regression analyses with PEDQ-CVB E/R subscale scores.

|                        | $b$  | $\beta$ | $R^2$ | $\Delta R^2$ | $\Delta F$ (df) |
|------------------------|------|---------|-------|--------------|-----------------|
| **Model 1**            |      |         |       |              |                 |
| Black                  | .133 | .346*** |       | .388        | 11.77 (4, 207)**|
| Hispanic               | .120 | .258*** |       | .251        | 3.15 (4, 203)*  |
| Asian                  | .100 | .047    |       | .046        | .096 (2, 63)    |
| Multi-racial           | .100 | .155*   |       | .109        |                 |
| **Model 2**            |      |         |       |              |                 |
| HEXACO (Hon./Hum.)     | .348 | .411    |       | .388        | 11.77 (4, 201)**|
| HEXACO (Emo.)          | .019 | .003    |       | .003        |                 |
| HEXACO (Extra.)        | −2.626| −.415***|       |             |                 |
| HEXACO (Agree.)        | 1.097| .107    |       |             |                 |
| HEXACO (Consc.)        | −1.178| −.150   |       |             |                 |
| HEXACO (Open.)         | 2.845| .377*** |       |             |                 |
| Black                  | .3912| .381*** | .388  | .145        | 11.77 (4, 201)**|
| Hispanic               | .347 | .244*** |       | .244*       |                 |
| Asian                  | −1.740| .089    |       | .089        |                 |
| Multi-racial           | 1.608| .113    |       | .113        |                 |
| **Model 3**            |      |         |       |              |                 |
| CIS (Meta-Cognition)   | 2.194| .503*** |       | .503        | 13.34 (4, 207)**|
| CIS (Cognition)        | .065 | .018    |       | .018        |                 |
| CIS (Motivational)     | −.672| −.158*  |       | −.158*      |                 |
| CIS (Behavioral)       | −.981| −.271** |       | −.271**     |                 |
| Black                  | 2.410| .235*** | .251  | .046        | 3.15 (4, 203)*  |
| Hispanic               | 2.138| .150*   |       | .150*       |                 |
| Asian                  | .808 | .041    |       | .041        |                 |
| Multi-racial           | 1.554| .109    |       | .109        |                 |

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

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seen when the other PEDQ scales were considered, in Model 3, the scales of the CIS when entered first accounted for 20.5% of the variance in PEDQ-CVB E/R scores. Here, the CIS-MET, MOT, and the CIS-BEH subscales contributed significantly to the equation (βs = .503, −.158 & −.271, ps < .001). The addition of race in the second block produced an increase in $R^2$ to 25.1%. Here only Black (β = .235, p < .01) and Hispanic (β = .150, p < .05) categories contributed significantly to the equation. As was the case when PEDQ-CVB total scores was considered, the change in variance from 13.3% in Model 1 to 4.6% following the statistical control of CIS scores in Model 3 suggests that cultural competency could account for 65.4% of the race associated variance in PEDQ-CVB E/R scores. Last, as before, on average Asian participants report lower levels than White counterparts on the E/R scale (see Table 6).

### 3.5.5. PEDQ-CVB Stigmatization/Discrimination Scores

Last, when the predictors of scores on the PEDQ-CVB S/D scale were considered, the following results emerged (see Table 7). In the first model, race accounted for 6.8% of the variance in the S/D scale scores. Here, only the Black racial category (β = .263, p < .001) contributed significantly to the equation. For the second model, as before HEXACO scores were entered in the first block accounting for 26.5% of the variance. As seen with other scales, the HEXACO Extraversion (β = −.375, p < .001) and Openness to Experience (β = .437, p < .001) scales contributed significantly to the equation. The addition of race in the second block increased $R^2$ to 38.2%. Thus, inclusion of the HEXACO scales did not reduce the amount of variance accounted for by race a result reported earlier. Instead, entry of race in the second step of Model 2 led to an increase in the model of 11.7%. In the third Model, the scales of the CIS when entered first, accounted for 13.0% of the variance in PEDQ-CVB S/D scores. Here, the CIS-MET (β = .292, p < .001), CIS-MOT (β = .163, p < .05), and the CIS-BEH (β = −.249, p < .01) subscales contributed significantly to the equation. The addition of race in the second block led to a 4% increase in the variance ($R^2 = 16.9$). Here only the Black (β = .231, p < .001) category contributed significantly to the equation. Albeit will with a smaller total $R^2$, as was the case when the PEDQ-CVB total scores were considered, following the addition of the block of CIS scores to the equation, the contribution of the race of the respondent was again reduced to 4.6%. Here, the change in variance from 6.8% in Model 1 to 4% following the statistical control of CIS scores in Model 3 suggests that cultural competency could account for 41.2% of the race associated variance in PEDQ-CVB S/D scores.

### 4. Discussion

As individuals, how we define ourselves including identification with a given racial or ethnic group may impact our perception of racism and discrimination. As
Table 7. Summary of hierarchical regression analyses with PEDQ-CVB S/D subscale scores.

| Model | $b$  | $\beta$ | $R^2$ | $\Delta R^2$ | $\Delta F(df)$ |
|-------|------|---------|-------|--------------|---------------|
| Model 1 | 0.068 | 0.263*** | 3.75 (4, 207)*** |
| Black | 2.487 | 0.263*** | |
| Hispanic | 1.755 | 0.134 | |
| Asian | 1.255 | 0.070 | |
| Multi-racial | 0.255 | 0.020 | |
| Model 2 | 0.265 | 0.382 | 12.33 (6, 205)*** |
| HEXACO (Hon./Hum.) | 0.388 | 0.50 | |
| HEXACO (Emo.) | 0.067 | 0.11 | |
| HEXACO (Extra.) | -2.180 | -0.375*** | |
| HEXACO (Agree.) | 0.046 | 0.05 | |
| HEXACO (Consc.) | 0.508 | 0.070 | |
| HEXACO (Open.) | 3.034 | 0.437*** | |
| Black | 3.554 | 0.376*** | 0.382 | 11.7 (4, 201)*** |
| Hispanic | 1.709 | 0.131* | |
| Asian | -1.394 | -0.078 | |
| Multi-racial | 0.615 | 0.047 | |
| Model 3 | 0.130 | 0.169 | 7.73 (4, 207)*** |
| CIS (Meta-Cognition) | 1.173 | 0.292** | |
| CIS (Cognition) | -0.174 | -0.052 | |
| CIS (Motivational) | 0.634 | 0.163* | |
| CIS (Behavioral) | -0.826 | -0.249** | |
| Black | 2.016 | 0.213*** | 0.169 | 2.14 (4, 203)* |
| Hispanic | 0.862 | 0.066 | |
| Asian | 1.996 | 0.112 | |
| Multi-racial | 0.35 | 0.018 | |

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

Noted by Milner (1983), individuals whose racial identity is closely tied to their sense of self are more likely to label the actions of others or events as racist in nature relative to an individual who places less emphasis on their racial identity. Thus, how a given individual processes their lived experiences—including negative interactions or insults—and how they internalize such events, is the essence of perceived racism or discrimination (Chu-Lien Chao et al., 2014; Grossman & Porche, 2014). Higher perceived racism and discrimination is associated with elevated stress levels, feelings of inferiority and lower self-esteem, inferior academic performance, and poorer health (Allen et al., 2002; Chu-Lien Chao et al., 2014).
While correlational in nature, the purpose of the present investigation was to
determine whether the factors associated with human personality (as measured
by the HEXACO-60 measures of Honesty-Humility, Emotionality, Extraversion,
Agreeableness versus Anger, Conscientiousness, and Openness to Experience),
individual resilience, cultural intelligence, race/ethnicity, and gender were pre-
dictive of individuals who reported higher levels of perceived ethnic discrimina-
tion. Determining whether personality, cultural competency in a highly diverse
environment, and resilience in the face of adversity were factors above those
immutable characteristics that define a person such as race and gender may pro-
vide insight into how our perceived lived experiences impacts our interpretation
of interactions with others. Thus, the results of this investigation may lend in-
sight in identifying a course of action in achieving a more cohesive society.

When race is considered as a social construct, considerable variation in the
definition often exists at both the inter—as well as the intra-country level. As
noted by Baldwin (2017), race has been defined to reflect differences in biology
that have been assumed to exist, to the notion of race on the basis membership
in an ancestral clan (e.g., Abraham; Entine, 2007), and race as reflected in dif-
ferent cultures (Banton, 1987; Omi & Winant, 1994). As noted above, races are
often defined by commonly shared physical characteristics, and were presumed
to be immutable. Ethnicity is usually defined with references to shared histories,
ancestry, and cultural norms (Clair & Denis, 2015). As a consequence, while a
given ethnicity may share certain racial “features”, ethnicity is usually considered
less rigidly defined and is often chosen by the individual (Cornell & Hartmann,
2006). Noteworthy here, are examples in the past where certain ethnic groups
were once defined as racially separate from White people as a race (e.g., Irish,
Jewish). Such fluid definitions of race and ethnicity can undermine societal c o-
hesiveness. Further, fertile ground for cultural insensitivity and group mistrust
can be found with shifting definitions of cultural markers of racial and ethnic
norms (see Fiske, 2010). For example, there is a marked proliferation of anti-se-
motic attitudes and action linked to solidarity within racial justice movements
and anti-colonialism activism (Romeyn, 2020; see also, Soske & Jacobs, 2015).

The consensus within the scientific community has been to reject defining in-
dividuals as members of biological racial categories. Simply put, consideration
of significant genetic differences as a component of a zoological definition of race is
not meaningful or useful when ascribed to modern Homo sapiens (Jackson, 1992;
Tattersall, 2004). Nonetheless, race has existed throughout human history as a
socially constructed concept by societies as well as researchers (Mukhopadhyay
& Henze, 2003). Nonetheless, given the long history associated with the use of
race, it should not be a surprise to anyone that humans are by nature tribal and
such a predisposition was beneficial (Clark et al., 2019). For example, greater
cooperation and the formation of coalitions enhanced survival and reproductive
success benefiting later generations (Tooby & Cosmides, 2010). Unfortunately,
loyalty can be a double-edged sword, where loyalties can produce biases, includ-
ing tribal biases (Kahan et al., 2017). Collectively, this can have a marked impact
on intergroup relations in a diverse society.

One bias in perception in interpersonal interactions is referred to as the ultimate attribution error (Pettigrew, 1979), an extension of attribution theory (Harvey and Weary, 1984; Hewstone, 1989; Kelley & Michela, 1980; Ross & Fletcher, 1985) and the work of Allport (1979). The ultimate attribution error relates to biases in perception with a linkage between attribution and differentiation between members of a defined ingroup and those of an outgroup. Past research suggests the tendency for individuals to ascribe the positive behaviors of members of an outgroup to external factors, while ascribing the negative behaviors of members of an outgroup to internal characteristics (Stewart et al., 2010). Naturally, making such distinctions can lead to errors in perceived causation, including maintaining both negative and positive stereotypes (Czopp et al., 2015). These can exist even when self-reported measures of prejudice are low. Such biases are particularly damaging when applied to reinforce negative stereotypes about a given group (Stewart et al., 2010). Further, such negative stereotypes that are attributed to a given group both exist and persist about Black (e.g., lazy, irresponsible), White (e.g., materialistic, mean), and Asian (e.g., apologetic, submissive) people. Even when considered within a group, negative stereotypes exist. Examples of such stereotypes include White West Virginians and inbreeding (Lapidos, 2008), Haitian-Americans as sexually promiscuous and carriers of AIDS (Farmer, 2006), or that Filipinos eat dogs and that ethnic Visayans are shiftless (Teodoro, 1981).

The question of how and under what conditions individuals perceive racism is one of considerable importance for a diverse functional society. Oddly, however, less research has focused directly on such questions (Matheson et al., 2021; Rattan & Ambady, 2013), with the majority of research geared toward examination of overt forms of racism such as verbal insults or physical attacks (Gee, Ro, Shariff-Marco, & Chae, 2009; Karlsen & Nazroo, 2002) or more subtle forms of racism (see, Sue, Alsaidi et al., 2019). Microaggressions in various forms—micro-insults, microinvalidations, and microassaults—are usually considered in personal interactions and the environment (Sue, 2010). Such forms of racial aggression are considered an insult to racial minorities, and may be seen as an invalidation of the lived experience of the individual (Sue et al., 2007; Wong et al., 2014). Implicit racial attitudes (Greenwald & Banaji, 1995; 2017; Hahn & Gawronski, 2015), and the behavioral consequences of negative racial attitudes (Dovidio, 2001; Dovidio & Gaertner, 2004; Richeson & Shelton, 2007) have been considered as well.

While overt racism exists in contemporary society, it has declined significantly (Huddy & Feldman, 2009). Contemporary discussions of racism frame arguments around the proposition that overt racism has been supplanted by racial prejudices that are often considered more subtle in nature. While arguably much more prevalent than overt forms of racism and discrimination (Huddy & Feldman, 2009), the validity of modern measures of racism or prejudice are an area
of some debate, including the possible (mis)measurement of racial prejudice that could be attributed to ideological beliefs that are nonracial in nature (Campbell & Manning, 2018; Lilienfeld, 2017a, 2017b; Schuman, 2000). While beyond the scope of the present study, it is worthwhile to examine the scope of the debate and the arguments proffered by proponents and critics.

4.1. Cognitive and Attributional Complexity

As a social species, navigating daily interactions involves processing substantial amounts of information. Often individuals prioritize information that allows for successful social interactions (Decety & Cacioppo, 2011). However, such adaptive strategies are subject to a myriad of possible biases including the perception of outgroups as more homogenous than members of their ingroup (Linville et al., 1986), selective recall of social information consistent with personal expectations (Hirt et al., 1999) and, paying insufficient attention to situational influences on the behavior of others (Gilbert & Malone, 1995; Goleman, 2006). Here, the latter bias is more probable among individuals who engage in low-intensity processing (see Cacioppo et al., 1996), with higher levels of attributional errors and biases among individuals eschewing cognitive complexity in social perception (Chaiken & Trope, 1999; Malle, 2011; Reid & Foels, 2010; Sultan & Kanwal, 2018).

Whether a given interaction is labeled as indicative of discrimination often hinges on what specific characteristics of the situation are highlighted (Inman & Baron, 1996; Inman et al., 1998; O’Brien et al., 2008; Simon et al., 2013). Individuals enter an interaction with others not as a blank slate but with lived experiences that shape, among other things, the formation of a prototype for discrimination—that is, culturally shaped cognitive processes for categorizing events (and things; Rosch, 1973). Included in such prototypes are ingroup versus outgroup expectations (Baron et al., 1991) and status asymmetry (Swim et al., 2003). However, individuals vary in the salience of prototypes. For example, White individuals’ perceptions of discrimination are similar for both White perpetrator, Black victim and Black perpetrator, White victim situations. Conversely, Black individuals perceive greater discrimination when perpetrator was White and the victim Black than if the races of perpetrator and victim are reversed (Simon et al., 2013).

Perceptions of bias and discrimination are often tied to situations requiring help from others. However, when examined, the research suggested that White people were as likely to help Black as White recipients (Saucier, 2015). In meta-analysis of previous work, White and Black recipients were provided equal assistance. Blacks received less assistance from Whites in situations only when such assistance included greater costs to do so such as challenges associated with risk, excessive time, or complexity.

Thus, situational variables impact treatment of others requiring help (McManus et al., 2019). Further, the results of McManus and colleagues suggested that
racism had a minimal influence on disclination in a helping scenario. Research reports that specifically considered situational context such as the perceived benevolence of the target or cognitive load lent support to predictions that individuals are prone to provide more assistance to members of an ingroup than to individuals who do not possess identification with the ingroup (Gamberini et al., 2015; Levine & Crowther, 2008; Meiring et al., 2014).

Thus, understanding perceived discrimination requires consideration of situational variables. Often perception of discrimination was established on the basis of traditional dynamics with a White perpetrator and a victim of a racial minority (e.g., Inman & Baron, 1996). More recent research has turned to examinations of the role of cognition in the perception of racism (Reid & Foels, 2010). When extended to consideration of interactions that may involve less overt, more subtle forms of perceived racism cognitive complexity has an impact on such perceptions as does how much a given individual thinks about racism (Reid and Folds, 2010). Given this, it is reasonable to assume individual differences in how people weight harm to the victim and the intentions of a perpetrator in drawing conclusions about a racial or discriminatory interaction (Swim et al., 2003).

As noted earlier, the complexity of the interaction may color perceptions of discrimination and racism. Individual differences exist in a need for cognition; that is, greater enjoyment in thinking and a tendency to think about and interpret situations in a more complex manner (Cacioppo, Petty, Feinstein, & Jarvis, 1996). While not dismissing the role of prior experience, individual differences in how people think, how many dimensions are brought to bear when processing experiences, and perhaps how many prior experiences are included in the interpretation of a current experience could well effect how such interpersonal experiences are perceived. At least where more subtle forms of racism may be present, greater thinking about the putative causal factors that led to the interaction are associated with lower levels of perceived racism (Reid & Birchard, 2010). Thus, according to Reid and Foels (2010), more nuanced and complex explanations—greater attributional complexity—may well impact perceived racism. In a multicultural society, this has practical import. Increased intergroup familiarity is associated with more sophisticated perceptions of the group (Mullen, Rozell, & Johnson, 2001), a more complex consideration of the detrimental effects of racist speech (Leets, 2001, 2003), and lower levels of prejudice toward members of other groups (Myers & Twenge, 2016; Pettigrew & Tropp, 2006).

In addition to individual differences in the propensity toward greater levels of a need for cognition and its connection to cognitive complexity (Cacioppo et al., 1996), individuals navigating the social world differ in terms of a construct referred to attributional complexity (Reid & Foels, 2010). As implied, this construct reflects individual differences in complexity when seeking to explain social interactions (Fletcher, Danilovics, Fernandez, Peterson, & Reeder, 1986; Fletcher, Rosanowski, Rhodes, & Lange, 1992; Joireman, 2004). Individuals higher in
Attributional complexity are more likely to apply a multi-causal explanation to a behavior or social interaction (Reid & Foels, 2010), including perceived negative situations. Such individuals are more adept at viewing social situations from multiple points of view, which is often reflected in interpretations of events with greater causal precision (Fletcher et al., 1992).

Such variables are important in understanding racial differences in perceived racism. Subtle, as opposed to blatant racism presents a number of complex cognitive and experiential challenges that directly impact perception (Bonilla-Silva, 2009). Previous research has demonstrated that White individuals are inferior to racial minorities in identifying the nonverbal, often subtle, cues that suggest prejudice in others (Reid & Foels, 2010). Such cues are often related to prejudiced racial attitudes (Richeson & Shelton, 2005). In a series of experiments by Reid and Foels (2010), perceptions of subtle forms of racism were related to attributional complexity and cognitive complexity. However, their research suggested racial complexity, which includes elements of both attributional and cognitive complexity, has a marked impact on perceived racism in the forms generally seen today, including subtle forms of racism.

### 4.2. Cultural Intelligence in a Multi-Cultural Society

Traditionally called “the Great Melting Pot”, The United States has among the highest (but not the highest) levels of diversity of all countries (Connor & Lopez, 2016). With a population that is comprised of 1/5th immigrants, the immigrant population is approximately four times larger than Germany, the second ranked country (Connor & Lopez, 2016; Lopez, 2015). Given the changing demographics in the United States, the ability to interact effectively with individuals who differ in terms of culture, ethnicity, or race is both a societal concern and individual concern.

Just as there are individual differences in social skills generally, individuals who have the capacity to understand perception and judgments of self and of others in a multicultural setting have an advantage in social interactions, including in the workplace (Ayoob & Alsultan, 2017). Considered one of several discernable types of intelligence (Ang & Van Dyne, 2008; Moran, 2009; Van Dyne et al., 2012), those higher in cultural intelligence are more adept at understanding those from different cultures as well as the ability to behave in an acceptable manner across a variety of cultures and settings (Ang et al., 2006; Earley & Ang, 2003; Thomas, 2006). As a type of intelligence applicable across situations, it has been considered to be a culture-free construct (Ng & Earley, 2006). Leveraging four elements considered characteristic of cultural intelligence (Ang & Van Dyne, 2008; Ang et al., 2006; Earley & Peterson, 2004), individuals who score high on measures of cultural intelligence have a sophisticated understanding of variations in physical behavior and in emotional displays (Earley et al., 2006). Last, individuals who have an interest in multiple cultures, with the confidence to interact in multiple settings, are in turn better adjusted in culturally
While more work needs to be done, the present results suggest that CQ does influence perception of the behavior and intentions of others. In particular CIS-BEH scores were inversely related to perceived discrimination, Conversely, CIS-MET scores were positively related to perceived discrimination. First, unlike traditional intelligence, cultural intelligence is not fixed but rather amenable to experience, can increase, and as such can enhance intercultural interaction (Ng & Earley, 2006). For example, in the work domain, individuals are capable of increases in CQ with experience, especially coupled to an environment where inclusion and valuing each member is perceived (Alexandra et al., 2021; Ng & Earley, 2006). In this light, with opportunity to engage with members of diverse backgrounds, opportunities to deliberate on these cultures produce a positive change in CIS-MET, more adept interactions with members of other groups (CQ-B), and enhanced motivation to seek out additional experiences (CIS-MOT (Alexandra et al., 2021). In turn, this may impact the perceived inclusion (see Fang et al., 2018; Liao & Thomas, 2020; Shore et al., 2011). Given this, individuals ranking high in CQ are more adept at adjusting cognitive frameworks when interacting with others (Earley & Ang, 2003). Further, individuals with higher CQ show greater reflection and tolerance for differences in sociocultural norms, and thus are less likely to make shallow and incorrect assumptions when interacting with others in a diverse setting (Afsar et al., 2020). Last, such a capacity may produce a reduction in outgroup distinctions with concomitantly greater acceptance (Shore et al., 2011). Certainly, there is support for this at least among workgroups (Alexandra et al., 2021) but presumably more generally as well.

4.3. Resilience

As measured by the BRS, resilience was not associated with perceived ethnic discrimination. However, higher levels of resilience were associated with three personality characteristics—Agreeableness and Extraversion, and inversely related to Emotionality. This is largely consistent with a recent meta-analysis of the relationship among different dimensions of personality and resilience (Oshio et al., 2018). Further, resilience was associated with all four scales of the CIS. This result suggests that higher resilience is associated with more effective intercultural interactions. In a highly multi-cultural environment, higher CIS scores may be reflected in the ability to navigate diverse ethnic and racial norms and behaviors and is worthy of further investigation.

It is possible to distinguish between the perception of ethnic and racial discrimination and an actual, objective occurrence. Further, such perceptions can adversely affect the health and emotional well-being of the individual (USDHHS, 2001). Nonetheless, labeling an experience as perceived by the recipient does not in any way imply the experience did not indeed occur (USDHHS, 2001). In the present investigation, Black respondents reported significantly higher levels of perceived discrimination than the reference category, White respondents. Hist-
panic individuals reported somewhat lower than Black but still substantial levels of perceived discrimination. Conversely, Asian/Pacific Islander respondents reported significantly lower levels of perceived discrimination than Whites.

5. Conclusion

While there is marked disagreement on prevalence and severity (Pew, 2021), racism is a chronic and persistent negative force in the United States (APA, 2016; Berg-Cross & Hill, 2015; Guimond et al., 2013; Nier & Gaertner, 2012). In the present study, the personality traits of openness to experience, extraversion and to a lesser extent, conscientiousness, accounted for a significant proportion of the variance in PEDQ-CVB scores. This result is consistent with that of others (e.g., Lin & Alvarez, 2020). Past research suggests that higher scores on agreeableness, openness to experience, and conscientiousness are associated with lower levels of prejudice and more positive interracial behaviors (Ackermann & Ackermann, 2015; Flynn, 2005; Graziano & Habashi, 2010; Graziano et al., 2007). Similarly, cultural intelligence accounted for a significant proportion of the variance as well, including a substantial proportion of the race associated variance in perceived discrimination. However, whether such perceptions are accurate, exaggerated, or the result of a misunderstanding, they have real consequences. For example, perceived racial discrimination and depression are associated, even following statistical control of other variables such as age, gender, and socioeconomic status (Klonoff et al., 1999). Black individuals who report multiple incidences of racism and discrimination present with more severe symptoms of depression (Landrine & Klonoff, 1996). Asian perceptions of racism are associated with lower levels of self-esteem but no depression (Liang, 2006). While solutions are beyond the scope of this report, cultural mistrust is one area worthy of future study and amelioration. It is common that when faced with interracial interactions, for African-Americans to internalize suspicions of White individuals, questioning their intent. Such a cognitive/behavioral approach has been ascribed as protective coping mechanism, when faced with perceived racist interactions (Chakraborty & McKenzie, 2002; Whaley, 2001).

The present study involved students enrolled at one Christian university in the southeastern United States. As noted earlier, the number of Hispanic and especially the number Asian/Pacific Islander respondents was small. This suggests an additional question for future research—Do Hispanic and Asian/Pacific Islanders perceive that their cultures are, in some domains, more integrated with White culture. If true, this may partially account for some of the differences in perceived discrimination. In order to increase external validity and durability of the results, comparable research should examine the relationships reported here, extending to include addition factors worthy of consideration. Further, examination of experiences at the junior and senior high school levels may lend new insight. As with all research other regions of the country should be included as well.
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Conflicts of Interest

The author declares no conflicts of interest regarding the publication of this paper.

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Supplemental Data

Participant student comments can be found [here].

http://www.callisto-science.org/data/Comments_from_Respondents.pdf