Assessing the Effects of Racial Microaggression and Structural Inequality on Overall Well-Being and Psychopathology among BIPOC Adolescents

Kayla Simone Brown

University of North Carolina at Chapel Hill

Department of Psychology and Neuroscience: Senior Honors Thesis

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Margaret Sheridan Ph.D.

Grad Mentor: Esme Navarro

Postdoc Mentor: Anna Fetter Ph.D.
Abstract

Racism impacts the lives of Black, Indigenous, and Persons of Color (BIPOC) youth. The present study seeks to address gaps within the literature about the detrimental effects that two forms of racial injustice can have on overall well-being and psychopathology in BIPOC adolescents: microaggressions and structural inequality. While assessing the effects of racial microaggressions and structural inequality, we used peer experiences as a moderator to test whether peer relations served as a protective factor against poor outcomes. BIPOC participants (N = 96) with the majority identifying as black (62.5%) and female (53%) were given the measures to assess for overall well-being, racial microaggression, peer experiences and psychopathology. Further, we used the Child Opportunity Index to obtain measures of participant’s experienced structural inequality. Consistent with other studies, racial microaggressions predicted psychopathology and overall well-being. Structural inequality, contrastingly, did not predict psychopathology and well being. The interaction between racial microaggression and receiving prosocial behaviors was significant, $b = -0.057, p = .05, t(94) = 1.99$ in predicting psychopathology. Similarly, in follow up analyses, the interaction between structural inequality and receiving prosocial behavior in predicting psychopathology was also significant, $b = -0.21, t(94) = 2.18, p = .03$. Results suggest that receiving prosocial behavior may protect BIPOC youth from the detrimental effects of microaggressions and inequality.

Keywords: Black, Indigenous and People of Color (BIPOC), Peer Experiences, Racial Microaggression, Structural Inequality, Well-Being

Introduction

It is well documented that youth who identify as Black, Indigenous, or Persons of Color
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(BIPOC) have different lived experiences than their white peers as a result of racial injustices. One type of racial injustice is structural racism. Structural racism can be conceptualized across four broad levels: cultural (eg. negative beliefs of the values and practices of minoritized groups), institutional (eg. regulations that consolidate power for white people), interpersonal (eg. manifestation of racial prejudices: microaggressions) and intrapersonal (eg. internalization of negative beliefs of ownself) (Alvarez et al., 2022). Prior research within the last decade has shown that structural racism results in profound emotional, social and mental detriment during the adolescent years, including an increased risk for psychopathology (Kalin et al., 2023; Hankerson 2022; McLaughlin et al., 2019). BIPOC individuals are disproportionately impacted by psychopathology. For example, 13% of Black youth and 30% of Multiracial youth report having at least one major depressive episode (Halgunseth et al., 2022). BIPOC individuals also have the highest rates of suicide, and experience suicidal risk earlier in life in comparison to their white peers (Polanco-Roman et al., 2022). Given these alarming statistics, it is important to better understand how to protect BIPOC individuals from poor wellbeing outcomes.

**Racial Microaggression**

During adolescent development, BIPOC youth begin to understand their place within society, specifically in relation to their race (Wang, 2022). Race is the social and biological practice of assigning humans based upon their complexion, appearance (eg. hair texture and nose shape) and language (Carter & Pieterse, 2005). Race was also formed by separating people by culture; culture can be defined as the norms and values passed through socialization (Carter et al., 2007). Racism and racial discrimination can be defined in two parts: differential treatment and disparate impact. Differential treatment is the unequal treatment of individuals or their
cultural groups based upon their race. Disparate impact refers to the fact that certain societal rules favor certain groups over others, which can consequently enforce racial disadvantages (Pager & Shepard, 2008).

The most commonly occurring form of racism BIPOC individuals are subjected to is covert racism (Ricco & Scianna, 2005). Covert racism are subtle intentional or unintentional “everyday” forms of discrimination (Nadal, 2011), which can be specifically manifested through racial microaggressions. According to Williams (2018), microaggressions are messages about racial inferiority. These messages can be both verbal and nonverbal, intentional or unintentional, and vague or specific. Covert racism in the form of microaggressions can occur within peers (eg. touching hair without permission), and even within homes (eg. racially coded languages and messages).

Over 70 percent of Black and 50 percent of Latinx individuals report experiencing racial discrimination (Pew Research Center, 2016). Racial discrimination has severe effects on adolescent development. Research has consistently demonstrated that individuals who tend to report greater experiences of any form of racism have worse health outcomes than those who do not report experiencing racism (Williams & Mohamed, 2009). The experiences of racial discrimination, especially microaggression and everyday discrimination, has been shown to cause psychological distress, including negative overall well-being and higher risks of anxiety and depression (Williams et al., 2018). Notably, West (2019) found that as individuals become more exposed to microaggressions, individuals report worse life satisfaction and more severe symptoms of depression. Experiencing racial microaggressions also impacts other prominent areas of life, including academic achievement. In one study, high achieving African American
youth who experienced microaggressions reported experiencing more stress and depressive symptoms (Williams et al., 2018). Importantly, associations between microaggressions and psychopathology are not explained by individual differences in negative affect. In a sample of African Americans, there was a strong association between racial mistreatment and psychopathology symptoms even after controlling for negative affect (Williams et al., 2018). These results emphasize that racial mistreatment has a unique impact on the psychopathology exhibited by BIPOC youth.

**Structural Inequality**

Structural racism can manifest into inequality. As previously mentioned, another aspect of racial discrimination is the disparate impact societal rules place on individuals. Importantly, societal rules and processes may not have explicit racial content, but can still consequently enforce racial disadvantages (Pager & Shepard, 2008). Structural inequality refers to the fact that privileged racial groups within society have developed structures that prohibit access to equitable resources in order to oppress marginalized groups (Assari et al., 2019). Structural systems such as education, housing, health care, and media are all examples of structures that have perpetuated injustices against BIPOC individuals with inequitable policies (Amadeo et al., 2021). As a result of these inequalities, BIPOC youth are more exposed to social risk factors such as family poverty, low maternal education and low quality schooling in comparison to white youth (Burchinal et al., 2008). For example, there is a strong association between socioeconomic status and psychopathology (Peverill et al., 2021); individuals from lower socioeconomic status backgrounds have higher psychopathology than their more wealthy peers. Similarly, there is a strong association between maternal education and child psychopathology (Meyrose et al.,
children who have mothers with low education are shown to have more mental health problems in comparison to children with mothers who pursued higher education. Despite this research, which suggests that structural inequality results in mental health disparities, few research studies have explored how inequality itself is associated with psychopathology. This is largely due to the fact that measuring structural inequality is difficult; however in the past decade researchers have developed tools to measure the quality of resources available to different individuals across the United States. Doing so is important because investigating structural inequality would bring awareness to the need for policies that could create structural change and would inform clinical interventions for youth from structurally disadvantaged backgrounds.

Peer experiences

Peer relationships are a crucial factor for development and have longitudinal impacts on mental well-being and adulthood adjustment (Shin et al., 2016). For example, studies have reported that children with more peer relationship problems are more likely to exhibit psychopathology into adolescence and adulthood (Prinstein, 2018; Shin et al., 2016). Given this evidence, positive peer experiences may protect from negative outcomes. In fact, peers have been found to protect from peer victimization and positively influence academic achievement, mental well-being, and social adjustment in adolescents (Véronneau et al., 2014). Receiving prosocial behavior may be especially important as studies find that receiving prosocial behavior can protect against feelings of loneliness and depression (Griese & Buhs, 2014). Prosocial behaviors can be defined as voluntary acts such as helping, supporting and protecting others. Prosocial behaviors also make peers more attractive to interact with, and are necessary in building supportive friendships (Eisenberg et al., 2006). Not receiving prosocial behaviors is
detrimental to well-being. Herd & Kim-Spoon found that as a child experiences peer rejection at an early age, they are more likely to exhibit externalizing behaviors (eg. delinquent and aggressive behaviors), internalizing issues (eg. depression and anxiety) and may display self isolating behaviors (2021).

Purpose of current study

Despite the abundance of literature about the effects of racism leading to an increased risk for developing psychopathology among BIPOC youth, there is little literature that evaluates whether well-known protective factors like peer support can protect BIPOC youth against microaggressions and structural inequality. Exploring protective factors that may moderate the effects of racial microaggressions and structural inequality are important for shaping interventions that can reduce the detrimental effects of psychopathology among BIPOC youth. Further, few studies also assess well-being in addition to psychopathology. Doing so is important because psychopathology does not completely encompass the overall well being of an individual. In fact, research has found high levels of well-being in populations with high levels of psychopathology (Bos et al., 2016). Thus, we are interested to know the influence that racial injustices, specifically microaggression and structural inequality, has on psychopathology and wellbeing.

This study seeks to answer these questions using a cross-sectional, representative community sample of BIPOC youth. To this purpose, we used linear regression analyses to evaluate the effects of racial microaggression and structural inequality on overall well-being and psychopathology, while moderating for peer experiences. We hypothesized that structural inequality is associated with greater risk for psychopathology and overall negative well-being;
participants who lived in areas with greater structural inequality would report greater psychopathology symptoms and lower wellbeing. For microaggressions, we hypothesized that more experiences of racial microaggression is associated with greater psychopathology symptoms and lower wellbeing. Finally, we hypothesized that positive peer experiences would: (1) moderate the association between structural inequality and psychopathology and (2) microaggressions and psychopathology. Similarly, we hypothesized that positive peer experiences would: (1) moderate the association between structural inequality and wellbeing and (2) microaggressions and wellbeing.

Methods

Baseline and Current Study

Participants in this analysis were part of the ongoing Study of Toddler to Teenage Anxiety and Resiliency (STTAR). The STTAR is a follow up study from the Duke Preschool Anxiety Study, which originally occurred between the years 2007 and 2010. The Duke Preschool Anxiety Study was a representative community sample of children (n=917) recruited from Durham County pediatric primary care clinics. Currently, the STTAR study is actively re-recruiting the 917 children originally enrolled from the Duke Preschool Anxiety Study to examine mechanisms linking dimensions of adversity in early childhood with longitudinal outcomes.

Participants

In this analysis, inclusion criteria included 1) identifying as BIPOC, and 2) participating in Visit One and Two of the research study. Participants were considered BIPOC if they identify
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as Black, Indigenous, Asian, More than one race, Other Non-White, White- Hispanic/Latino, Non-White -Hispanic/Latino, or Prefer not to answer Non-white. A total of 177 participants completed Visit One at the time of analysis. Out of the 177 participants, 98 identify as BIPOC. Of the 98, two participants were excluded because they did not complete the questionnaires of interest. Thus, 96 participants were included in our final analysis. The average age of participants was 18.16 ($SD = 1.70$). Over half (53%) of participants were female and 43% of participants were male. The majority of the participants identified as Black (62.5%). Participants also identified as White- Hispanic/Latino (10.4%), Asian (6.3%), Other Race Non-White (2.1%), More than one race (17.7%) and Prefer not to answer Non-white (1%).

 Measures

Structural inequality. Structural inequality was measured using the Child Opportunity Index 2.0 (COI 2.0; Diversity Data Kids, 2023). The COI is a composite metric of the quality of resources and living conditions present in a given neighborhood. The COI is based on 29 indicators across three domains: education, health and environment, and social and economic factors. Participants' census tracks were used to determine the score on the COI. Participants receive a score between zero to 100 that represents the level of resources present in their neighborhood in comparison to the nation. Higher scores are indicative of greater resources.

Peer experiences. Peer experiences were measured using The Revised Peer Experiences Questionnaire (RPEQ; Prinstein et al., 2001). RPEQ uses 14 items that are presented in two versions, one for practicing a given behavior and another for receiving that behavior. The recipient of prosocial behavior sub-measure contains five items (e.g. Another teen helped me when I was having a problem). The targeted behavior considers relevant occurrences that have
happened within the past two months on a five-point scale from 1 (Never) to 5 (A Few Times a Week). The internal consistency for a past sample of 1,065 adolescents showed a Cronbach’s $\alpha$ of 0.87 (Fan et al., 2021).

**Well-Being.** Overall well-being was measured using The Positive and Negative Emotions, Engagement, Relationships, Meaning, Accomplishment, and Health Profiler (PERMA; Butler, J., & Kern, M. L. 2016). This measure was developed to measure well-being or positive functioning across five domains; positive emotions (eg. *In general, how often do you feel joyful?*) negative emotions (eg. *In general, how often do you feel angry?*), engagement (eg. *How often do you become absorbed in what you are doing?*), relationships (eg. *To what extent do you receive help and support from others when you need it?*), meaning (eg. *In general, to what extent do you lead a purposeful and meaningful life?*), and accomplishment (eg. *How much of the time do you feel you are making progress towards accomplishing your goals?*). PERMA consists of 23 items. Items are on an 11-point scale ranging from 0 to 10 with the following varying response anchors: (0 = never, 10 = always), (0 = terrible, 10 = excellent) and (0 = not at all, 10 = completely). Overall well-being scores were calculated as the average of the items in each domain. In a past sample of 439 Australian adults, this measure had an overall proven internal consistency of $\alpha = 0.80–0.93$ (Ryan et al., 2019).

**Racial Microaggression.** Racial Microaggressions were measured using the Racial and Ethnic Microaggression Scale (REMS; Nadal, 2011). REMS is a 45-item measurement developed to assess the frequency at which everyday subtle racial discrimination is encountered by BIPOC individuals within a six-month period. This scale contains six factors: Assumptions of inferiority (eg. *Someone assumed that I would not be educated because of my race*), Second-Class Citizen
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and Assumptions of Criminality (eg. Someone avoided walking near me because of my race),
Microinvalidations (eg. Someone told me that people should not think about race anymore),
Exoticization/Assumptions of Similarity (eg. Someone asked me to teach them things in my
‘native language’), Environmental Microaggressions (eg. I observed people of my race
portrayed positively in movies), and Workplace and School Microaggressions (eg. An employer
or co-worker was unfriendly or unwelcoming toward me because of my race). Respondents were
instructed to indicate the number of times that a microaggression occurred, with 0 (I did not
experience this event) and 1 (I experienced this event at least once in the past six months). A
total score of microaggressions experienced was calculated by summing the total number of
items endorsed. The overall Cronbach score for a past study of 661 participants was \( \alpha = 0.912 \)
(Nadal, 2011).

Psychopathology. Psychopathology was measured using the Youth Self-Report and Adult Self
Report. The Youth Self Report (YSR; Achenbach, T.M., & Rescorla, L.A., 2001) is a 112 item
self report measure that assesses internalizing and externalizing behaviors using DSM-oriented
scales and syndromes. Adolescents between the age of 11-18 years old at the time of re-
recruitment utilized this child-report measure. Respondents were instructed to self report for and
answer the three-point likert-type scale 0 (Not true), 1 (Somewhat or Sometimes true) and 2
(Very true or Often true). The Adult Self Report (ASR; Achenbach, T. M., & Rescorla, L. A.,
2003) is a 123 item self report measure that, like the YSR, assesses internalizing and
externalizing behaviors using DSM-oriented scales and syndromes. Adults between the age of 18
- 59 years old at the time of re-recruitment utilized this child-report measure. Adults were
instructed to self-report to answer the three-point likert-type scale 0 (Not true), 1 (Somewhat or
Sometimes true) and 2 (Very true or Often true). Total psychopathology score was derived from
the total problems subscale of the YSR and ASR.

Data Analysis Plan
Hypotheses were tested using hierarchical linear regressions. In model one, the main
effect of structural inequality and receiving prosocial behavior on psychopathology was tested.
In model two, the interaction between structural inequality and the receiving prosocial behavior
and psychopathology was tested. In model three, the main effect of structural inequality and
receiving prosocial behavior on well-being was tested. In model four, the interaction between
structural inequality and receiving prosocial behavior on well-being was tested. In model five,
the main effect of racial microaggression and receiving prosocial behavior on psychopathology
was tested. In model six, the interaction between racial microaggression and the receiving
prosocial behavior on psychopathology was tested. In model seven, the main effect of racial
microaggression and receiving prosocial behavior on well-being was tested. In model eight, the
interaction between racial microaggression and the receiving prosocial behavior on well-being
was tested. Covariates entered into all models included participant age, sex and race. Significant
interactions were probed using simple slope analyses. Variables were assessed for outliers.
Analyses were rerun without outliers. All analyses were conducted in IBM SPSS Statistics for
Windows, (version 29.0).

Results
Descriptives and Bivariate Correlations

Table 1 presents descriptive statistics and Table 2 presents bivariate correlations among the variables of interest. In this sample, the mean score for structural inequality was 55.79 (SD = 24.036, range 2 - 100). The mean score for racial microaggression was 9.67 (SD = 6.49, range 0.00 - 35.00). The mean score for receiving prosocial behavior was 14.63 (SD = 5.34, range 5.00 - 25.00). The mean score for overall well-being was 6.31 (SD = 1.61, range 1.95 - 9.11). The mean score for psychopathology was 56.24, (SD = 12.10, range 26.00 - 80.00). As shown in Table 2, overall well-being was significantly negatively correlated with total microaggressions (p < .05).

Overall well-being was significantly negatively correlated to total psychopathology (p < .001). Total microaggression was significantly positively correlated with psychopathology (p < .001).

Psychopathology outcomes

Results of linear regressions can be found in Table 3. Linear regression analyses evidenced that exposure to racial microaggressions significantly predicted psychopathology, b = 0.69, t (94) = 3.86, p < 0.001 after controlling for participant age, sex and race. The interaction between racial microaggression and receiving prosocial behavior on psychopathology was not significant.

The main effects of structural inequality and receiving prosocial behavior on psychopathology were not significant. The interaction between structural inequality and receiving prosocial behavior on psychopathology was significant b = 0.21, 2.18, p = .03. Simple slopes analysis revealed that the association between structural inequality and psychopathology was stronger at lower levels of prosocial behavior (b = -0.15, -2.03, p = 0.04; Figure 1).
Results of linear regressions can be found in Table 3. Linear regression analyses evidenced that exposure to racial microaggressions significantly predicted overall well-being $b = -0.057$, $p = 0.029$, $-2.226$ after controlling for participant age, sex and race. The interaction of racial microaggression and prosocial behavior was not significant in predicting well-being. The main effect of structural inequality and receiving prosocial behavior was not significant in predicting overall well-being. There was no significant interaction between structural inequality and overall well-being.

**Follow-up analysis**

Linear regression analyses were run without outliers. Six outliers were identified. All results remained the same without the six outliers, with exception to the model evaluating the interaction between microaggressions and receiving prosocial behavior. In this model, there was a significant interaction $b = -0.146$, $t = -2.40$ $p = 0.019$. Simple slopes analysis revealed that the direct effect of microaggressions on psychopathology was stronger at low levels of prosocial behavior ($b = 1.42, 3.47, p = 0.001$) and at mean levels of prosocial behavior ($b = 0.65, 2.49, p = 0.01$; Figure 2).

**Discussion**

The present study investigated the relationship between two common experiences among BIPOC youth, microaggressions and structural inequality, and its impact on psychopathology and well-being. Three main findings emerged. First, we found that racial microaggressions significantly predicted psychopathology and well being. Second, we found that while there were
no main effects of structural inequality on psychopathology or wellbeing, structural inequality and receiving prosocial behavior interacted to predict psychopathology. Third, in follow up analyses, we found an interaction between racial microaggressions and receiving prosocial behaviors.

The relationship found between microaggressions and both psychopathology and wellbeing are consistent with prior findings exploring the impacts of racism on the BIPOC adolescent experience. Research reports have found that higher experience of microaggressions results in overall experiences of stress, which has detrimental effects on wellbeing (Anderson et al., 2017). A systematic review on developmental processes by Marks and Colleagues (2015) reported that experiences of discrimination can shape multiple developmental processes, in particular, self esteem. This is due to the fact that discrimination results in a questioning of self worth and value. As more discrimination is experienced, individuals also report more psychological stress and lower self esteem (Nadal et al., 2014).

Findings from this study suggest that peer support in the context of inequality is important in shaping psychopathology outcomes. Prior research suggests that peer relationships impact individual emotionality, self- regulation, and social competence (Schwartz & Bilsky, 1990; Eisenberg, 1996; Holmgren, 1998). For individuals who reported receiving low levels of prosocial behavior, lower scores on the child opportunity index were associated with higher psychopathology symptoms. While there is substantial literature describing the positive impacts of social support, research exploring the moderating role social support plays in protecting against psychopathology in the context of structural inequality are mixed. For example, research has reported no moderating effects of social support on socioeconomic status and health.
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(Brown 16) (Salonna 2011) and community violence and psychological distress (Hammack 2004, Paxton 2004). Other studies, conversely, report that at low levels of socioeconomic status, higher social support is associated with better wellbeing outcomes (Malecki 2006). Similarly, research has also reported that at low levels of social support, community violence was associated with depressive symptoms (Kaynak 2011). Discrepancies among studies are likely due to differences in measurement. To our knowledge, our study is the first to evaluate a comprehensive measurement of structural inequality, the Child Opportunity Index, alongside social support. Our finding that at low levels of social support (but not high levels) there is a negative association between structural inequality and psychopathology, suggests that the negative effects of structural inequality may be especially detrimental without peer support.

In our follow-up analysis, the positive relationship between total microaggressions and psychopathology symptoms was present at low and mean levels of prosocial behavior. Similar to the results of structural inequality, microaggressions may be especially detrimental to psychopathology in the context of little peer support. While this may be due to the large role peers play in overall emotional support (Shin et al. 2016; Hernández & Villodas, 2019), for BIPOC youth, peer support may also help individuals develop a strong sense of ethnic and racial identity, which has been found to promote positive outcomes (Hoffman et al., 2019). Additionally, while this study did not explore ethnic and racial socialization, Kornienko and colleagues found that Black and Latinx interracial peer experiences tend to report higher instances of racial discrimination, whereas intraracial relationships protect against instances of discrimination (2023). Taken together, this literature suggests that the types of relationships of BIPOC youth matters in development.
Our study has several strengths. First, our sample size is a representative community sample of BIPOC adolescence. Interestingly, participants who identified as Black made up a large percentage for this study, a demographic often not represented in most research studies. Second, our study is one of the few to explore structural inequality and its relationship to overall well-being and psychopathology. This is important as larger, structural manifestations of racism, in the form of inequality, are often not explored in the literature. Third, we used measures of both well-being and psychopathology to better capture the lived experiences of our participants. Most studies focus on psychopathology as an outcome, but as stated before, psychopathology may not totally encompass well-being outside of internalizing and externalizing symptoms.

Our study also has several limitations. First, we only measured one aspect of social support. The Revised Peer Experiences Questionnaire has other components within the measure that can depict a larger display of peer experiences outside of receiving prosocial behavior. Second, our study did not look at the racial and ethnic content of friendships. Kornienko and colleagues found that BIPOC youth tend to prefer friendships within the same racial group, with those youth having lower levels of discrimination experiences (2023). Similarly, another study found that BIPOC youth tend to increase same-race friendships over time. Those friendships specifically provide social support, self esteem, and promote development of racial identity (Kogachi & Graham 2021; Rivas-Drake et al., 2024). Future studies should therefore investigate this important aspect of peer support as a protective factor. Third, our measure for structural inequality may not accurately represent structural inequality in our sample. Structural inequality can be hard to conceptualize into a measure due to how it must encompass many systems
measures to determine the impact of structural inequality on overall well-being. Lastly, our study was cross-sectional. Thus, future studies should investigate how structural inequality and experiencing racial microaggressions can longitudinally affect BIPOC youth into adulthood.

**Conclusion**

This present study supports other literature finding a relationship between racial discrimination and psychopathology and negative well-being for BIPOC adolescence. Racial discrimination has a significant impact on BIPOC adolescents; experiences of microaggressions and structural inequality should not be taken lightly. While peers may help mitigate these negative effects, the identification of more protective factors is still needed. These results and the results of future studies should be considered to help inform clinical interventions to support BIPOC youth and shape societal policies.
Table 1: Descriptive Statistics for the sample of the study

<table>
<thead>
<tr>
<th>Variable</th>
<th>Mean</th>
<th>SD</th>
<th>Range</th>
</tr>
</thead>
<tbody>
<tr>
<td>Child Opportunity Index</td>
<td>55.79</td>
<td>24.036</td>
<td>2 - 100</td>
</tr>
<tr>
<td>Racial Microaggression</td>
<td>9.67</td>
<td>6.49</td>
<td>.00 - 35.00</td>
</tr>
<tr>
<td>Recipient of Prosocial Behavior</td>
<td>14.63</td>
<td>5.34</td>
<td>5.00 - 25.00</td>
</tr>
<tr>
<td>Overall Well-Being</td>
<td>6.31</td>
<td>1.61</td>
<td>1.95 - 9.11</td>
</tr>
<tr>
<td>Psychopathology</td>
<td>56.24</td>
<td>12.10</td>
<td>26.00 - 80.00</td>
</tr>
</tbody>
</table>

Table 2: Correlations among variables of interest

<table>
<thead>
<tr>
<th>Variable</th>
<th>1</th>
<th>2</th>
<th>3</th>
<th>4</th>
<th>5</th>
</tr>
</thead>
<tbody>
<tr>
<td>1. Overall Well-Being</td>
<td>--</td>
<td>-0.232*</td>
<td>0.196</td>
<td>0.066</td>
<td>-0.530**</td>
</tr>
<tr>
<td>2. Total Microaggressions</td>
<td>--</td>
<td>--</td>
<td>-0.067</td>
<td>-0.038</td>
<td>0.383**</td>
</tr>
<tr>
<td>3. Receiving Prosocial Behavior</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>0.040</td>
<td>-0.007</td>
</tr>
<tr>
<td>4. Child Opportunity Index</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>-0.045</td>
</tr>
<tr>
<td>5. Total Psychopathology</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
<td>--</td>
</tr>
</tbody>
</table>

*p < .05. **p < .001.

Table 3: Hierarchical regression analysis predicting Psychopathology and Overall Well-Being
<table>
<thead>
<tr>
<th>Predictors</th>
<th>B</th>
<th>SE</th>
<th>t</th>
<th>Sig.</th>
<th>R²</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Model 1: Total Psychopathology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.078</td>
</tr>
<tr>
<td>Child Opportunity Index</td>
<td>-0.032</td>
<td>0.052</td>
<td>-0.607</td>
<td>.546</td>
<td></td>
</tr>
<tr>
<td>Receiving Prosocial Behavior</td>
<td>0.011</td>
<td>0.236</td>
<td>0.48</td>
<td>.962</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.22</td>
<td>0.765</td>
<td>1.597</td>
<td>.114</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>3.52</td>
<td>2.597</td>
<td>1.356</td>
<td>.179</td>
<td></td>
</tr>
<tr>
<td>Race</td>
<td>-0.019</td>
<td>0.012</td>
<td>-1.503</td>
<td>.136</td>
<td></td>
</tr>
<tr>
<td><strong>Model 2: Total Psychopathology</strong></td>
<td></td>
<td></td>
<td></td>
<td></td>
<td>.057</td>
</tr>
<tr>
<td>Child Opportunity Index</td>
<td>-0.350</td>
<td>1.55</td>
<td>-2.265</td>
<td>.026*</td>
<td></td>
</tr>
<tr>
<td>Receiving Prosocial Behavior</td>
<td>-1.152</td>
<td>0.581</td>
<td>-1.983</td>
<td>.05</td>
<td></td>
</tr>
<tr>
<td>Interaction - Child Opportunity &amp; Prosocial</td>
<td>0.021</td>
<td>0.010</td>
<td>2.183</td>
<td>.032*</td>
<td></td>
</tr>
<tr>
<td>Age</td>
<td>1.337</td>
<td>0.751</td>
<td>1.780</td>
<td>.079</td>
<td></td>
</tr>
<tr>
<td>Sex</td>
<td>3.421</td>
<td>2.544</td>
<td>1.345</td>
<td>1.82</td>
<td></td>
</tr>
<tr>
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### Model 7: Well-Being

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### Model 8: Well-Being

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* $p < .05$. ** $p < .001$.  

---

**Figure 1: Slope Analysis for Structural Inequality and Receiving Prosocial Behavior**
Figure 2: Slope Analysis for Microaggression and receiving prosocial behavior

References


https://doi.org/10.1176/appi.ajp.21101001


Kornienko, O., Santos, C.E., Seaton, E.K. et al. Racial Discrimination Experiences and


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