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EMPIRICAL ARTICLE

CHILD DEVELOPMENT

White adolescents' racial contexts: Associations with critical action

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Abstract

This study takes a person-centered approach to investigate White youths' racial contexts by utilizing a latent profile analysis among a sample of White adolescents (N = 323, ages 16–17; 52% female, 48% male; data collected 1996–1998). Racial contexts were composed of parent, peer, and school influences, which revealed three distinct profiles: a *Race Conscious* profile, a *Race Silent* profile, and a *Low Race Engagement* profile. These profiles predicted White adolescents' critical action during emerging adulthood, where adolescents in the *Race Conscious* profile were engaged in more critical action as compared to the other two profiles. These findings suggest that the racial contexts in which White adolescents develop have direct implications on their desire to work toward, and take action for, social change.

Research highlights that White parents are often hesitant to discuss race with their children. Yet, research also shows that White children notice race early on in development (Hirschfeld, 2008), develop in-group biases (Patterson & Bigler, 2006), endorse racial and ethnic stereotypes (Katz & Kofkin, 1997), and develop colorblind racial attitudes (Rogers & Meltzoff, 2017). Thus, regardless of White parents' apprehensiveness to have explicit discussions about race, White children are forming their own ideas resultant from the myriad messages, experiences, and interactions they have in their racial contexts. A racial context refers to "the social environment surrounding a child that shapes how that child makes sense of race" (p. 20, Hagerman, 2018). The racial context includes both explicit (e.g., having discussions about White privilege) and implicit (e.g., children observing their parents' cross-race friendships) forms of racial socialization. However, the ways in which White children make sense of race are not limited to parents. Schools and peers represent other forms of socialization where White children learn, negotiate, and receive important messages about race. Characterizing the racial contexts for White adolescents is essential as it sheds light on the manners through which White supremacy can be both socially reproduced and challenged.

Challenging inequality during adolescence has often been studied through a critical consciousness lens. A central tenet of critical consciousness, initially conceptualized by Freire (1970), is that individuals who experience oppression can become liberated by a critical analysis of inequality and through taking action for social change. Critical consciousness has been mostly examined among youth experiencing marginalization, where findings generally highlight the positive outcomes associated with critical consciousness, such as occupational attainment, the maintenance of positive relationships, and higher education (Heberle et al., 2020). Recently, scholars have challenged the critical consciousness literature to examine how individuals with privilege (such as White youth) develop critical consciousness (Heberle et al., 2020) and, in particular, critical action. Critical action refers to the participation in activities to advance social change. For White youth, who often hold access to resources that are necessary for social change, it is imperative to understand

Abbreviations: AIC, Akaike information criterion; BIC, Bayesian information criterion; BIPOC, Black, Indigenous and People of Color; LMRT, Lo–Mendell–Rubin adjusted Likelihood Ratio Test; LPA, latent profile analysis; MADICS, Maryland Adolescent Development in Context Study; saBIC, sample-size adjusted Bayesian information criterion; SEP, socioeconomic position.

how one's racial context may engender more critical and social justice-focused action, rather than efforts to uphold or reinforce White supremacy. Using longitudinal data from the Maryland Adolescent Development in Context Study (MADICS), our study has two main aims. First, we sought to illuminate typologies or profiles of racial contexts in a sample of White youth by investigating parent, peer, and school influences. Second, we examined how these racial contexts were related to critical action 2 years later.

White racial identity and White racial socialization during adolescence

Helms's White Racial Identity model (Helms, 1990, 1995) posits that the central task for White individuals is to develop an antiracist White identity, characterized by a clear understanding of Whiteness and privilege, the abandonment of racism, and action for justice. Helms's model has seldom been applied in developmental research, stymieing efforts to cultivate antiracism among White children and adolescents (Hazelbaker et al., 2022). One study, however, demonstrates the applicability of Helms's model to children and adolescents finding that although most White youth endorsed colorblind perspectives and reified the invisibility of Whiteness when discussing race, some did recognize their racial privilege (Moffitt et al., 2021). Indeed, White children in the United States develop in a context in which Whiteness is viewed as the "norm" and superior, receiving access to additional resources and privileges that racially minoritized children do not experience. These structural privileges are intertwined with the history of the United States of America (USA), where institutions and values have been created and maintained by White, Eurocentric notions (Sue, 2003). Since the normativity of Whiteness renders it largely invisible to White people, a catalyst, such as intergroup contact or parent discussions about race, is necessary for White youth to engage with their White identity. Within the developmental literature, few studies have sought to delineate experiences that encourage White children to think critically about race. However, one study found that history lessons which taught about racism to White children resulted in less biased attitudes toward Black Americans and greater engagement with Whiteness (e.g., White students felt guilty about their racial privilege; Hughes et al., 2007). Other research has highlighted parental racial socialization as an integral catalyst to exploring White identity and Whiteness (Thomann & Suyemoto, 2018).

Racial and ethnic socialization refers to the indirect and direct messages children receive about race and ethnicity from individuals, settings, and broader macrolevel influences (Rogers et al., 2021). Racial and ethnic socialization has been predominantly explored in racially minoritized youth to examine how parents prepare their children to face negative stereotypes and racial discrimination (Hughes et al., 2006). The content of these messages can take various forms such as emphasizing cultural pride (or racial group pride), White people as prejudiced, preparation for bias (i.e., teaching children to be aware and deal with discrimination), egalitarianism (i.e., all people are equal), among many others (Hughes et al., 2006). Due to historical factors and the social position of White individuals, researchers have contended that racial socialization for White children is categorically distinct from that of racially minoritized children (Loyd & Gaither, 2018). White racial socialization must consist of educating children about both historical and current racism, White privilege, and antiracist action.

Parental influence on the racial context

Parents are an integral influence on a child's racial context as they make decisions about neighborhoods, schools, and socialization opportunities, all of which impact how their children will make sense of race (Loyd & Gaither, 2018). The decisions that parents make are often motivated by their own racial attitudes. For example, White parents' racial attitudes have been shown to influence where they choose to send their children to school. Billingham and Hunt (2016) demonstrate that as the number of racial minority students increases, the less likely White parents are to send their child to that particular school. In addition to restricting opportunities for intergroup contact, these school enrollment decisions also affect parental racial socialization. For instance, research has suggested that greater racial and ethnic diversity at school leads to White parents having more conversations about race with their children (Brown et al., 2007). White parents' awareness of their racial attitudes has also been shown to influence whether they choose to discuss race with their children. Perry et al. (2019) found that White parents who were more aware of their racial attitudes and biases engaged in greater color-conscious conversations with their children.

In general, though, many studies demonstrate that White parents often do not talk to their children about race (Abaied & Perry, 2021; Vittrup, 2018; Zucker & Patterson, 2018). This is likely due to the invisibility of Whiteness and parents' perceptions that not talking about race reduces racial bias in their children (Pahlke et al., 2012). However, when White parents choose not to talk about race or address a racial incident, children tend to construct their own narratives (Bigler & Liben, 2006). The narratives that White children create often support their racial group, contrary to White parents' belief that choosing silence will decrease racial bias in their children (Bigler & Wright, 2014). Furthermore, when White parents choose to ignore talking about race, White children derive meaning from the silence (Hagerman, 2014). White children may infer that race conversations should

be avoided and consequently develop an out-of-touch conceptualization of the role race plays in shaping one's lived experience in the USA (Underhill, 2018). As such, implicit racial messages (including not talking about race) represent a distinct form of parental racial socialization in White families.

When White parents do engage in explicit discussions with their children about race, they often endorse a colorblind perspective (Pahlke et al., 2021; Zucker & Patterson, 2018). This perspective downplays or minimizes race, as well as the role of structural racism in the continued oppression of Black, Indigenous and People of Color (BIPOC) in the USA. White parents who hold colorblind racial attitudes have been found to engage in discussions about race with their children that are characterized by emphasizing differences between racial groups due to merit and choice rather than systemic racism (Zucker & Patterson, 2018). Exposure to colorblind ideologies has been shown to exacerbate prejudice in White youth and decrease outgroup liking (Holoien & Shelton, 2012). On the other hand, few White parents adopt a color-conscious perspective, viewing racial differences as not only salient but something to be celebrated (Perry et al., 2019). When White parents take a color-conscious approach to race conversations, their children are more likely to recognize White privilege and racial inequality (Hagerman, 2014). Therefore, parents choosing to send color-conscious messages may be imperative in shaping a racial context that encourages White adolescents to develop critical consciousness and take an active role in combating inequality.

Peer influence on the racial context

As adolescence is marked by increases in autonomy and time spent with friends, peers play a significant role in shaping White youths' racial contexts. Cross-race friendships for White youth have been shown to be associated with positive outcomes such as higher academic achievement, prosocial behaviors, and lower prejudice (Lewis et al., 2018; Rubin et al., 2006). In intergroup contexts, cross-race friendships have also been shown to attenuate anxiety regarding interracial contact for White youth. Page-Gould et al. (2008) found that cortisol (i.e., stress hormone) reactivity decreased over time as a result of cross-race friendships for White college students who were implicitly prejudiced or concerned about outgroup rejection. These findings build on intergroup contact theory, which posits that cross-race friendships can serve to reduce prejudice (Pettigrew, 1997). Illustrating this further, McClelland and Linnander (2006) found that contact with racially minoritized youth and exposure to racial issues longitudinally predicted decreases in racial prejudice (e.g., colorblindness) and increased outgroup liking among White youth. Research has also suggested that having cross-race friendships for White youth is associated with greater critical action (Carter et al., 2019).

Another important aspect of the peer influence on the racial context is whether and how White youth talk about race with their friends. During adolescence, friends start to play a greater role in shaping behaviors and ideas (De Goede et al., 2009). In line with this notion, peers may have a significant impact on how White adolescents make sense of race and inequality. Specifically, conversations about race with peers of different racial and ethnic backgrounds may amplify White adolescents' racial consciousness. Thomann and Suyemoto (2018) found that some early White adolescents consulted with their peers to learn more about racism; however, they also found that others avoided such topics with their peers as not to appear racist. As such, more research is needed to empirically contextualize the role peers play in shaping White adolescents' understanding of race and critical consciousness development.

School influence on the racial context

Since adolescents spend a significant amount of time in educational settings, school represents another crucial piece of the racial context (Zucker & Patterson, 2018). Much research has documented the long history of racial segregation in USA schools (Sikkink & Emerson, 2008). Particularly, research highlights a common paradox for White parents: they recognize the value of racial diversity for their children but remain steadfast in sending their children to what they deem as the "best" schools (Roda & Wells, 2013). This is problematic because White parents often equate a school's quality with the quantity of racial and ethnic minority students, such that a greater number of racial and ethnic minority students implies a poorer school quality (Billingham & Hunt, 2016). These decisions about school enrollment affect the school racial climate by decreasing opportunities for intergroup contact during childhood and adolescence, which could have implications for critical consciousness development for White youth. A greater percentage of racial and ethnic diversity at school may foster more cross-race friendships and discussions about race or race-related movements (e.g., Black Lives Matter) that lead to White adolescents being more cognizant of their racial privilege and positionality.

Further, students are socialized about race through their learning. For example, teachers or schools may place emphasis on learning about the contributions and advancements made by BIPOC or, on the contrary, may only discuss contributions made by White individuals. Historically, school curriculums have focused on the contributions of White individuals and have neglected to discuss racism in the USA (Boutte, 2008). Since learning about historical racism and discussing the experiences of BIPOC have been shown to attenuate racial bias in

White children (Hughes et al., 2007), more research is needed to understand how these school socialization experiences may relate to both understandings of race and critical action.

Critical consciousness

Critical consciousness has generally been operationalized as three components: critical reflection, critical motivation, and critical action (Diemer et al., 2017). Critical reflection refers to one's level of perceived inequality. Critical motivation encompasses one's level of perceived capacity to enact social change. Lastly, critical action refers to the participation in activities to advance social change and challenge inequality. Due to the lack of research investigating critical action in White youth, and the recent calls for centering critical action in critical consciousness research (Diemer et al., 2021), our study focuses on how the racial context contributes to White youths' critical action. To date, critical consciousness literature has mostly focused on populations experiencing marginalization, such as low socioeconomic positioned youth (SEP) or racially minoritized adolescents (Heberle et al., 2020). Some scholars have suggested a broader conceptualization of critical consciousness to include how privilege is understood and negotiated during adolescence (Hershberg & Johnson, 2019; Jemal, 2017). This broader conceptualization is also based on Freire's (1970) discussion of how systems of oppression are maintained by privilege (i.e., those who act as oppressors) and that "true solidarity with the oppressed means fighting at their side to transform the objective reality which has made them these 'beings for another'" (p. 49). Thus, investigation into how critical consciousness may serve to promote antiracist action, social justice attitudes, and other forms of social action in White youth can serve as a useful complement.

Some research has illuminated aspects of the social context that encourage critical action. For example, Diemer and Li (2011) found that critical action was greater for low SEP, mostly racially and ethnically minoritized youth, who reported having more sociopolitical support (i.e., through discussions) from parents and peers. In another study with predominantly racially and ethnically minoritized adolescents, Diemer et al. (2006) found that critical action was influenced by feeling supported to challenge injustice from parents and peers. The school racial climate has also been shown to play a role in encouraging adolescents to take critical action. For instance, having an open classroom dynamic (i.e., talking about social issues freely) in school has been shown to result in more civic action and sociopolitical efficacy for students of color as well as elicit critical action for White youth (Godfrey & Grayman, 2014; Rapa et al., 2020). Furthermore, school racial messages that encourage youth to reflect on racial inequality have also been associated with greater antiracism action for racially and ethnically diverse adolescents (Bañales et al., 2019). For White youth, these aspects of the social context (parents, peers, and schools) may similarly catalyze critical action.

An adolescent's multiple social identities and experiences are also likely to shape their critical action (Godfrey & Burson, 2018). In particular, for White youth, since Whiteness remains largely invisible, other marginalized social identities may serve to catalyze an understanding of privilege and oppression that may lead to critical consciousness development. Some studies have investigated youths' critical consciousness at the intersection of various social identities. For instance, Hershberg and Johnson (2019) investigated how young White men understood their lower SEP in the context of their racial privilege finding that eight of the 31 young men displayed critical reflection about socioeconomic inequalities. Also exploring socioeconomic marginalization in a sample of youth from a variety of racial backgrounds, Diemer and Li (2011) found that low SEP White adolescents reported low levels of critical action. In addition to SEP, gender has been shown to influence critical consciousness outcomes where young White women generally report higher levels of critical reflection and action (as compared to young White men), largely influenced by their experiences with sexism (Diemer et al., 2006). Additional research investigating how an adolescent's multiple social identities shape their engagement in critical action is needed.

Person-centered approach to racial socialization and racial contexts

Racial contexts are complex and dynamic, which necessitates appropriate analytic methods to accurately depict the various influences that shape how youth make sense of race. One novel way to categorize multiple contextual influences is mixture modeling, an empirically driven, person-centered approach to identify hidden or latent groups from observed data (Laursen & Hoff, 2006). Latent profile analysis (LPA) is an example of mixture modeling where indicator variables are measured continuously. Researchers have applied mixture modeling techniques to identify various types of prejudice (Meeusen et al., 2017), racial identity processes among racially minoritized youth (Hope et al., 2020), and racial socialization practices (White-Johnson et al., 2010). Compared to a variable-centered approach, mixture modeling is advantageous because it elucidates the natural patterning within individuals, rather than the relations between variables. Particularly, as it pertains to racial socialization and racial contexts for White adolescents, a person-centered lens can illuminate the various profiles or "typologies" a White adolescent may evince.

Mixture modeling has been used in similar ways to explore racial socialization patterns among racially minoritized youth. For example, White-Johnson et al. (2010) examined parental racial socialization practices in a sample of African American mothers. They found three distinct classes: Multifaceted, Low Race Salience, and Unengaged. The Multifaceted class was characterized by positive messages about being African American while simultaneously preparing their children for the obstacles they may face due to their racial group. The Low Race salience class was characterized by sending messages about self-worth and individual traits rather than positive racial messages. The Unengaged class reported few racial socialization practices. Children in the Multifaceted class had mothers who had more years of education, reported more instances of discrimination, and had higher ratings of race centrality as compared to the other two classes. In addition, Byrd and Ahn (2020) used mixture modeling to examine family, school, neighborhood, and internet influences on ethnic-racial socialization for a sample of mostly racially minoritized youth (the sample was 23% White). The LPA revealed three profiles: an Average profile where adolescents had moderate racial socialization across indicators; a High Discrimination profile where youth received ethnic racial socialization but also reported high levels of discrimination; and a Positive School profile where youth had the highest socialization in school settings and the lowest reported discrimination. The authors found that youth in the high discrimination profile reported the most parental racial socialization, critical reflection, and critical action. To date, person-centered approaches specifically investigating White racial socialization remain limited.

The current study

Investigating the role that systems of oppression and privilege play for all youth is a requisite step to disrupting these systems that continue to affect groups of youth unequally. Few studies to date have sought to contextualize the myriad influences that contribute to how White adolescents make sense of race. Furthermore, connecting the racial contexts that White adolescents experience to their critical action advances our understanding of what may motivate White youth to work toward social change. In the current manuscript, we define a White adolescent's racial context as the multiple environments and influences that contribute to how race and racism are negotiated. Therefore, the racial context includes not only racial socialization in the form of explicit discussions about race, for instance from family and peers, but also environmental influences such as racial and ethnic diversity in school.

In the current study, we sought to address the dearth of research on White racial socialization and critical consciousness by (1) contextualizing the racial context for White adolescents and (2) examining how these contexts relate to critical action. To do this, we used LPA to derive racial context typologies or profiles across three key influences during adolescence (ages 16–17): parents (i.e., parental racial attitudes, parent-child conversations about race), peers (i.e., peer conversations about race), and schools (i.e., diverse school curriculum, school diversity). Thus, White adolescents' racial contexts comprised both objective (e.g., school racial and ethnic diversity) and perceived (e.g., cross-race friendships) indicators. The profiles generated were then used to predict critical action roughly 2 years later, when participants were young adults (age 18–19). We expected that White adolescents who experienced racial contexts characterized by greater racial socialization would report more critical action during emerging adulthood. Since this prediction was based on prior research, the analyses were confirmatory. On the contrary, in an exploratory nature, we investigated how White adolescents' other social group memberships, namely sex and SEP, differentially interacted with their racial context to influence critical action.

METHOD

Participants and procedure

The overall goal of the MADICS was to examine how social context and behavioral choices impact developmental trajectories (Eccles et al., 2006). The study includes eight waves of data collection, starting in 1991, when youth (aged 12–13) were in middle school. As more comprehensive data on racial context became available in Wave 4, Wave 4 ($N = 1057$) was utilized to derive various racial contexts. Wave 4 data were collected when participants were juniors in high school (16–17 years old) and include self-report and interview data from both the parent and adolescent. Outcome measures were calculated at Wave 5 ($N = 912$), when the participants were approximately 18–19 years old. Wave 5 only includes self-report data from the youth (no parent report).

The MADICS is a longitudinal study of adolescents in Prince George's County from 1991 to 2012 with the purpose of examining successful pathways through adolescence. Prince George's county is located outside of the Washington D.C. area and is a unique ecological setting to investigate the racial context. First, Prince George's County has a full range of ecological settings, including diversity by SEP and urbanicity. The county is majority Black (62.7%); White individuals made up 27.0% of the population during Wave 4 of the study (U.S. Census Bureau, 2000), and neighborhood racial and ethnic diversity ranges from homogeneous (e.g., 95.8% Black or 85.4% White) to heterogeneous (e.g., 39.7% White, 41.4% Black, 12.1% Asian). The median income for Black Americans in the county was $53,938 as compared to $59,921 for White Americans in the county.

To be included in the current study, participants must have self-identified as White (N = 323) at Wave 4. In line with the full sample, the majority of youth participants identified as female (52% female, 48% male). Participants' average age at Wave 4 was 16.5 years (SD = 0.58). Participants' median family income was between $50,000–54,999, and median parent education was a high school degree with some college.

Measures

Critical action

Critical action was measured in Wave 5, consisting of five questions that have been used in previous studies (Rapa et al., 2018), and generally correspond to other validated critical action scales (Diemer et al., 2017). Items assessed level of political involvement, protesting, and collective action aimed at addressing political inequality within the past 2 years. Example items include participating in civil rights groups or participating in women's rights. Response options ranged from almost never (0) to more than 10 times (5). A mean score was calculated from the five items, and the measure maintained good reliability (α = .79).

Racial context

Parent racial context

The parent racial context was based on three questions from the youth and parent questionnaires. First, parent racial attitudes were assessed from a thermometer rating question asking parents to rate their feelings toward Black Americans where they were told that a rating between 0 and 49 meant they were not favorable toward a particular social group, 50 meant they were not particularly warm or cold, and 51–100 meant they were more favorable. Despite consisting of a single question, thermometer ratings have been shown to be a reliable predictor of attitudes toward social groups and have good convergent and discriminant validity (Forscher et al., 2015). Second, a single parent-reported question was used to assess whether parents thought it was important for their child to know about race: "How important is it for your 11th grader to know about (his or her) racial background?" Parents responded on a 1 (not at all)–4 (very) scale. Finally, the frequency of race related conversations was derived from the following question asked on a 1 (almost never)–6 (almost every day) scale to youth: "How often do you talk in the family about your racial background?" Due to low variability (M = 1.69), this indicator was dichotomized such that youth who reported never talking about race were coded as 0, and youth who reported talking about race once a month or more were coded as 1.

Peer racial context

The peer racial context consisted of two questions. First, talking with friends about race was assessed from a single question: "I talk with my friends about race and ethnicity and how it affects our lives." Response options ranged from 1 (not at all) to 4 (very true). Second, cross-race friendships were measured by having youth report how many of their friends were Black or African American: "How many of the friends that you spend most of your time with are Black/African American?" Answer choice options ranged from 1 (none of them) to 5 (all of them).

School racial context

High school diversity was assessed using school racial and ethnic data from National Center for Education Statistics during the time of the study. The percentage of students who identified as White was included in the analysis to reflect the level of diversity (lower percentage White indicates more school racial and ethnic diversity). A majority of White students (n = 285; 88%) attended a school where Black students were more than 50% of the school's population. Additionally, the following question was used to investigate school racial socialization through school curriculum: "How many of the important people you read about or discuss in class are not White—that is, they are Black, Hispanic, Asian, or American Indian?" Participants responded on a 1 (most) to 5 (none) scale. Responses were reverse coded so that higher scores reflected greater racial and ethnic diversity in school materials and curriculum.

Sociodemographic variables

Sex, parent education, and family income were included as covariates. Adolescents were asked to indicate whether they identified as male or female (additional gender identities were not provided). Parents were asked to provide the highest level of education they had received on a continuous scale (measured in years). Parents were also asked: "From all sources of income you mentioned, tell me your total family income before taxes in 1990." Response options ranged from 1 (less than $5,000) to 16 (more than $75,000), measured in $5000 increments.

Two neighborhood variables were also examined since neighborhood dynamics have been connected to White parents' racial socialization (Hagerman, 2014). Neighborhood resources were constructed from five

questions regarding access to resources in the community, such as an after-school recreation programs, health services, day care services, summer programs, and community centers. A count variable was then created to assess how many resources a family had access to. Neighborhood cohesion was constructed from four questions that assessed whether neighbors relied on each other and had similar views about raising children (α = .73). Both neighborhood constructs have been used in previous research with the MADICS data (Rivas-Drake & Witherspoon, 2013).

Analytic design

Analyses were conducted in R and Mplus (Muthén & Muthén, 2017). First, descriptive statistics were run to examine the relations between key study constructs. Next, we ran a LPA using the seven racial context variables: parent racial attitudes, parent's report of the importance for their child to know about race, youth's report of talking about race in the family, cross-race friendships, talking about race with friends, racially and ethnically diverse school curriculum and the percentage of White students at school. All variables (except for talking about race in the family) were continuous. LPA is appropriate for the combination of categorical and continuous indicator variables (Berlin et al., 2014). One- to seven-profile models were tested iteratively, using maximum likelihood estimation to account for missing data. We determined the appropriate number of latent profiles by evaluating interpretability (based on theory) and comparing fit indices, including Bayesian information criterion (BIC), sample-size adjusted BIC (saBIC), Akaike information criterion (AIC), and the Lo–Mendell–Rubin adjusted Likelihood Ratio Test (LMRT). Lower AIC, BIC, and saBIC values indicate a better model fit (Nylund et al., 2007). In addition, LMRT test with a significant *p*-value indicates that the current model is a better fit than a model with one fewer profile. Lastly, an entropy value closer to 1 (range from 0 to 1) indicates clearer profile classification between latent profiles (Nylund et al., 2007).

Given relatively high entropy (>0.70) and limited options for addressing missing data in LPA approaches, the most likely profile membership was exported to R to better handle non-random completion of the distal outcome. After determining the model solution that best fit the data, the profiles were extracted as a single categorical variable, and one-way ANOVAs were run to predict profile membership by sociodemographic factors. Next, multiple regression analyses were run to investigate how the various racial contexts related to critical action. Continuous predictor variables were centered, and categorical covariates were dummy coded prior to analysis. Multiple regression analysis was also utilized to examine how sex, family income, and parent education, respectively, interacted with profile membership in predicting critical action. The emmeans package in R (Lenth et al., 2019) was used to probe significant interactions (i.e., simple slopes) at the mean and one standard deviation below and above the mean (Aiken & West, 1991).

Missing data

The percentage of missing data in the LCA indicators at Wave 4 ranged from 5.0% to 18.3%. The outcome variable (critical action) at Wave 5 had 29.7% missing data. Little's test (Little, 1988) was performed to examine whether the data were missing completely at random. The LCA indicators and critical action were used in the test. Results revealed that the data were missing completely at random ($\chi^2(603) = 626.28$, $p = .25$). The mice package was then used in R to make use of all available data. Based on the percentage of missing data, a total of five datasets were imputed to generate reliable standard error estimates and parameters (Van Buuren & Groothuis-Oudshoorn, 2011).

An attrition analysis revealed some differences between youth with missing data at Wave 4 (N = 323) from the sample of White youth at Wave 1 (N = 424). Independent sample *t*-tests demonstrated that youth who were not included in the analyses had parents who reported fewer years of education (M = 13.48 vs. 14.40, $p < .001$) and reported fewer neighborhood resources (M = 4.3 vs. 4.7, $p < .05$). There were no differences found for sex, family income, or neighborhood cohesion.

RESULTS

Research question 1: What are profiles of White adolescents' racial contexts?

Table 1 presents the fit statistics for each latent profile model. Using standard model fit indices and theoretical considerations, the three-profile solution was selected. While the four-profile model had a lower AIC and saBIC, visual inspection of the profiles suggested that a three-profile solution contained both expected and conceptually interesting profiles with adequate profile sizes. Indeed, a closer look at the four-profile solution suggested that the fourth profile was not conceptually distinct from the largest profile in three-profile solution and therefore, the three-profile solution with greater parsimony was more optimal. For the five–seven profile solutions, although the aBIC continues to decrease in the five-profile model, this solution is not tenable as two of the profiles represented 5% or less of the sample. Furthermore, past the four-profile model, model convergence problems increased, suggesting overfitting to the

TABLE 1 Fit statistics for latent profile analysis ($N = 323$)

	AIC	BIC	aBIC	Entropy	LMRT	BLRT	Profile size
1 Profile	8323.92	8376.81	8332.40	—	—	—	323
2 Profiles	8256.88	8339.99	8270.21	0.75	81.28*	83.04*	213-110
3 Profiles	**8233.93**	**8347.25**	**8252.10**	**0.78**	**38.13**	**38.96***	**202-65-56**
4 Profiles	8176.04	8319.59	8199.06	0.76	67.89	69.83*	144-64-63-52
5 Profiles	7974.88	8148.66	8002.75	0.89	56.38*	57.61*	160-84-51-21-7
6 Profiles	7998.94	8202.93	8031.65	0.85	−7.86	−8.06	164-53-53-25-23-5
7 Profiles	7905.05	8139.26	7942.61	0.88	−40.68	−40.68	165-51-41-29-21-9-7

Note: The 3 profile solution was bolded to demonstrate the selected solution.

Abbreviations: aBIC, adjusted Bayesian Information Criterion; AIC, Akaike information criterion; BIC, Bayesian Information Criterion; BLRT, bootstrap likelihood ratio test; LMRT, Lo–Mendell–Rubin Adjusted Likelihood Ratio Test.

*$p < .05$.

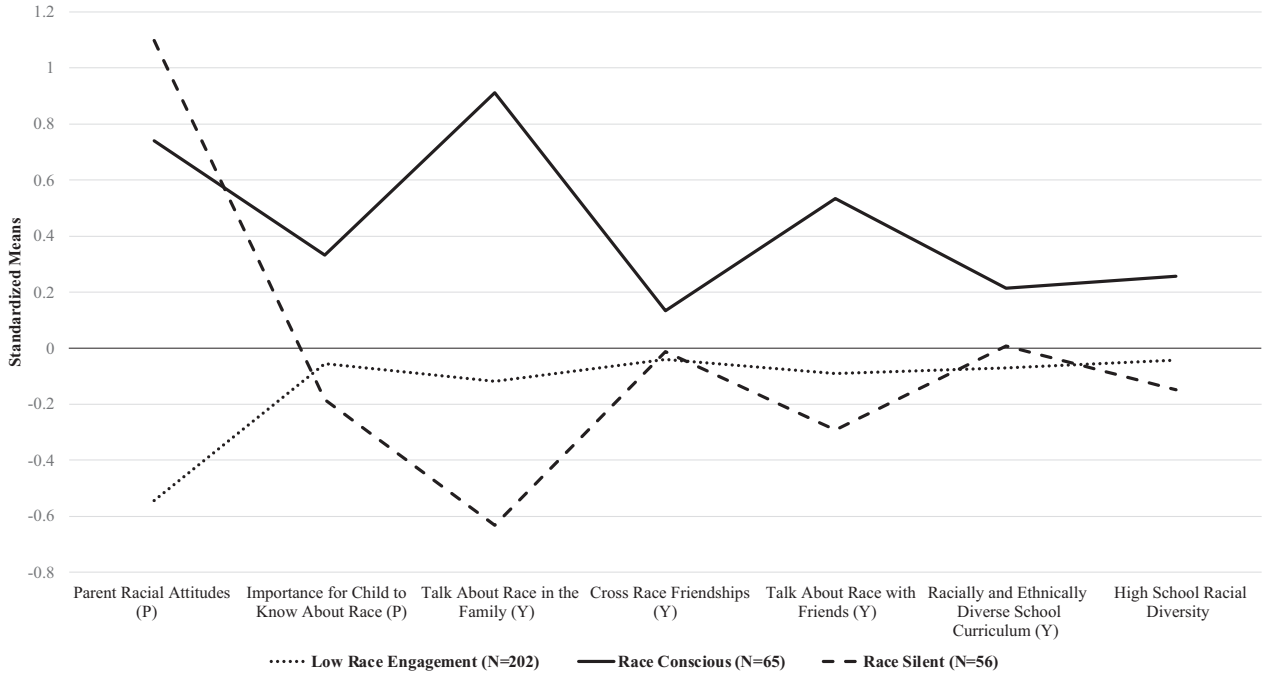

FIGURE 1 Latent profile analysis of White adolescents' racial contexts. (P) indicates parent-reported and (Y) indicates youth-reported. High school racial diversity was calculated using data from the National Center for Education Statistics

data. After identifying the best fitting model, entropy was used to verify profile classification (entropy = 0.78).

As displayed in Figure 1, the largest profile ($n = 202$; 63%) was named the *Low Race Engagement* profile. Adolescents in this profile had parents with the most negative racial attitudes toward Black Americans. Additionally, across the three domains (i.e., parent, peer, and school), adolescents in this profile had generally low to moderate racial socialization and engagement, as compared to the other groups. The second-largest profile ($n = 65$; 20%) was named the *Race Conscious* profile. With the exception of parent racial attitudes, adolescents in this group had the highest reports of racial socialization and engagement across parent, peer, and school domains. They talked about race with their family and friends, reported a more diverse racial and ethnic curriculum, and had the greatest racial diversity within their schools. The smallest profile ($n = 56$; 17%) was named the *Race Silent* profile. The distinguishing feature of this group was that adolescents reported never or very rarely talking about race with both family and friends. While parent self-reported racial attitudes (i.e., thermometer rating question about their feelings toward Black Americans) were the most positive in this profile, parents simultaneously reported that it was *not* important for their child to know about race. This aligns with a colorblind ideology, where parents may report high racial attitudes as they believe that "all individuals should be treated equally," but concurrently believe that talking about or explicitly addressing race engenders racism (Perry et al., 2019). Adolescents in this profile also had lower cross-race friendships and a greater percentage of

TABLE 2 Sociodemographic characteristics by profile membership

Sociodemographics	a. Race Silent profile	b. Race Conscious profile	c. Low Race Engagement profile	F/χ^2
Sex				2.12
Male	33	31	91	
Female	32	25	111	
Parent education (years)	15.4 (2.7)[bc]	14.2 (2.5)[a]	14.2 (2.5)[a]	4.64*
Family income	11.7 (3.6)	11.0 (4.1)	11.3 (3.5)	0.37
Neighborhood				
Neighborhood cohesion	3.5 (0.7)	3.5 (0.8)	3.5 (0.6)	0.11
Neighborhood resources	4.5 (1.3)	4.8 (1.1)	4.7 (1.2)	0.91

Note: Lower case superscript letters show statistically significant differences between groups (a) Race Silent profile, (b) Race Conscious profile, and/or (c) Low Race Engagement profile. For example, adolescents in the Race Silent profile had parents with significantly more years of education as compared to the Race Conscious profile (indicated by [b]) and the Low Race Engagement profile (indicated by [c]).

*$p < .05$.

White students in their school; however, they did report "somewhat" learning about racial and ethnic minorities through their school curriculum.

To further explore the racial attitude findings, we subtracted parents' feelings toward Black Americans from their feelings toward White Americans (i.e., a measure of bias and in-group preference; Newheiser & Olson, 2012). Consequently, scores above zero indicated more positive attitudes toward Black Americans (out-group preference), and scores below zero indicated more positive attitudes toward White Americans (in-group preference). Parents in the *Race Silent* profile rated attitudes toward Black and White Americans similarly ($M = 2.67$, $SD = 13.07$). This is distinct from the *Low Race Engagement* profile, where parents reported more positive attitudes toward White Americans ($M = -5.73$, $SD = 13.27$), and the *Race Conscious* profile where parents reported higher attitudes toward Black Americans ($M = 5.49$, $SD = 16.5$).

Profiles were significantly different from one another on all indicators except cross-race friendships and learning about racial and ethnic minorities in school (see Table S1). Sociodemographic characteristics were examined in relation to each of the three profiles. A chi-square was used to examine sex, and one-way ANOVAs were used to examine family income, parent education, neighborhood resources, and neighborhood cohesion (Table 2). Only parent education was associated with profile membership, $F(2, 320) = 4.64$, $p < .05$. Adolescents in the *Race Conscious* profile and in the *Low Race Engagement* profile had parents with fewer years of education as compared to the *Race Silent* profile.

Research question 2: Do racial context profiles predict critical action?

Descriptively, the *Race Conscious* profile reported the most critical action ($M = 0.63$, $SD = 0.88$) as compared to the *Low Race Engagement* profile ($M = 0.38$, $SD = 0.74$) and *Race Silent* profile ($M = 0.39$, $SD = 0.60$). Multiple regression analyses were performed to examine how adolescent racial context profiles predicted critical action during emerging adulthood, controlling for sex, family income, and parent education (see Table 3). Being in the *Race Conscious* profile was associated with greater critical action as compared to the *Low Race Engagement* profile and the *Race Silent* profile. There were no significant differences found between the *Low Race Engagement* profile and the *Race Silent* profile.

TABLE 3 Regressions predicting critical action from profile membership

Variables	*b*	*se*
Racial Context profile		
Race Conscious versus Race Silent	.27*	.14
Low Race Engagement versus Race Silent	.02	.12
Race Conscious versus Low Race Engagement	.26*	.10
Female[a]	.04	.09
Parent education	.08	.04
Family income	−.02	.04

Note: Racial context profiles were rotated across models to test all combinations.

[a]Comparison group = male.

*$p < .05$.

As an exploratory analysis, moderation analyses were run to examine how sex, family income, and parent education interacted with adolescents' racial contexts to produce critical action. There were no significant interactions found for sex or parent education, however, there was a significant interaction between family income and the *Race Conscious* profile ($b = -.26$, $SE = .11$, $p < .05$; see Table 4). Probing this interaction (see Figure 2) revealed that at one standard deviation below ($b = .5$, $SE = .14$, $p < .001$) and at the mean family income ($b = .2$, $SE = .11$, $p < .05$), youth in the *Race Conscious* profile reported significantly more critical action as compared to those in the *Low Race Engagement* profile.

DISCUSSION

Research that takes a critical lens to investigate White youths' racial contexts is limited, reifying Whiteness as the "norm" and obscuring efforts aimed at racial equality. The current study elucidates the various racial contexts a White adolescent may experience, as well as the role these contexts play in engendering critical action. This research also extends and challenges the racial socialization and critical consciousness literature to consider how adolescents with racial privilege (e.g., White youth in the USA) learn about race and develop critical consciousness. Findings revealed three distinct profiles: a *Race Conscious* profile, a *Race Silent* profile, and a *Low Race Engagement* profile. There were differences in critical action by profile, such that being in the *Race Conscious* profile was associated with greater critical action during emerging adulthood as compared to the other two profiles. In addition, youth from lower family income backgrounds reported greater critical action in the *Race Conscious* profile as compared to the *Low Race Engagement* profile. Collectively, the current study sheds light on divergent racial contexts for White youth and the importance of race conscious socialization during adolescence for promoting critical action.

TABLE 4 Examining interaction between family income and profile membership

Variables	*b*	*se*
Racial Context profile[a]		
Race Silent	−.02	.12
Race Conscious	.24*	.11
Female[b]	−.04	.08
Parent education	.08†	.05
Family income	.08	.06
Interaction: profile × family income		
Race Silent × family income	−.20	.11
Race Conscious × family income	−.26*	.11

[a]Comparison group = Low Race Engagement.
[b]Comparison group = male.
†$p < .10$.
*$p < .05$.

White adolescents' racial contexts

Much research examining the racial context for White youth has focused on parental racial socialization, finding that White parents often do not talk to their children about race (e.g., Vittrup, 2018). The current study aligns with this notion finding that about 60% of the sample reported never talking about race or about their racial background with their family. However, among the profiles, youths' report of talking about race with their families was perhaps one of the most differentiating features of their racial contexts. Youth in the *Race Conscious* profile reported having many conversations about race with their family, whereas youth in the *Low Race Engagement* profile reported having very few conversations, and youth in the *Race Silent* profile

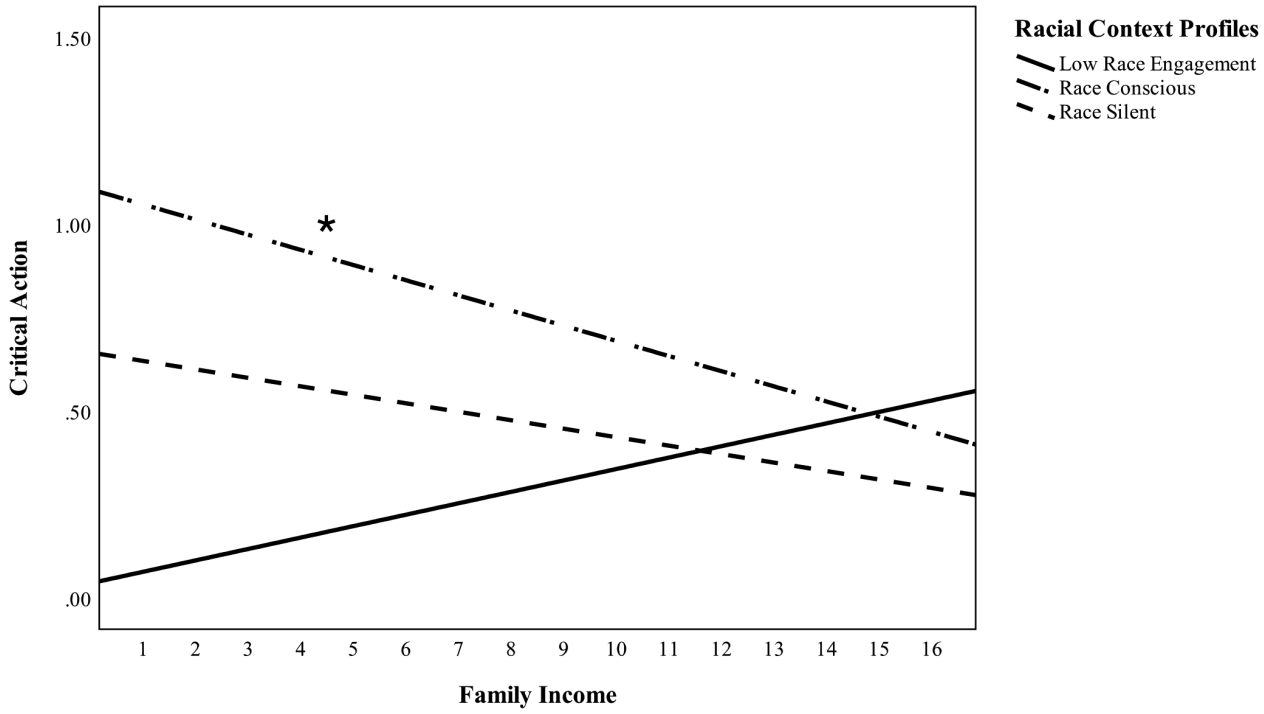

FIGURE 2 Probing the interaction between family income and racial context profiles on critical action. Family income measured on a scale from 1 (<5,000) to 16 (more than $75,000) in $5,000 increments. *$p < .05$

reported almost never talking about race with their family. Interestingly, though, parents in the *Race Silent* profile reported the highest thermometer ratings toward Black Americans. This finding was surprising as previous research has demonstrated that White parents who hold less biased racial attitudes are more likely to engage in racial socialization with their children (Perry et al., 2019; Zucker & Patterson, 2018). To further explore this finding, we investigated how White parents' feelings toward Black Americans compared to their own racial group (i.e., a measure of bias and in-group preference). Results demonstrated that parents of youth in the *Race Silent* profile displayed similar attitudes toward both social groups, whereas parents of youth in the *Race Conscious* profile, where youth had many family conversations about race, reported higher attitudes toward Black Americans. As such, White parents' in-group or out-group preferences may play a role in shaping their racial socialization practices and should be investigated in future research.

Further, in the *Race Silent* profile, parent's report of importance for their child to know about race did not correspond to their racial attitude score. Though not measured directly in the current study, parents in this profile are likely endorsing a colorblind perspective as they expressed favorable attitudes toward Black Americans, but simultaneously deemphasized the importance of talking about race to their children. Indeed, research has documented the pervasiveness of colorblindness among White Americans and that White parents tend not to recognize the importance of discussing race with their children (Abaied & Perry, 2021; Pahlke et al., 2012). Much less studied in the literature, though, are the various other influences in which White youth negotiate race. The present study reveals the multifaceted racial context White adolescents experience through investigating not only parent influences but also peer and school influences.

Within the peer domain of the racial context, youth generally had similar levels of cross-race friendships; however, the number of conversations with peers about race differed. Although the *Race Silent* profile had slightly higher cross-race friendships than the *Low Race Engagement* profile, they reported having the least conversations about race with their peers. In general, findings across the three profiles reveal that having the opportunity for intergroup contact during high school was not always associated with more cross-race friendships or discussions about race. For instance, in all profiles, most students (88%) attended schools that were predominantly racially minoritized youth, and yet over 60% of youth reported that most of their friends were White. Previous research has also documented White youths' low cross-race friendships; for example, McGill et al. (2012) found that 70% of White youth reported having only intraracial best friends. This is problematic since peers of different racial and ethnic backgrounds help youth transform and construct new modes of thinking about diversity and racial identity and cross-race friendships are linked to less biased racial attitudes (Gaias et al., 2018). Since mere exposure to racial and ethnic diversity may not be sufficient to form cross-race friendships, it is critical for future research to examine how and when cross-race friendships form and uncover positive ways to cultivate friendships among racially and ethnically diverse youth (Gaias et al., 2018).

Associations between racial contexts and critical action

Research has demonstrated that parental conversations about race in White families can lead to more positive, color-conscious attitudes toward BIPOC (Perry et al., 2021; Vittrup, 2018). However, few studies have taken a more comprehensive investigation into how multiple aspects of the racial context relate to action for social change (i.e., critical action). Findings from the extant study demonstrated that racial socialization across parent, peer, and school influences during adolescence resulted in more critical action during emerging adulthood. These findings challenge the often-espoused belief by White parents that not talking about race promotes equity (Abaied et al., 2022). In addition, the critical action measure not only related to race, but other systems of oppression as well (e.g., sexism and classism). As such, the current finding is consistent with research that has shown that racial experiences and intergroup contact can serve as a catalyst for White youth to explore various issues of inequality (not just related to race) and develop civic identities characterized by working toward social justice (Bowman, 2011).

The current study also extends the critical consciousness literature by demonstrating that critical action can be engendered for White youth in contexts that promote race consciousness. While the applicability of critical consciousness to White youth has been debated, we concur with Jemal's (2017) contention that oppression is not only the job of the oppressed to solve. Reaching a state of liberation requires the efforts of all individuals to challenge the oppressive systems that perpetuate unequal advantages. In this sense, it becomes essential to understand how White youth may develop this critical understanding of inequality and instigate critical action. The current findings suggest that one pathway is to increase the amount of racial socialization that White youth receive in their racial context. The results also underscore that the spaces in which White youth learn about race, and subsequently develop critical consciousness, are not restricted to certain contexts or influences and thus, investigating multiple influences concurrently is imperative to provide a more robust and accurate depiction of what encourages White adolescents to work toward social change.

Moreover, due to historical and contemporary racism that has buoyed White supremacy, being White serves as an influential lens through which adolescents navigate the world. Nonetheless, being White is not the only identity or system of privilege that may shape White adolescents' experiences. As such, investigating how other social identities and experiences shape critical consciousness is imperative (Godfrey & Burson, 2018). The findings from the current study demonstrated significant relations between racial context profiles and family income. As compared to the *Low Race Engagement* profile, youth in the *Race Conscious* profile whose families had lower income reported more critical action. This finding was somewhat surprising, as previous research has highlighted that youth from higher socioeconomic backgrounds typically report greater critical action (Tyler et al., 2020). However, there may be several contributing factors to explain this discrepancy. First, we measured family income and parent education separately in the analysis. While purportedly both measures tap into socioeconomic position, they may differentially relate to parental racial and ethnic socialization. Since higher education and university contexts have been associated with racial identity development and race consciousness for White individuals (Dull et al., 2021), children with parents who have more years of education may engage in more discussions about race, inequality, and critical action. Within the current sample, across all three profiles, we found this trend such that youth who had parents with more years of education engaged in critical action more than youth with parents who had fewer years of education. Furthermore, while family income and parent education are often linked, there may be some nuances that circumvent White families' socioeconomic position (e.g., intergenerational wealth, college debt). Lastly, it may also be that White youth with lower family income are more likely to engage in critical action due to experiences with classism and marginalization (Diemer & Rapa, 2016).

Limitations and future directions

While the study boasts many strengths in revealing White youths' racial contexts and critical action, there are several limitations. First, the study made use of data that were around 20 years old. In the past two decades, conversations about race, the content of those conversations, and movements toward racial equality have evolved—although racism undoubtedly persists. For instance, the COVID-19 pandemic has reinforced and augmented racial inequities and the murder of George Floyd reinforces the long history of police brutality for Black Americans in the USA (Ferguson et al., 2022). In addition to changes over time, these data were also collected from one county that has a higher percentage of racial diversity and schools that boast opportunities for intergroup contact, resulting in a sample that is not nationally representative. Consequently, researchers should continue to investigate the composition of White youths' racial context in large and diverse samples of White youth across the USA and in other countries.

Another limitation is the measure used for critical action. Critical action for White youth should consist of measures of allyship behavior. Due to limitations from available questions in the dataset, we were not able to interrogate adolescents' privilege consciousness, or the full range of allyship behaviors as the measures solely capture perceptions and actions taken against disadvantage (and not measures taken against dismantling privilege). In addition, critical reflection was not assessed in the current study but should be prioritized in future research. For example, White youths' critical reflection must involve a critical understanding of both privilege, Whiteness, and marginalization. Future work should also seek to construct scales that more critically measure these components of critical consciousness in White youth.

Furthermore, the measures used for the latent profile indicators mostly consisted of one question and thus may not capture the full spectrum of experiences that White adolescents have in each of the parent, peer, and school influences. In addition to this, the current data do not differentiate between types of parent or peer conversations about race. For example, parents and peers may be espousing colorblind or racist views when discussing race. Thus, more comprehensive measures should be used in future research. Similarly, our exploratory analyses investigating how sex and SEP interact with one's racial context to influence critical action was not fully able to capture intersectionality. An intersectional framework refers to the external systems of oppression, privilege, and power that shape and intersect to inform an individual's lived experience (Crenshaw, 1991). Intersectionality, as it applies to critical consciousness, strives to investigate the role of oppression and privilege at the system level rather than at the individual level (Godfrey & Burson, 2018). The variables used in the current analysis were categorical individual-level variables that do not entirely capture how systems of oppression and privilege interact to shape one's lived experiences. Therefore, future studies should use intersectional approaches that address structural influences and analytical methods that account for one's unique social location. Lastly, studies should also employ a mixed-methods approach to investigating White racial socialization and intersectionality to gain a deeper understanding of how adolescents come to understand race, in relation to their other social identities, and the resulting implications on their critical consciousness development.

Nevertheless, the current findings shed light on the potential for critical consciousness to promote positive outcomes in White youth, with implications for deep-seated racial and ethnic inequalities in health, educational outcomes, and socioeconomic position. Future

work is needed in this area to understand how critical consciousness can be developed in White children and adolescents, what components of critical consciousness are most relevant, and how it may be shaped by other experiences with systems of oppression and privilege (i.e., intersectionality). This study reveals several areas of the racial context that need future investigation (such as peers) but also raises other aspects of the racial context that may be relevant but have received less attention in the literature. For instance, social media has burgeoned as a tool for social justice and racial equity. Consequently, for many youth, social media may be another space in which they receive important messages about race that shape their racial consciousness and critical action. Another future direction is investigating how White identity development relates to racial socialization during adolescence and social-justice action. For example, how White youth feel about their Whiteness (maintaining a positive, negative, or neutral relationship) likely acts as a motivator or discouragement for taking critical action. Lastly, while cross-race friendships and conversations about race with racially minoritized youth may lead to more positive outcomes in White youth (e.g., becoming more aware of racial inequality), it is critical that future work assesses how these interactions affect racially minoritized youth.

CONCLUSION

Moving toward a more just and equitable society requires investigation into how all youth negotiate race, develop understandings of inequality, and work toward social change. This study reveals the various influences that shape how White youth make sense of race. While the majority of the sample received low racial socialization across parent, peer, and school settings, some adolescents' racial contexts were characterized by frequent race conversations, cross-race friendships, and racial and ethnic diversity within their schools. Moreover, youth who did experience higher racial socialization in their racial contexts were engaged in more critical action during emerging adulthood as compared to the other two profiles. As the USA continues to grapple with its long history of racial inequality, encouraging White youth to form a critical understanding of race and a desire to contribute to social change is vital.

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REFERENCES

Abaied, J. L., & Perry, S. P. (2021). Socialization of racial ideology by White parents. *Cultural Diversity and Ethnic Minority Psychology*, *27*(3), 431–440. https://doi.org/10.1037/cdp0000454

Abaied, J. L., Perry, S. P., Cheaito, A., & Ramirez, V. (2022). Racial socialization messages in White parents' discussions of current events involving racism with their adolescents. *Journal of Research on Adolescence*. https://doi.org/10.1111/jora.12767

Aiken, L. S., & West, S. G. (1991). Multiple regression: Testing and interpreting interactions. In *Multiple regression: Testing and interpreting interactions*. Sage Publications, Inc.

Bañales, J., Aldana, A., Richards-Schuster, K., Flanagan, C. A., Diemer, M. A., & Rowley, S. J. (2019). Youth antiracism action: Contributions of youth perceptions of school racial messages and critical consciousness. *Journal of Community Psychology*. https://doi.org/10.1002/jcop.22266

Berlin, K. S., Williams, N. A., & Parra, G. R. (2014). An introduction to latent variable mixture modeling (part 1): Overview and cross-sectional latent class and latent profile analyses. *Journal of Pediatric Psychology*, *39*(2), 174–187. https://doi.org/10.1093/jpepsy/jst084

Bigler, R. S., & Liben, L. S. (2006). A developmental intergroup theory of social stereotypes and prejudice. *Advances in Child Development and Behavior*, *34*, 39–89. https://doi.org/10.1016/S0065-2407(06)80004-2

Bigler, R. S., & Wright, Y. F. (2014). Reading, writing, arithmetic, and racism? Risks and benefits to teaching children about intergroup biases. *Child Development Perspectives*. https://doi.org/10.1111/cdep.12057

Billingham, C. M., & Hunt, M. O. (2016). School racial composition and parental choice: New evidence on the preferences of white parents in the United States. *Sociology of Education*. https://doi.org/10.1177/0038040716635718

Boutte, G. S. (2008). Beyond the illusion of diversity: How early childhood teachers can promote social justice. *The Social Studies*, *99*(4), 165–173. https://doi.org/10.3200/TSSS.99.4.165-173

Bowman, N. A. (2011). Promoting participation in a diverse democracy: A meta-analysis of college diversity experiences and civic engagement. *Review of Educational Research*, *81*(1), 29–68. https://doi.org/10.3102/0034654310383047

Brown, T. N., Tanner-smith, E. E., Lesane-brown, C. L., & Michael, E. (2007). Child, parent, and situational correlates of familial ethnic/race socialization. *Journal of Marriage and Family*, *69*(1), 14–25.

Byrd, C. M., & Ahn, L. H. (2020). Profiles of ethnic-racial socialization from family, school, neighborhood, and the internet: Relations to adolescent outcomes. *Journal of Community Psychology*, *48*(6), 1942–1963. https://doi.org/10.1002/jcop.22393

Carter, E. R., Brady, S. T., Murdock-Perriera, L. A., Gilbertson, M. K., Ablorh, T., & Murphy, M. C. (2019). The racial composition of students' friendship networks predicts perceptions of injustice and involvement in collective action. *Journal of Theoretical Social Psychology*, *3*(1), 49–61. https://doi.org/10.1002/jts5.27

Crenshaw, K. (1991). Mapping the margins: Intersectionality, identity politics, and violence against women of color. *Stanford Law Review*, *43*(6), 1241. https://doi.org/10.2307/1229039

De Goede, I. H. A., Branje, S. J. T., & Meeus, W. H. J. (2009). Developmental changes in adolescents' perceptions of relationships with their parents. *Journal of Youth and Adolescence*. https://doi.org/10.1007/s10964-008-9286-7

Diemer, M. A., Kauffman, A., Koenig, N., Trahan, E., & Hsieh, C. A. (2006). Challenging racism, sexism, and social injustice: Support for urban adolescents' critical consciousness development. *Cultural Diversity and Ethnic Minority Psychology*, *12*(3), 444–460. https://doi.org/10.1037/1099-9809.12.3.444

Diemer, M. A., & Li, C. H. (2011). Critical consciousness development and political participation among marginalized youth. *Child Development*, *82*(6), 1815–1833. https://doi.org/10.1111/j.1467-8624.2011.01650.x

Diemer, M. A., Pinedo, A., Bañales, J., Mathews, C. J., Frisby, M. B., Harris, E. M., & McAlister, S. (2021). Recentering action in critical consciousness. *Child Development Perspectives*, *15*(1), 12–17. https://doi.org/10.1111/cdep.12393

Diemer, M. A., & Rapa, L. J. (2016). Unraveling the complexity of critical consciousness, political efficacy, and political action among marginalized adolescents. *Child Development*, *87*(1), 221–238. https://doi.org/10.1111/cdev.12446

Diemer, M. A., Rapa, L. J., Park, C. J., & Perry, J. C. (2017). Development and validation of the critical consciousness scale. *Youth and Society*. https://doi.org/10.1177/0044118X14538289

Dull, B. D., Hoyt, L. T., Grzanka, P. R., & Zeiders, K. H. (2021). Can white guilt motivate action? The role of civic beliefs. *Journal of Youth and Adolescence*, *50*(6), 1081–1097. https://doi.org/10.1007/s10964-021-01401-7

Eccles, J. S., Wong, C. A., & Peck, S. C. (2006). Ethnicity as a social context for the development of African-American adolescents. *Journal of School Psychology*, *44*(5), 407–426. https://doi.org/10.1016/j.jsp.2006.04.001

Ferguson, G. M., Eales, L., Gillespie, S., & Leneman, K. (2022). The whiteness pandemic behind the racism pandemic: Familial whiteness socialization in Minneapolis following #GeorgeFloyd's murder. *American Psychologist*, *77*(3), 344–361.

Forscher, P. S., Cox, W. T. L., Graetz, N., & Devine, P. G. (2015). The motivation to express prejudice. *Journal of Personality and Social Psychology*, *109*(5), 791–812. https://doi.org/10.1037/pspi0000030

Freire, P. (1970). *Pedagogy of the oppressed*. Continuum.

Gaias, L. M., Gal, D. E., Abry, T., Taylor, M., & Granger, K. L. (2018). Diversity exposure in preschool: Longitudinal implications for cross-race friendships and racial bias. *Journal of Applied Developmental Psychology*, *59*(2019), 5–15. https://doi.org/10.1016/j.appdev.2018.02.005

Godfrey, E. B., & Burson, E. (2018). Interrogating the intersections: How intersectional perspectives can inform developmental scholarship on critical consciousness. *New Directions for Child and Adolescent Development*, *2018*(161), 17–38. https://doi.org/10.1002/cad.20246

Godfrey, E. B., & Grayman, J. K. (2014). Teaching citizens: The role of open classroom climate in fostering critical consciousness among youth. *Journal of Youth and Adolescence*, *43*(11), 1801–1817. https://doi.org/10.1007/s10964-013-0084-5

Hagerman, M. A. (2014). White families and race: Colour-blind and colour-conscious approaches to white racial socialization. *Ethnic and Racial Studies*. https://doi.org/10.1080/01419870.2013.848289

Hagerman, M. A. (2018). *White kids: Growing up with privilege in a racially divided America*. NYU Press.

Hazelbaker, T., Brown, C. S., Nenadal, L., & Mistry, R. S. (2022). Fostering anti-racism in white children and youth: Development within contexts. *American Psychologist*. Advance online publication. https://doi.org/10.1037/amp0000948

Heberle, A. E., Rapa, L. J., & Farago, F. (2020). Critical consciousness in children and adolescents: A systematic review, critical assessment, and recommendations for future research. *Psychological Bulletin*. https://doi.org/10.1037/bul0000230

Helms, J. E. (1990). *Black and White racial identity: Theory, research, and practice*. Greenwood Press.

Helms, J. (1995). An update of Helms's White and people of color racial identity models. In *Handbook of multicultural counseling*. https://doi.org/10.1177/0011000091191007

Hershberg, R. M., & Johnson, S. K. (2019). Critical reflection about socioeconomic inequalities among white young men from poor and working-class backgrounds. *Developmental Psychology*, *55*(3), 562–573. https://doi.org/10.1037/dev0000587

Hirschfeld, L. A. (2008). Children's developing conceptions of race. In S. M. Quintana & C. McKown (Eds.), *Handbook of race, racism, and the developing child* (pp. 37–54). John Wiley & Sons, Inc.

Holoien, D. S., & Shelton, J. N. (2012). You deplete me: The cognitive costs of colorblindness on ethnic minorities. *Journal of Experimental Social Psychology*. https://doi.org/10.1016/j.jesp.2011.09.010

Hope, E. C., Cryer-Coupet, Q. R., & Stokes, M. N. (2020). Race-related stress, racial identity, and activism among young Black men: A person-centered approach. *Developmental Psychology*, *56*(8), 1484–1495. https://doi.org/10.1037/dev0000836

Hughes, D., Rodriguez, J., Smith, E. P., Johnson, D. J., Stevenson, H. C., & Spicer, P. (2006). Parents' ethnic-racial socialization practices: A review of research and directions for future study. *Developmental Psychology*, *42*(5), 747. https://doi.org/10.1037/0012-1649.42.5.747

Hughes, J. M., Bigler, R. S., & Levy, S. R. (2007). Consequences of learning about historical racism among European American and African American children. *Child Development*, *78*(6), 1689–1705. https://doi.org/10.1111/j.1467-8624.2007.01096.x

Jemal, A. (2017). Critical consciousness: A critique and critical analysis of the literature. *Urban Review*, *49*, 602–626. https://doi.org/10.1007/s11256-017-0411-3

Katz, P. A., & Kofkin, J. A. (1997). Race, gender, and young children. In D. J. Cohen (Ed.), *Developmental psychopathology: Perspectives on adjustment, risk, and disorder* (pp. 51–74). Cambridge University Press.

Laursen, B., & Hoff, E. (2006). Person-centered and variable-centered approaches to longitudinal data. *Merrill-Palmer Quarterly*, *52*(3), 377–389. https://doi.org/10.1353/mpq.2006.0029

Lenth, R., Singmann, H., Love, J., Buerkner, P., & Herve, M. (2019). *Package 'emmeans'*.

Lewis, J. A., Nishina, A., Ramirez Hall, A., Cain, S., Bellmore, A., & Witkow, M. R. (2018). Early adolescents' peer experiences with ethnic diversity in middle school: Implications for academic outcomes. *Journal of Youth and Adolescence*. https://doi.org/10.1007/s10964-017-0697-1

Little, R. J. A. (1988). A test of missing completely at random for multivariate data with missing values. *Journal of the American Statistical Association*, *83*(404), 1198–1202. https://doi.org/10.1080/01621459.1988.10478722

Loyd, A. B., & Gaither, S. E. (2018). Racial/ethnic socialization for White youth: What we know and future directions. *Journal of Applied Developmental Psychology*, *59*, 54–64. https://doi.org/10.1016/j.appdev.2018.05.004

McClelland, K., & Linnander, E. (2006). The role of contact and information in racial attitude change among White college students. *Sociological Inquiry*. https://doi.org/10.1111/j.1475-682X.2006.00145.x

McGill, R. K., Way, N., & Hughes, D. (2012). Intra- and interracial best friendships during middle school: Links to social and emotional well-being. *Journal of Research on Adolescence*, *22*(4), 722–738. https://doi.org/10.1111/j.1532-7795.2012.00826.x

Meeusen, C., Meuleman, B., Abts, K., & Bergh, R. (2017). Comparing a variable-centered and a person-centered approach to the structure of prejudice. *Social Psychological and Personality Science*, *9*(6), 645–655. https://doi.org/10.1177/1948550617720273

Moffitt, U., Rogers, L. O., & Dastrup, K. R. (2021). Beyond ethnicity: Applying Helms's White racial identity development model among White youth. *Journal of Research on Adolescence*. https://doi.org/10.1111/jora.12645

Muthén, L. K., & Muthén, B. O. (2017). *Mplus user's guide* (8th ed.). Muthén & Muthén.

Newheiser, A. K., & Olson, K. R. (2012). White and Black American children's implicit intergroup bias. *Journal of Experimental Social Psychology*, *48*(1), 264–270.

Nylund, K. L., Asparouhov, T., & Muthén, B. O. (2007). Deciding on the number of classes in latent class analysis and growth mixture modeling: A Monte Carlo simulation study. *Structural Equation Modeling*, *14*(4), 535–569. https://doi.org/10.1080/10705510701575396

Page-Gould, E., Mendoza-Denton, R., & Tropp, L. R. (2008). With a little help from my cross-group friend: reducing anxiety in intergroup contexts through cross-group friendship. *Journal of Personality and Social Psychology*, *95*(5), 1080. https://doi.org/10.1037/0022-3514.95.5.1080

Pahlke, E., Bigler, R. S., & Suizzo, M. A. (2012). Relations between colorblind socialization and children's racial bias: Evidence from European American mothers and their preschool children. *Child Development*, *83*(4), 1164–1179. https://doi.org/10.1111/j.1467-8624.2012.01770.x

Pahlke, E., Patterson, M. M., & Hughes, J. M. (2021). White parents' racial socialization and young adults' racial attitudes: Moral reasoning and motivation to respond without prejudice as mediators. *Group Processes & Intergroup Relations*, *24*(8), 1409–1426. https://doi.org/10.1177/1368430220941065

Patterson, M. M., & Bigler, R. S. (2006). Preschool children's attention to environmental messages about groups: Social categorization and the origins of intergroup bias. *Child Development*, *77*(4), 847–860. https://doi.org/10.1111/j.1467-8624.2006.00906.x

Perry, S., Abaied, J. L., Skinner-Dorkenoo, A. L., & Waters, S. (2021). *A laboratory procedure to facilitate color conscious racial socialization methods among white parents in the U.S.* https://doi.org/10.31234/osf.io/3w59e

Perry, S. P., Skinner, A. L., & Abaied, J. L. (2019). Bias awareness predicts color conscious racial socialization methods among white parents. *Journal of Social Issues*, *75*(4), 1035–1056. https://doi.org/10.1111/josi.12348

Pettigrew, T. F. (1997). Generalized intergroup contact effects on prejudice. *Personality and Social Psychology Bulletin*, *23*(2), 173–185. https://doi.org/10.1177/0146167297232006

Rapa, L. J., Bolding, C. W., & Jamil, F. M. (2020). (Re)examining the effects of open classroom climate on the critical consciousness of preadolescent and adolescent youth. *Applied Developmental Science*, 1–16. https://doi.org/10.1080/10888691.2020.1861946

Rapa, L. J., Diemer, M. A., & Bañales, J. (2018). Critical action as a pathway to social mobility among marginalized youth. *Developmental Psychology*, *54*(1), 127–137. https://doi.org/10.1037/dev0000414

Rivas-Drake, D., & Witherspoon, D. (2013). Racial identity from adolescence to young adulthood: Does prior neighborhood experience matter? *Child Development*, *84*(6), 1918–1932. https://doi.org/10.1111/cdev.12095

Roda, A., & Wells, A. S. (2013). School choice policies and racial segregation: Where white parents' good intentions, anxiety, and privilege collide. *American Journal of Education*, *119*(2), 261–293. https://doi.org/10.1086/668753

Rogers, L. O., & Meltzoff, A. N. (2017). Is gender more important and meaningful than race? An analysis of racial and gender identity among Black, White, and mixed-race children. *Cultural Diversity and Ethnic Minority Psychology*, *23*(3), 323. https://doi.org/10.1037/cdp0000125

Rogers, L. O., Niwa, E. Y., Chung, K., Yip, T., & Chae, D. (2021). M(ai)cro: Centering the macrosystem in human development. *Human Development*, *65*(5–6), 270–292. https://doi.org/10.1159/000519630

Rubin, K. H., Bukowski, W. M., & Parker, J. G. (2006). *Peer interactions, relationships, and groups*. https://doi.org/10.1002/9780470147658.chpsy0310

Sikkink, D., & Emerson, M. O. (2008). School choice and racial segregation in US schools: The role of parents' education. *Ethnic and Racial Studies*, *31*(2), 267–293. https://doi.org/10.1080/01419870701337650

Sue, D. W. (2003). *Overcoming our racism*. https://doi.org/10.1002/9780787979690

Thomann, C. R. B., & Suyemoto, K. L. (2018). Developing an antiracist stance: How White youth understand structural racism. *Journal of Early Adolescence*, *38*(6), 745–771. https://doi.org/10.1177/0272431617692443

Tyler, C. P., Geldhof, G. J., Black, K. L., & Bowers, E. P. (2020). Critical reflection and positive youth development among White and Black adolescents: Is understanding inequality connected to thriving? *Journal of Youth and Adolescence*, *49*(4), 757–771. https://doi.org/10.1007/s10964-019-01092-1

Underhill, M. R. (2018). "Diversity is important to me": White parents and exposure-to-diversity parenting practices. *Sociology of Race and Ethnicity*, *5*(4), 486–499. https://doi.org/10.1177/2332649218790992

U.S. Census Bureau. (2000). *American community survey*. https://data.census.gov/

Van Buuren, S., & Groothuis-Oudshoorn, K. (2011). mice: Multivariate imputation by chained equations in R. *Journal of Statistical Software*, *45*, 1–67.

Vittrup, B. (2018). Color blind or color conscious? White American mothers' approaches to racial socialization. *Journal of Family Issues*, *39*(3), 668–692. https://doi.org/10.1177/0192513X16676858

White-Johnson, R. L., Ford, K. R., & Sellers, R. M. (2010). Parental racial socialization profiles: Association with demographic factors, racial discrimination, childhood socialization, and racial identity. *Cultural Diversity and Ethnic Minority Psychology*, *16*(2), 237. https://doi.org/10.1037/a0016111

Zucker, J. K., & Patterson, M. M. (2018). Racial socialization practices among White American parents: Relations to racial attitudes, racial identity, and school diversity. *Journal of Family Issues*, *39*(16), 3903–3930. https://doi.org/10.1177/0192513X18800766

SUPPORTING INFORMATION

Additional supporting information may be found in the online version of the article at the publisher's website.

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