

Interrupting the Pathway from Discrimination to Black Adolescents' Psychosocial Outcomes:
The Contribution of Parental Racial Worries and Racial Socialization Competency

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Abstract

Racial discrimination can lead to psychosocial problems for Black adolescents, including internalization (e.g., depression) and externalization (e.g., conduct problems). Black parents ($N = 186$; $M_{\text{age}} = 42.9$) of adolescents (ages 10-18) were assessed to investigate how parental worries and racial socialization competency (i.e., confidence, skills, and stress) contribute to the association between parental discrimination experiences and their adolescents' psychosocial problems. Mediation analyses indicated that the total direct models with discrimination, worries, and problems had good fit, and that the addition of worry mediated the discrimination-problems association. Further, racial socialization competency moderated the association between worry and problems, wherein greater competency was associated with less impact of worry on problems. Findings illuminate potential intervention targets for buffering discrimination's influence on adolescents' psychosocial functioning.

Keywords: racial socialization competency; discrimination; Black families; racial worries; psychosocial outcomes

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A growing and consistent body of literature has demonstrated that racial discrimination is uniquely and exponentially harmful to Black adolescents' mental and behavioral health (Anderson et al., 2020; Grollman, 2012; Pachter & García Coll, 2009; Walker et al., 2017). The critical developmental epoch of adolescence is especially sensitive to racial matters, as adolescents begin to form their sense of self through racial processes (e.g., racial identity, critical consciousness, etc.; Diemer & Li, 2011; McNeil Smith et al., 2019; Nicolas et al., 2008). Further, adolescents have increased awareness of and experiences with racial discrimination as well as increased sensitivity to others' evaluations (e.g., Brown & Bigler, 2005), indicating a need to better understand how families manage racial discrimination during adolescence to support a child's well-being. Researchers have also begun to identify processes or mechanisms through which parental experiences of racial discrimination may influence their children's psychological outcomes, including adolescents' depressive symptoms and overall well-being (Ford et al., 2013; Gibbons et al., 2004). Various hypotheses have been advanced to address why interpersonal dynamics between parent and child relate to adolescent psychological outcomes, namely, that varying individual parental characteristics (e.g., depression, distress) and practices (e.g., parenting styles, beliefs) shape the behaviors between family members and ultimately that of the child (Belsky, 1984; García Coll et al., 1996; McLoyd, 1990). Yet, parents' worry and concern for their child experiencing racial discrimination may be a potentially understudied component of

the pathway from parental discrimination experiences to adolescent psychosocial outcomes (e.g., Anderson & Stevenson, 2019; Thomas & Blackmon, 2015).

At this age, adolescents often rely on explicit and implicit cues from their proximal systems to inform their beliefs and behaviors, including racial identity and coping with discrimination and racism (García Coll et al., 1996; Jones et al., 2020; Wang et al., 2020). Racially specific communication and practices between Black parents and their children—or racial socialization—have been found to modulate the impact of discrimination on adolescent internalizing and externalizing psychosocial outcomes (e.g., Bynum et al., 2007; Neblett et al., 2008; Wang et al., 2020). Researchers have shown that racial socialization makes a meaningful contribution to the coping strategies that parents teach their children to employ when dealing with racial stressors (Anderson et al., 2019; Gaylord-Harden & Cunningham, 2009). Yet, few researchers have identified other pathways and mechanisms from racial socialization to adolescents' psychosocial well-being. One potentially important mechanism is parental worry over the impact of discrimination on their teen children, particularly when parental discrimination is the stressor contributing to adolescents' psychosocial problems (Cooper et al., 2015; Herda, 2016; Thomas & Blackmon, 2016). Additionally, the confidence, skills, and stress that parents have regarding their racial socialization abilities (i.e., racial socialization competency; Anderson et al., 2019) may align more directly with the fearful worry espoused by or repressed within parents in response to their own discriminatory experiences (Anderson et al., 2018). Taken together, and guided by the racial encounter coping appraisal and socialization theory (RECAST; Anderson & Stevenson, 2019; Stevenson, 2014), this study seeks to examine the associations between parental racial discrimination experiences, race-related worries, racial socialization competency, and adolescents' psychosocial problems, including both internalizing and externalizing outcomes. Furthermore, we seek to address conceptual gaps by assessing how parental worry may mediate the association between parental racial discrimination and adolescent psychosocial problems and how racial socialization competency may moderate this association.

The Contribution of Racial Discrimination to Adolescent Psychosocial Problems

Racial discrimination—or the overt or covert mistreatment on the basis of racial or ethnic group membership (Clark et al., 1999)—has been shown to impact the psychosocial well-being of adolescents, whether directly, vicariously, collectively, institutionally, or transgenerationally

(Harrell, 2000; Scott, 2003; Walker et al., 2017). Black American adolescents who experience racial discrimination are at a greater risk of several negative mental health outcomes, including greater internalizing symptoms (e.g., elevated depressive symptoms, suicide ideation, learned helplessness, low self-perception; Assari et al., 2017; English et al., 2020; McNeil Smith et al., 2019; Nyborg & Curry, 2003; Tobler et al., 2013) and externalizing problems (e.g., committing violent crimes; Estrada-Martínez et al., 2012; Herda & McCarthy, 2018). In addition to discrimination experienced directly by the adolescent, family systems theories suggest that parental experiences with racial discrimination can also increase their child's likelihood of experiencing emotional problems and poor mental health (Anderson et al., 2015; Priest et al., 2012; Tran, 2014). Ford and colleagues (2013), for example, found that parents' experiences with racial discrimination were positively and directly associated with their adolescent child's depressive symptoms and negatively related to psychological well-being. Herda (2016) found Black adolescents not only had heightened fears when personally victimized, but also feared discrimination at greater rates when their parents experienced discrimination via indirect victimization.

Such parental contact may also exacerbate parental distress in response to racial discrimination, as parents may be worried about their child's experience with and reactions to racial discrimination. In a longitudinal study of children ages 5 to 7, Anderson and colleagues (2015) found that Black parents' discrimination experiences were associated with child internalizing problems over time, both directly and via increased parental stress and less optimal (e.g., lax or overreactive) parenting practices. Indeed, racial discrimination can have a detrimental effect on the mental and physical health of Black parents, which may interfere with their ability to execute competence-promoting parenting behaviors (Brody et al., 2002). Over time, impaired parenting practices negatively impact adolescents' health and well-being (Ayón et al., 2010; Brody et al., 2002; Caughy et al., 2004). As such, it stands to reason that as Black adolescents grow older, parents facing discrimination may experience additional stress or worry specific to the tasks associated with raising their developing Black child in a racist society.

Parental Worry about Adolescents' Experiences of Discrimination and Well-being

Black parents not only report experiencing more discrimination than parents of other ethnic backgrounds, but also having greater fears of discrimination, particularly with respect to how racial discrimination impacts the physical safety and psychological well-being of their

children (Herda, 2016). For example, in a study by Thomas and Blackmon (2015), parents reported worry about their children experiencing and emotionally responding to racism after the shooting death of Trayvon Martin. Similarly, in a qualitative study, Posey (2017) found that Black parents drew upon their experiences of racial discrimination in the community and in school as well as their children's experiences to inform their beliefs about the challenges their children may encounter. The stress from parents' racially discriminatory experiences indicates their awareness of a threat for their child, mapping on to and extending our current conceptualization of racial stress appraisal—or determining if a racially stressful situation may pose a threat—in parents (Anderson & Stevenson, 2019). Although limited work has examined the implications of parents' racial worries for their children, parental worry and stress— independent of racial discrimination—are generally related to adverse internalizing outcomes and risk behaviors for adolescents (Fisak et al., 2013; Koning et al., 2013). And yet, worry may be the very impetus for engaging in conversations with children about racial discrimination (Stevenson, 2014). What is less known about this worry is whether there are optimal levels that are neither an under nor overreaction to the very real societal stimuli facing Black youth. Thus, it is crucial to examine parental worry as a mediator of parental racial discrimination and adolescent internalizing and externalizing outcomes given such robust associations between parental mood states and youth psychosocial outcomes.

We can forecast some of the challenges parents may face in providing wise counsel in the frequently discussed “driving while Black” scenario, in which families communicate what to do if the adolescent is pulled over by the police. For some parents, worry may prompt engagement in racially-relevant practices to ensure that adolescents are well equipped to encounter and effectively cope with such a discriminatory event (Anderson et al., 2019; Cooper et al., 2015; Hughes & Johnson, 2001; McNeil et al.; Saleem et al., 2016). However, as indicated by Thornton and colleagues (1990), “[For other parents,] there is a reluctance to discuss race or racism for fear that such a discussion would make their children bitter, resentful, and prejudiced against others (p. 402).” And yet, in both cases, parents may worry about what messages to provide, how to provide messages in a developmentally appropriate way, and how their messages might impact their child's confidence and resilience in negotiating such a life-or-death encounter (e.g., Lee et al., 2018). This demonstrates the potential intersection of racial socialization and parental worry.

Racial Socialization as a Familial Coping Response to Discrimination

Racial socialization, or the communication and behaviors between family members regarding race (Hughes et al., 2006; Lesane-Brown, 2006), is an essential component of parenting for Black families, especially with consideration to how such communication relates to Black children's psychosocial well-being in the face of discrimination (Anderson et al., 2019; García Coll et al., 1996; Murry et al., 2018). Four common racial socialization content messages permeate the literature and include socialization focused on emphasizing racial pride and heritage (i.e., cultural socialization), preparing adolescents for racial discrimination and how to cope with it (i.e., preparation for bias), promoting mistrust of other racial groups (i.e., promotion of mistrust), and conveying messages focused on individual characteristics rather than racial group content (i.e., egalitarianism; Hughes et al., 2006). Globally, parental racial socialization communication can promote a healthy racial identity and help adolescents prepare for and manage the negative consequences of racial discrimination (Umaña-Taylor & Hill, 2020; Wang et al., 2020). However, in examining messages in isolation, the literature is equivocal about the effects of several racial socialization messages on Black adolescents' psychosocial outcomes (Burt et al., 2012; McHale et al., 2006; Saleem & Lambert, 2016; Stevenson et al., 1997).

Additionally, while racial socialization is an important strategy to protect adolescents from the negative effects of racism and racial stress (Bannon et al., 2009; Harris-Britt et al., 2007), providing racial socialization can also be stressful for parents who may be simultaneously contending with their own racial discrimination experiences and lack confidence in their ability to strategically navigate such delicate topics (Anderson et al., 2018; Bentley et al., 2009; Thomas & Blackmon, 2015). In tandem with parents' racial discrimination experiences, having difficult conversations about racism may lead parents to worry or be fearful of what may happen to their child as a result of racial bias or discrimination (Herda, 2016; Thomas & Blackmon, 2015). Ongoing parental worry or rumination, as a result of direct or vicarious encounters with racial discrimination, can impact the way that children perceive and receive parent messages (e.g., Stevenson et al., 2002), which may negatively contribute to parents' sense of competency during these talks.

Racial Socialization Competency

Racial socialization competency—or the confidence, skills, and stress of racial socialization communication (see Anderson & Stevenson, 2019 for full description)—is a

recently proposed way of conceptualizing racial socialization that focuses on the emotional burden and skills necessary for parents and their children to transmit racial beliefs and coping strategies. Racial socialization competency considers the cognitive, behavioral, and physiological processes (i.e., confidence, skills, and stress) in addition to the content (e.g., cultural socialization, preparation for bias) of racial socialization (Anderson & Stevenson, 2019; Anderson et al., 2019). RECAST (Anderson & Stevenson, 2019; Stevenson, 2014) elucidates the role of racial socialization competency by postulating that racial discrimination yields stress for parents and children, and such stress is modulated via racial socialization competence. For purposes of this paper, racial worry is the manifestation or proxy of this racial stress, which serves as a mediator of discrimination experiences and subsequent outcomes (Anderson & Stevenson, 2019). Parental worry explains the association between parental discrimination and youth outcomes given the transactional pathways that familial stress travels (e.g., McLoyd, 1990). In turn, perceived skills, confidence, and stress regarding racial socialization practices can promote more optimal psychosocial outcomes in adolescents through mediating pathways in youth (i.e., racial coping self-efficacy and racial coping) by interfering with the stressful transmission of behaviors and moods. Empirical assessments have investigated parental racial socialization competence in particular, which includes three primary factors pursuant to racial socialization transmission: confidence, skills, and stress (Anderson et al., 2019; Jones et al, in press). Although the traditional subtypes (e.g., cultural socialization) of racial socialization are still relevant within the competency perspective, RECAST postulates that racial socialization competency is better aligned with the emotional and self-perception processes inherent in the cognitive-behavioral approaches and psychological-harm reduction undertaken by parents with respect to their racial discrimination and adolescent outcomes (Anderson & Stevenson, 2019; Jones et al., 2020; Metzger et al., 2020).

Although parents worry about their child's encounters with racial discrimination, their competence in the provision of racial socialization is hypothesized to be beneficial to the mental health of their children and themselves. In other words, the parental stress experienced after a discriminatory event is expected (e.g., Sawyer et al., 2012); however, rather than being debilitated, parents may use this event as a cue to facilitate the socialization process (e.g., Cameron & Schoenfeld, 2018). Stevenson (2014) described this multi-functionality of racial socialization competency as "ways parents can increase their children's sense of competence

during their racial encounters, manage the parental fears, and reduce anxiety about how the world may mistreat their children when they are not there to protect them” (p. 160). Families can influence how adolescents cope with and respond to racial discrimination, which is postulated to disrupt the pathway from racial discrimination to adverse outcomes (Anderson & Stevenson, 2019). Such parental racial socialization competence is hypothesized to be instrumental in the associations between their own racial worry and their child’s psychosocial outcomes (see Lee et al., 2018), given that myriad studies have found relationships between parental internal mood states and youth psychosocial outcomes (e.g., Anderson et al., 2015; Ford et al., 2013; Goodman & Gotlib, 1999). And, while youth may have a host of internal processes that relate to their psychosocial outcomes, the questions raised by this study seek to assess the impact of parental variables on youth outcomes. Although RECAST is concerned with bidirectional and dyadic relationships between parent and child, this investigation assesses how internalized parental experiences from discrimination shape their racial socialization processes and predict subsequent adolescent outcomes (e.g., Anderson et al., 2015; Ford et al., 2013). Additionally, in building evidence to investigate, refine, and improve upon RECAST, models with greater parsimony and fewer relationships may be advanced. As such, we are interested in assessing how parental worry is related to racial socialization competency and how the worry-psychosocial outcomes relationship may be attenuated via varying levels of racial socialization competency.

Study Aims and Hypotheses

Taken together, we investigated the association between parents’ discriminatory experiences and the mental and behavioral health of their children. More specifically, we explored three research questions. First, is there a direct relationship between parental racial discrimination and parents’ reporting of their child’s internalizing and externalizing problems? Second, do parental worries about their child’s racism experience mediate the racial discrimination-adolescent mental health relationship? Third, does parents’ racial socialization competency (i.e., confidence, skills, stress) moderate the impact of parental racial worry on their adolescent child’ problems? (see Figure 1 for conceptual model).

[Insert Figure 1 here]

We hypothesized that H1) parents’ racial discrimination experiences would be associated with greater parent-reported adolescent internalizing and externalizing problems and H2) parental worry would mediate the association between parental racial discrimination and

adolescents' outcomes, such that more racial discrimination would be related to higher worry, and higher worry would predict greater adolescent psychosocial problems. H3) Finally, we expected that racial socialization competency would moderate the association between worry and adolescent outcomes, such that greater competence (e.g., higher confidence, higher skills, and lower stress) would mitigate the association between worry and adolescents' problems.

Method

Participants and Procedures

The analytic sample included 186 Black parents and other primary caregivers (henceforth parents) of children from a larger dataset with inclusion criteria seeking Black caregivers of children aged 18 and under (for more information, see Anderson et al., 2019). For purposes of this study, only families with children 10-18 were retained. Parents in the sample were 70% female and, with respect to their relationship to the child, 62% were mothers, 28% were fathers, and the remaining 10% included stepparents, grandparents, aunts, uncles, and other caregivers. Parents' mean age was 42.9 years ($SD = 10.33$; Min: 19; Max: 68). With respect to race and ethnicity, 93.5% of parents endorsed the racial or ethnic categorization of Black/African American, 2.1% as Black/African, 1.6% as Black/Caribbean, and the remainder as some other categorization. Most parents (59.2%) were married or living with a partner and the median reported family income was between \$50,000 and \$74,999. Approximately 24% of parents reported their highest educational level as high school, with a similar proportion (27%) reporting vocational or community college or having a bachelor's degree (28%). An additional 20% indicated obtaining a graduate degree. With respect to adolescent demographics, parents indicated that half of the target children were female (50.5%), and target children were 13.8 years of age on average ($SD = 2.41$). Note that all participants resided in the United States.

Participants were recruited nationally in the summer of 2018 through three methods: 1) Amazon's Mechanical Turk; 2) Qualtrics' Panel Management; and 3) listservs for organizations with a Black or parenting focus. Amazon Mechanical Turk or MTurk is an online crowdsourcing platform on which workers complete Human Intelligence Tasks in return for payment after giving informed consent. After consenting to partake in the study, participants were directed to the online survey link. Qualtrics Panels is an online survey delivery service that allows researchers to recruit participants into their studies (see Brandon et al. (2014) for a full description). After identifying a study coordinator through Qualtrics, Black parents were invited

via email to participate in the research. Emails included the expected duration of the study and incentives available for participation. In all cases, questions were added to the screening methods of the platforms, including veracity checks and requests for best effort, before proceeding. Given that we were principally interested in understanding parental racial socialization competency, parents' reports were solely captured (i.e., even when reporting on youth). Participants received compensation from the various platforms by which they participated (typically under \$5) and were also entered into a raffle for a \$20 Amazon gift card. Human subjects approval for the current study was obtained through the [blinded] University's Internal Review Board.

Measures

Sociodemographic Information

Parents were asked to complete several sociodemographic items including sex, parent's relationship to child, age, race/ethnicity, and several indicators of socioeconomic status, including level of educational attainment (ranging from "Middle School" to "Advanced Professional Degree") and yearly household income (ranging from "\$0-\$24,999" to "over \$200,000").

Parents' Racial Discrimination

Racial discrimination experiences were assessed using the mean of four items from the brief version of the Racism and Life Experiences Scales (RaLES-B; Harrell, 1997). Two of the items measured lifetime and past year frequency of racism-related experiences, measured on a 5-point Likert-type scale from 1 (not at all) to 5 (extremely). The other two items measured the endorsement of stress due to racism, again measured at lifetime and past year timepoints. For these two items, a 5-point Likert scale was used from 1 (none) to 5 (extreme). Previous studies found the RaLES-B to be reliable and valid (e.g., Caughy et al., 2004; Utsey, 1998), as was the case for the current sample ($\alpha = .82$).

Adolescents' Psychosocial Problems

Adolescents' psychosocial problems were assessed using the Internalizing and Externalizing Problems subscales of the Brief Problem Monitor (BPM; Achenbach et al, 2011). The BPM is a 19-item scale that obtains parental report of their child's internalizing, externalizing, and attention problems from the more robust Child Behavior Checklist (CBCL). Statements such as "acts too young/old for [their] age" are accompanied by a scale of 0 (being not true), 1 (somewhat true), and 2 (very true). The Internalizing Problems subscale is created by

adding responses to six items, such as “feels worthless or inferior”. The Externalizing Problems subscale is created using seven items (e.g., “argues a lot”). The reliability for internalizing ($\alpha = 0.81$) and externalizing ($\alpha = 0.84$) problems were both acceptable for the current study, and with full-scale reliability ($\alpha = 0.91$) and internal consistency with the CBCL ($r = 0.95$) found in prior research (Piper et al., 2014).

Parental Racial Worries

Parents’ race-related concerns for their children were assessed via the Worries About Racial Profiling Scale (WARP; Stevenson & Winn, 2016). The WARP comprised 22 items, which are averaged to compute a mean score. The 22 items assess the level of worry parents report having regarding their children in a variety of racial situations in which the child would be unaccompanied. Sample items include “that your children will experience random acts of violence walking through your neighborhood because of their race?” Prompts are given on a 5-point scale from 0 (not at all worried) to 5 (extremely worried). This measure was developed based on interviews with parents of color over decades regarding how they struggle to help their children navigate daily racial hostility (Fagan & Stevenson, 2002; Stevenson & Abdul-Kabir, 1996; Stevenson et al., 2002; Stevenson et al., 2005). Reliability for the current study was high ($\alpha = 0.95$).

Racial Socialization Competency

The Racial Socialization Competency Scale (RaSCS; Anderson et al., 2019) is a theory-derived instrument based on the constructs within the RECAST. The current study assessed the parents of the 10-18-year-old subsample of the original measure validation population (children ages 1-18). The original study included a factor analysis on 28 items (e.g., “Teach my child to engage rather than walk away from a negative racial encounter with another person”; “Teach my child to express the styles, languages, and communications of their culture in school”). For each item, caregivers had three stems in which they endorsed the following conceptual constructs: confidence (“I believe I can”), skills (“I am/would be prepared to”), and stress (“I am/would be stressed to”). Taken together, an example confidence item would read “I believe I can teach my child to engage rather than walk away from a negative racial encounter with another person.” Participants were asked to rate each of these 84 (28 items x three responses) total items from 1 (low) to 5 (high). Based on confirmatory factor analyses, one item was dropped from the RaSCS

and four subscales emerged. The four factors are racial socialization Confidence (27 items, $\alpha = .97$), racial socialization Skills (27 items, $\alpha = .96$), and two factors for stress, with 19 items constituting a General Stress subscale (e.g., “Share my emotions about my positive racial encounters”; $\alpha = .94$) and seven items constituting a Call to Action Stress subscale (e.g., “Teach my child to know what to say and do if they get stopped by police while walking or driving”; $\alpha = .87$). The diverging stress subscales differ primarily in the nature of requests for parents, with general stress exploring how well a parent can express and emote with their child, while call to action explores stress associated with facilitating directive behaviors against racial discrimination with their child.

Data Analysis Plan

With regard to preliminary results, the authors utilized descriptive statistics to assess the interrelationships between the relevant study variables. Moreover, because the data were drawn from three, diverse sampling sources, initial analyses assessed whether significant differences existed across these sources. Mediation analysis was performed using the PROCESS macro (Hayes, 2017) for SPSS (IBM Statistics) using 10,000 bootstrap samples with bias-corrected bootstrap confidence intervals to examine the indirect effect of racial discrimination on adolescent internalizing and externalizing behavior through parental racial worries (Model 4). The PROCESS Macro has become increasingly popular for estimating mediational analysis and has been found to be similar in interpretation to structural equation modeling (see Hayes et al., 2017). Parental age and gender were entered into the model as covariates. Notably, although cross-sectional (or atemporal) mediation has received scrutiny (see Maxwell & Cole, 2007; Maxwell et al., 2011), our rationale for utilizing it in the current analysis is two-fold: one theoretical and one practical. First, despite not being able to establish temporal precedence, the hypothesized pathway (parent’s experiences with discrimination would lead them to be worried about their children’s encounters with discrimination, which could in turn manifest in the perception of psychological problems) is theoretically and empirically sound (see Anderson et al., 2015; Thomas & Blackmon, 2015). Second, the area of racial socialization competency is still novel, and to date, longitudinal studies of these processes have yet to be established. Future longitudinal studies can verify temporal relationships inferred from our cross-sectional data. Participants with missing data on any of the study variables ($n = 4$, 2.15%) were removed from analyses, consistent with the routine of the PROCESS Macro. Of note, missing participants did

not differ significantly from the analytic sample in terms of any of the sociodemographic variables.

To test the potential moderating role of racial socialization competency, second stage moderated mediation models (Model 14) were tested within the PROCESS Macro. Notably, racial socialization confidence, skills, and two stress subscales were treated as proposed moderators in four separate models. Again, racial discrimination was entered as the independent variable, adolescent internalizing or externalizing problems were entered as the outcome, racial worry was entered as the mediator, and age and gender were entered as parental covariates. For these models, predictor and moderator variables were grand mean centered. For a sample size of 186, we had 70% power to detect a correlation of .18 or higher, 80% power to detect a correlation of .2 or higher, and 90% power to detect a correlation of .23 or higher. Our bivariate relationships were adequately powered to detect a small-medium association. We are confident that the sample size we ultimately utilized for analyses will detect meaningful associations (that is, $r = .18$ or higher) that may inform the theoretical and practical suppositions we are interested in exploring. Lastly, consistent with articulations by Hayes (2017) and Preacher and colleagues (2009), the Johnson-Neyman technique was utilized to identify the value of the moderator at which the mediation effect is conditional ($\alpha = .05$). This technique is thought to be a more robust assessment of moderated mediation than the mean \pm 1 SD approach.

Results

Preliminary Analyses

Descriptive statistics and bivariate correlations were calculated to examine associations among sociodemographic characteristics and the proposed study variables (see Table 1). With regard to demographics, chi-square tests indicated a significant difference in education level and annual household income among the three sample sources. Specifically, education level and household income of the listserv subsample was significantly higher than the other two subsamples ($ps < .001$). Collapsing across subsamples, parent age was negatively correlated with parental racial worry ($r = -.16$, $p = .036$) and report of both child internalizing ($r = -.20$, $p = .005$) and externalizing ($r = -.17$, $p = .023$) problems. With respect to child gender, one-way ANOVAs revealed that parents reported significantly higher confidence and skills ($ps < .001$) and significantly lower call to action ($p = .012$) and general racial socialization stress ($p = .017$) for girls compared to boys. Child gender was not related to any other study variables.

With respect to our first research question, racial discrimination was positively associated with adolescent internalizing ($r = .22$, $d = .45$, $p = .003$) and externalizing ($r = .22$, $d = .45$, $p = .002$) problems. Racial discrimination was also positively associated with parental racial worry ($r = .37$, $p < .001$), and, notably, worry was also significantly associated with both types of adolescent problems ($r_{INT} = .38$, $r_{EXT} = .44$, $ps < .001$). Exploring the association between parents' racial discrimination and racial socialization competency revealed that racial discrimination experiences were positively associated with general racial socialization stress ($r = .24$, $p = .001$), but not associated with other dimensions. Parents' racial worries were significantly and inversely correlated with racial socialization skills ($r = -.15$, $p = .04$) and positively correlated with both call to action ($r = .29$, $p < .001$) and general ($r = .32$, $p < .001$) racial socialization stress. Lastly, parental report of adolescents' internalizing and externalizing problems were negatively correlated with racial socialization confidence and skills, and positively associated with both types of racial socialization stress (see Table 1).

[Insert Table 1 here]

Internalizing Problems

Parental Racial Worry as a Mediator

With respect to our second research question, the total direct model was significant ($_{adj}R^2 = .09$, $df = 3$, 178 , $F = 6.85$, $p < .001$), as was the full model with worry included as a mediator ($R^2 = .19$, $df = 4$, 177 , $F = 10.23$, $p < .001$). The total effect (path c), controlling for parental age and gender was significant ($b = .092$, $p = .003$). There was no evidence that parents' racial discrimination had a direct effect on adolescent's internalizing problems (path $c' = .04$, $p = .19$). Notably, there was a significant indirect effect of racial discrimination on adolescent's internalizing problems through racial worry (effect ab_1), demonstrated by the bootstrapped 95% CI of the indirect effect, $b = 0.05$, $SE = 0.02$, 95% CI [0.02, 0.09].

Racial Socialization Competency as a Moderator of the Mediated Pathway

To test our third hypothesis as it pertained to internalizing outcomes, we examined a set of moderated mediation models using each of the four subscales of racial socialization competency (confidence, skills, stress: general, stress: call to action). Each model evaluated racial socialization competency as a moderator of the indirect path between parental racial discrimination and adolescent internalizing problems. Consistent with theory, we evaluated the

“b path” (e.g., the relation between parental racial worries and adolescent internalizing problems).

Racial Socialization Competency: Confidence. The overall model investigating racial socialization confidence as a moderator was significant ($R^2 = .30$, $df = 6$, 175 , $F = 12.69$, $p < .001$). The direct effect (c' path) of racial discrimination on internalizing problems after controlling for worry (M), racial socialization confidence (W), and their interaction (M*W) was not significant ($b = .03$, $p = .28$). Notably, there was a significant conditional indirect effect (index of moderated mediation: $b = -.05$, $SE = .02$, $95\% \text{ CI } [-.09, -.03]$). As such, the effect of racial discrimination on internalizing problems through worry varied at levels of racial socialization confidence (see Figure 2a). Johnson-Neyman analyses revealed that the effect of worry on the discrimination-internalizing behaviors link was only significant for those reporting racial socialization confidence below 4.72 (out of 5). For those parents who reported racial socialization confidence at levels above this (roughly 38% of our sample), this mediational pathway was not significant ($p = .05$).

Racial Socialization Competency: Skills. The omnibus model investigating racial socialization skills as a moderator was also significant ($R^2 = .33$, $df = 6$, 175 , $F = 14.24$, $p < .001$). The direct effect (c' path) of racial discrimination on adolescent internalizing problems after controlling for worry, racial socialization skills, and their interaction (M*W) was not significant ($b = .05$, $p = .08$). Moreover, there was a significant conditional indirect effect (index of moderated mediation: $b = -.05$, $SE = .02$, $95\% \text{ CI } [-.10, -.01]$). Johnson-Neyman analysis noted that the indirect effect of worry was only significant for those reporting lower than 4.25 (out of 5) on racial socialization skills ($p = .05$; see Figure 2b). This means that for those parents who endorsed skills in talking with their children at levels above 4.25, their worry did not significantly mediate the relationship between their discrimination experiences and their child's internalizing problems.

Racial Socialization Competency: Stress. Models including both call to action and general racial socialization stress as potential moderators were analyzed. The model with call to action stress as a moderator was significant ($R^2 = .25$, $df = 6$, 175 , $F = 9.48$, $p < .001$). Again, there was a significant conditional indirect effect (index of moderated mediation: $b = .04$, $SE = .01$, $95\% \text{ CI } [.01, .06]$). In this instance, slopes indicated that the indirect effect of worry was non-significant for those reporting 2.12 or lower in call to action stress ($p = .05$; 32% of sample);

see Figure 2c). Similarly, the model with general racial socialization stress was significant ($R^2 = .24$, $df = 6$, 175 , $F = 9.39$, $p < .001$). As with call-to-action stress, the indirect effect of worry on the discrimination-adolescent's internalizing problems link was non-significant for those participants with lower endorsement of general racial socialization stress (1.91/5; see Figure 2d).

[Insert Figure 2 here]

Externalizing Problems

Racial Worry as a Mediator

As with internalizing problems, mediation analysis was conducted to test the hypotheses concerning the impact of parental racial worry on the relationship between racial discrimination and externalizing problems. The same parental covariates (age and gender) were entered into models throughout. The total direct model was significant ($_{adj}R^2 = .07$, $df = 3$, 178 , $F = 5.20$, $p = .002$), as was the full model with worry included as a mediator ($R^2 = .21$, $df = 4$, 177 , $F = 12.01$, $p < .001$). The total effect (path c), controlling for parental age and gender was significant ($b = .092$, $p = .003$). There was no evidence that parents' racial discrimination had a direct effect on adolescent's externalizing problems (path $c' = .03$, $p = .30$), however, there was a significant indirect effect of racial discrimination on adolescent problems through racial worry (effect ab), demonstrated by the bootstrapped 95% CI of the indirect effect, $b = 0.06$, $SE = 0.02$, 95% CI $[0.03, 0.10]$.

Racial Socialization Competency as a Moderator of the Mediated Pathway

To test our third hypothesis as it pertained to externalizing outcomes, we again examined moderated mediation models using the four subscales of racial socialization competency. As with internalizing, each model evaluated racial socialization competency as a moderator of the indirect path between parental racial discrimination and adolescent externalizing problems. Consistent with theory, we evaluated the "b path" (e.g., the relation between parental racial worries and adolescent externalizing problems).

Racial Socialization Competency: Confidence. The overall model for racial socialization confidence was significant ($R^2 = .29$, $df = 6$, 175 , $F = 11.86$, $p < .001$). While the direct effect (c' path) of racial discrimination on externalizing problems was not significant ($b = .03$, $p = .41$), there was a significant conditional indirect effect (index of moderated mediation: $b = -.04$, $SE = .02$, 95% CI $[-.08, -.01]$). Although the index of moderated mediation suggested a

significant conditional indirect effect, Johnson-Neyman analysis indicated that the indirect effect of worry was significant for the entire observed range of responses (Figure 3a).

Racial Socialization Competency: Skills. The model investigating racial socialization skills as a moderator was also significant ($R^2 = .33$, $df = 6$, 175 , $F = 14.56$, $p < .001$). Again, a significant conditional indirect effect emerged (index of moderated mediation: $b = -.03$, $SE = .02$, $95\% \text{ CI } [-.08, -.01]$). The indirect effect of worry was reduced to non-significance ($p = .05$) for those endorsing 4.61 or higher (of 5) in racial socialization skills (23% of sample; Figure 3b). As with internalizing, this means that the mediating impact of worry on the discrimination to child problems pathway (i.e., externalizing problems) was no longer significant for those parents who endorsed very high skill level.

Racial Socialization Competency: Stress. The model with call-to-action stress as a moderator was significant ($R^2 = .25$, $df = 6$, 175 , $F = 9.67$, $p < .001$). Again, there was a significant conditional indirect effect (index of moderated mediation: $b = .03$, $SE = .01$, $95\% \text{ CI } [.01, .06]$). Johnson-Neyman analysis revealed that the indirect effect of worry was conditional, for those with lower endorsement of call-to-action stress (1.69/5), the effect was not significant ($p = .05$; Figure 3c). Lastly, the model with general racial socialization stress was significant ($R^2 = .26$, $df = 6$, 175 , $F = 10.49$, $p < .001$). Similar to call-to-action stress, the indirect effect of worry on the discrimination-adolescent externalizing problems relationship was significant only for those endorsing higher than 1.64 (of 5) in general racial socialization stress (Figure 3d).

[Insert Figure 3 here]

Discussion

To extend previous research on the impact of racial discrimination on adolescents' psychosocial problems and parental variables which may account for and modulate this relationship, we tested the association between parental racial discrimination, race-related worries, racial socialization competency, and adolescents' psychosocial problems. We sought to answer three lines of inquiry: 1) is there a direct relationship between parental racial discrimination and parents' reporting of their child's internalizing and externalizing problems; 2) do parental worries about their child's racism experience mediate the racial discrimination-adolescent mental health relationship; and 3) does parents' racial socialization competency (i.e.,

confidence, skills, stress) moderate the impact of parental racial worry on their adolescent child's problems? In response to the first research question, although parental discrimination experiences were significantly related to both adolescent internalizing and externalizing problems through bivariate correlations, path findings suggested that there were no direct associations (i.e., direct effect) between parental discrimination and adolescent psychosocial problems, adjusting for other psychosocial and demographic factors. While previous studies have shown direct associations between parent's racial discrimination experiences and children's psychosocial problems (Anderson et al., 2015; Ford et al., 2013; McNeil et al., 2016), such findings may be nuanced given the wide range of tools used to assess psychosocial problems in the literature (e.g., BPM, CBCL, Psychological Well-Being Scale, Survey of the Health of All the Population and the Environment). Additionally, prior studies differed with respect to reporter (self or other) and the varying age ranges (4-18) for children included in the study samples. Researchers have also shown that Black parents' fears about the prospect of experiencing discrimination has been found to be positively associated with their children's racial distress but parents' actual experiences of discrimination was not associated (Herda, 2016). Thus, the perceptions and emotions that emanate from parents' experiences of discrimination (e.g., worry or concern for their children) may be more significant than the discriminatory experience itself, giving credence to the aims of the current study. Finally, given advancements in mediation analyses and the relationships between study variables, the direct association was not a necessary component to the subsequent investigation and rather points to an indirect pathway in which discrimination influences adolescents' psychosocial outcomes (see Hayes, 2009, 2017; Shrout & Bolger, 2002 for explanations).

Secondly, and consistent with our hypotheses and prior work (Thomas & Blackmon, 2015), we found that parental discrimination was indirectly associated with adolescent children's psychosocial problems through parental worry. Said another way, parental worry helps explain the association between parents' racial discrimination experiences and adolescents' psychosocial problems, such that parental discrimination appears to negatively impact their child's behavioral health when parents are worried about the impact of discrimination. Given that there is limited empirical evidence to support these findings (see Herda, 2016), we contribute to a growing body of literature demonstrating the psychological process Black parents undergo, especially

regarding their families, when faced with racially discriminatory encounters (e.g., Anderson et al., 2015; Ford et al., 2013; McNeil et al., 2016; Thomas & Blackmon, 2015).

Third, and consistent with our hypothesis and theoretical suppositions, racial socialization competency significantly moderated the association between parental worry and adolescents' internalizing and externalizing problems in the overall model, similar to previous research examining content scales of racial socialization (Hughes et al., 2006; Neblett, et al., 2009; Richardson, et al, 2015). Our findings extend this work, moreover, given that racial socialization has not been examined through moderated mediation with parental discrimination, parental worry, and adolescent outcomes (e.g., Neblett, et al., 2009; Richardson, et al, 2015). More specifically, when parents reported more racial socialization confidence and skills, the negative impact of parental worry on adolescents' psychosocial outcomes was weakened. Similarly, when parents reported less racial socialization stress, the relationship between parental worry and adolescent psychosocial outcomes was mitigated. Akin to findings in previous studies indicating that receiving a greater quantity of individual (e.g., Hughes et al., 2006; Hugueley et al., 2019; Saleem & Lambert, 2016) or clustered (e.g., Neblett et al., 2008) racial socialization messages can be beneficial for children's outcomes, parental competency in racial socialization confidence and skills seems to be similarly protective (Jones et al., under review). Indeed, these findings support RECAST's assertions that parents' racial socialization competency is indirectly related to the improvement of adolescents' psychosocial outcomes (Anderson & Stevenson, 2019). Thus, our study adds a unique and deeper understanding to the currently available literature on the protective nature of racial socialization, particularly in the presence of racial worry.

Overall, our findings indicate that the negative impact of parents' discrimination experiences on their child's wellbeing can be reduced when their worry is attenuated through lower levels of stress to address, the skills necessary to communicate about, and confidence to prepare their children to cope with racially discriminatory experiences. As such, the findings suggest that racial socialization competence buffers the association between discrimination and adverse child outcomes. Without an adequate skillset to address their own racial worry and help their children handle discriminatory events, Black parents are inadvertently exposing their adolescent children to greater psychological and behavioral risk related to racial discrimination. Additionally, parents' low confidence likely discourages them from trying to have these discussions and arouses stress in anticipation of these conversations, indicating the

interconnectedness of the racial socialization competency constructs to racial worry and subsequent adolescent psychosocial problems.

Limitations and Future Directions

Although this study has identified a number of novel contributions, limitations provide the groundwork for future investigation. The RaSCS scale is unique in that it focuses on the quality of parental transmission of racial messages and behaviors. However, it is also important to consider that parents may have greater confidence, more skills, and less stress for a given racial socialization domain. Therefore, future studies would benefit from taking a person-centered approach to evaluate parental competency, skills, and stress across the most salient strategies of racial socialization and examine how the combination of these communications impact adolescents' outcomes (see Jones et al., under review). Further, while our statistical analysis did not show child age as a significant factor within the present study, it is important to consider developmental differences in future work with racial socialization competency. For example, parents' concerns about their child's experience of discrimination may vary based on child's age (McHale et al., 2006; White-Johnson, Ford & Sellers, 2010; Jones et al., 2020). Additionally, parents likely need different competencies (e.g., skills, confidence) based on their child's developmental age (e.g., early childhood, school age, adolescence). Furthermore, attention should be given to demographic correlates and generalizability. The sample yielded slightly above-average income and college graduation for Black adults, so future studies should incorporate a representative sample to ensure generalizability. Likewise, it is important to be mindful of the source of participants (e.g., MTurk crisis; Chmielewski & Kucker, 2019), particularly when sampled from an online pool of self-selecting individuals. Moreover, though we know that our sample was recruited nationally, our lack of specific geographical information on participants limits our ability to speak to the generalizability of our findings.

As a cross-sectional study, it is not possible to establish the direction of the associations. We utilized atemporal mediation within our analyses, but we cannot be sure that the hypothesized pathways are undoubtedly explaining relationships between parental discrimination and adolescent psychosocial outcomes. Reverse causality cannot be fully dismissed, as for example, worry could alter reporting of perceived discrimination experiences. Therefore, future studies would benefit from examining these constructs longitudinally to better understand the temporal sequence of these processes, particularly as a function of racial socialization

competency as a mechanism of change in adolescent psychosocial outcomes. Additionally, while this study did not focus on parenting children of different genders or developmental stages (e.g., adolescents from the ages of 10-18), there is a robust literature detailing psychosocial outcomes and racial socialization differences by those domains (e.g., McNeil Smith et al., 2016; Wang et al., 2020). As such, it is critical to consider how the investigation or intervention of Black families along these lines would impact future studies. Furthermore, self-report from the adolescents themselves would help to corroborate or distinguish from perceptions of the parent; as such, future studies should collect responses from the family unit whenever possible. For example, the consideration of certain externalizing qualities (e.g., anger) may serve as a useful and constructive coping strategy to adolescent racial processes included in their critical racial consciousness (e.g., Nicolas et al., 2008). Umaña-Taylor and Hill (2020) also emphasized how the experience of parental or adolescent discrimination impacts the ways in which racial socialization is catalyzed within family practices; thus, the addition of adolescent reporters extends not only the provision of responses, but can help to inform what we understand the pathways to be from discrimination to child outcomes. Finally, considering how parental worry is related to specific psychological problems for parents (e.g., anxiety, depression) may provide greater context for the impact of and coping strategies used to contend with such worry.

Implications

The current study provides new insights into the influence of parental worries and racial socialization competency between parental racial discrimination experiences and their child's psychosocial problems. With particular respect to the recommendations from Hughes and colleagues (2006), this study integrated racial socialization in the broader context of parenting, utilized a process-oriented assessment tool, and contributed more wholly to the familial mechanisms concerning positive child development. In addition to RECAST, which emphasizes the development of perceived racial socialization competency to enhance adolescents' coping skills for racial encounters (Anderson & Stevenson, 2019), our findings underscore the importance of the development of parental confidence and skills in serving as protective factors in the association between racial discrimination and adolescents' psychosocial outcomes. While many studies document the negative effect that discrimination has on mental health outcomes, they also emphasize the important protective role familial factors can play (McNeil et al., 2019). Our study contributes to the literature by elucidating previously identified mechanisms (e.g.,

racial socialization) associated with racial discrimination and advancing unique stressors (e.g., racial worries) to understand the role of racially specific risk and protective factors on the relational pathways. It is critical that caregivers develop confidence and skill sets within racial socialization, as the lack thereof relates to less capacity to mitigate parental worry, thereby indirectly affecting their children's psychosocial outcomes.

As recently recommended by Umaña-Taylor and Hill (2020), a focus on parental self-efficacy and other process-oriented factors will be useful in understanding racial socialization more holistically. Additionally, Stevenson (2014) has proposed that racial literacy, or the practiced emotional regulation of racial stress and assertive racial coping during racial encounters, can be a reasonable next step in positioning racial socialization as a skills-based endeavor for children and adults (see Scott, Pinderhughes, & Johnson, 2019). Such process- and skill-oriented changes have been found through intentional parenting programming (e.g., Black Parenting Strengths & Strategies; Coard, Foy-Watson, Zimmer, & Wallace, 2007) and therapeutic interventions (e.g., Engaging, Managing, & Bonding through Race; Anderson, McKinney, & Stevenson, 2018) which seek to improve racial socialization processes and, more importantly, regulation of the emotional toll of such practices. Such interventions that provide specific language, skills, and opportunities to rehearse them is expected to boost competence for parents, thus reducing psychosocial problems for their child (Anderson & Stevenson, 2019). Likewise, our findings suggest a need for interventions that can help parents manage worry as a result of racial discrimination experiences (Furman, Lietz & Langer, 2006).

Together, the results point to potential mechanisms for intervention by highlighting the potency of parental socialization practices in mitigating psychological harm for parents and adolescents. This study also provides additional evidence of the psychological processes and function undergirding the racial socialization process, which emphasizes the need for exploring not only the content of racial socialization messages, but the competency dimensions inherent within. The core components of competence and mastery (e.g., attitudes, knowledge, and reduction of problem behaviors; Frydenberg, 2004) help to shift racial socialization transmission and acquisition processes from static or abstract to applied and malleable. Findings indicate that a good deal of this sample would benefit from some type of intervention to improve their competency and help to mitigate their worry for their child's psychosocial well-being. Although

parental confidence in their racial socialization ability was more robust than perception of racial socialization skills, both would be critical as targets for intervention.

Conclusion

At the time of this writing, families are facing unique challenges in their homes and communities. Unlike most other times in modern history, families are with each other more often than not due to COVID-19 quarantine and lockdown measures. In addition to a global pandemic, parents and children have also witnessed highly publicized killings of Black people and racial uprisings from citizens worldwide. When parents assess what they must do to keep their children safe, they are now facing a number of new considerations and worries. This study sought to investigate psychological and race-related variables which may offer guidance during such a time, providing empirical support to a racially specific stress and coping process for Black parents experiencing racial discrimination and their adolescent children. Findings emphasize the importance of investigating racial socialization from a competency perspective, with a goal to modulate levers of change for improvements to Black adolescents' psychosocial wellness through behavioral health interventions (e.g., Anderson et al., 2019). Moreover, this work advances our efforts toward understanding racial socialization practices from a family systems and child development perspective where emotional regulation during parent-child interactions have to be accounted for as central to the reduction of racial harm for parents and adolescents (Stevenson, 2014). Although Black American families have been subjected to racially discriminatory challenges over time, their strength and racially specific coping strategies continue to protect Black children from the deleterious consequences of this harm. That a parent's worst fears of racial profiling and maltreatment toward their children could be lessened by how well they skillfully teach them to navigate that hostility is not simply a finding, but a healing notion. It is our hope that the findings from this study will help us to better understand how to interrupt this pathway to improve the psychosocial health of Black adolescents and support their parents in successfully meeting a crucial child-rearing demand during a formative and consequential developmental period, especially in this current context.

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Table 1

Means, Standard Deviations, and Zero-Order Correlations Among Study Variables (N = 186)

Variable	1	2	3	4	5	6	7	8	9	10	11
1. Parent Age	--										
2. Child Age	.30**	--									
3. Parent Education Status	.06	-.12	--								
4. Parental Racial Discrimination	-.01	-.09	.12	--							
5. Parental Racial Worry	-.16*	-.15*	.06	.37**	--						
6. RS Confidence	.06	-.03	.08	-.09	-.15	--					
7. RS Skills	.07	-.03	.03	-.06	-.15*	.70**	--				
8. RS Stress: Call to Action	-.01	.08	-.05	.14	.29**	-.31**	-.35**	--			
9. RS Stress: General	-.07	.03	-.06	.24**	.32**	-.46**	-.48**	.76**	--		
10. Youth Internalizing Problems	-.20**	-.01	.12	.22**	.38**	-.32**	-.37**	.21**	.24**	--	
11. Youth Externalizing Problems	-.17*	-.06	.07	.22**	.44**	-.28**	-.37**	.17*	.28**	.71**	--
M	42.95	13.79	4.13	2.59	2.40	4.32	3.96	2.58	2.31	1.34	1.34
SD	10.40	2.40	1.55	0.92	0.88	0.71	0.75	0.91	0.78	0.40	0.41

Note. *p < .05; **p < .01

Note. RS = Racial socialization

Figure 1
 Conceptual (top) and Statistical (bottom) Models of Moderated Mediation

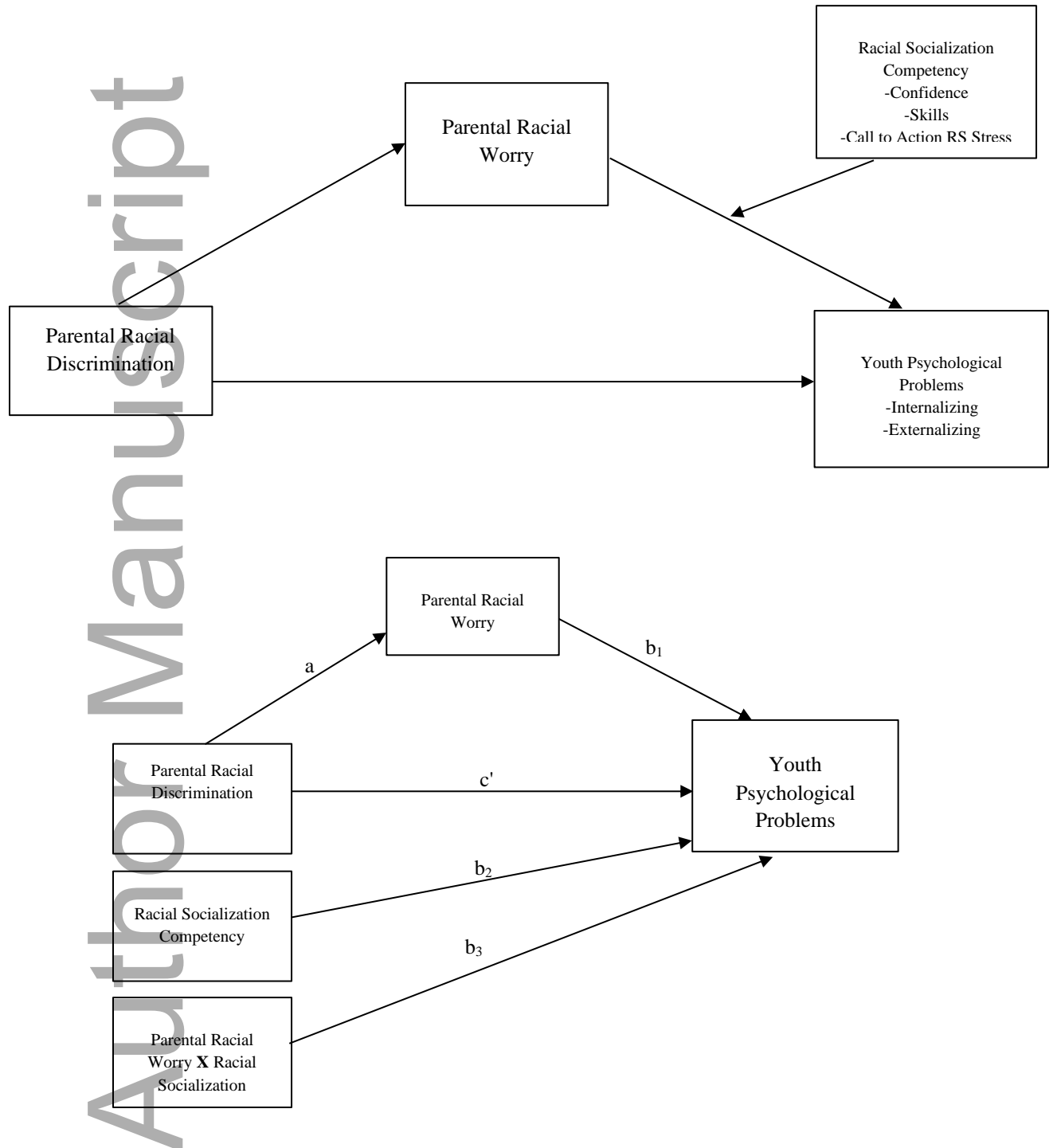
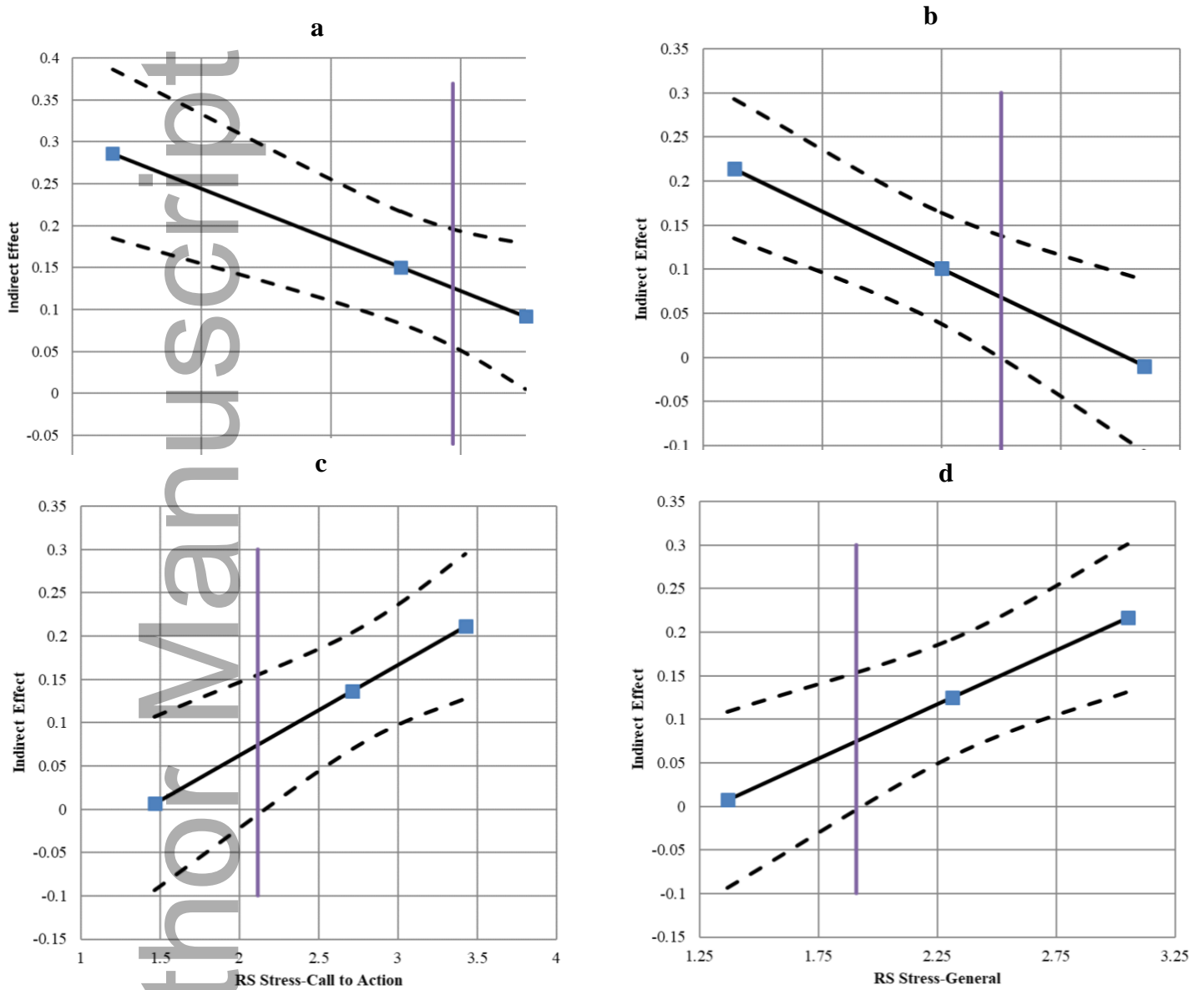


Figure 2

Conditional Indirect Effects of Parental Racial Discrimination on Youth Internalizing Problems at Values of the Racial Socialization Moderators

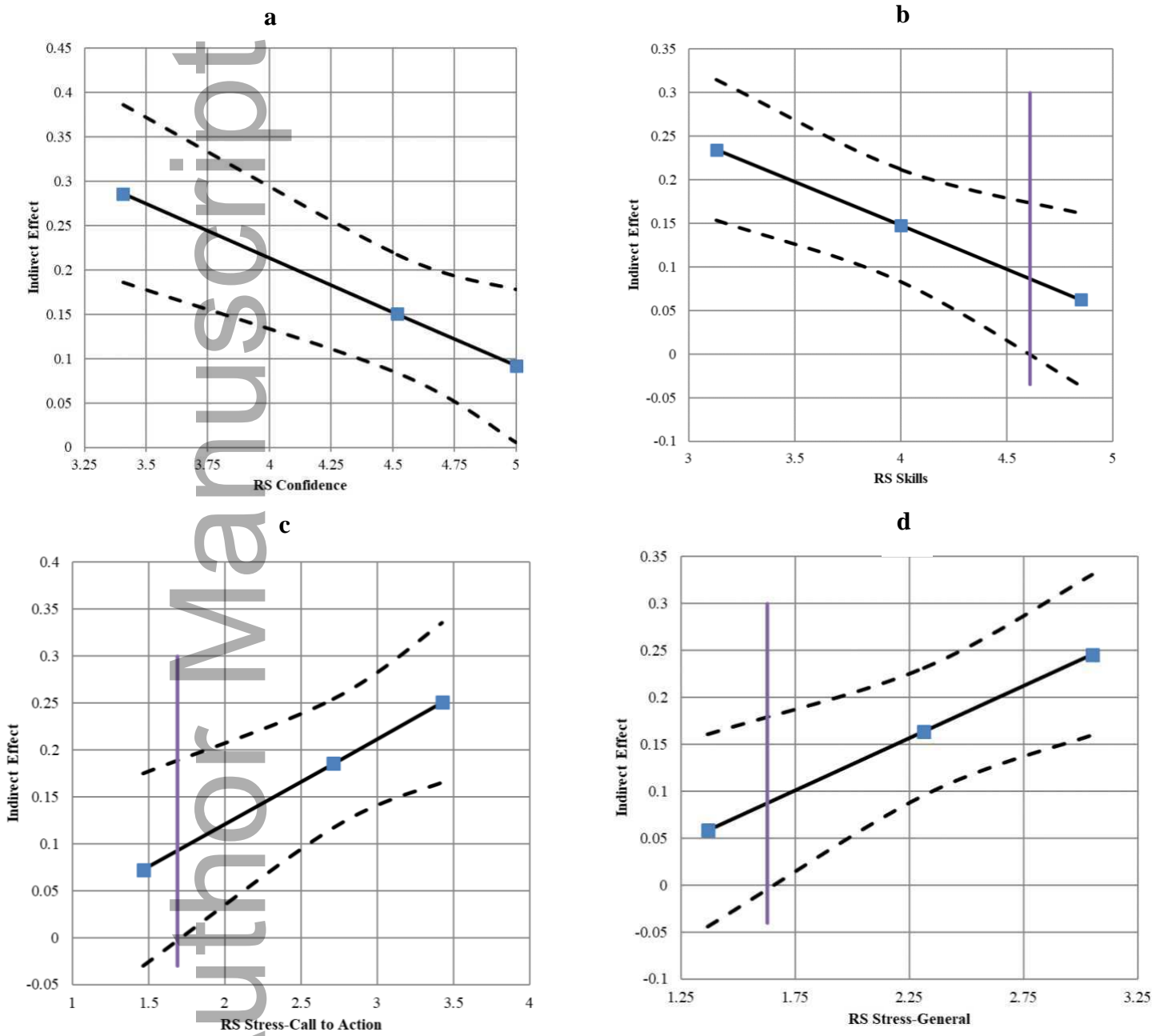


Note. a) Racial Socialization (RS) Confidence, b) RS Skills, c) RS Stress-Call to Action, d) RS Skills-General.

Note. Johnson-Neyman line denotes values of the moderator beyond which the indirect effect is non-significant

- 95% CI Upper Limit
- Conditional Indirect Effect
- 95% CI Lower Limit
- Johnson-Neyman

Figure 3
 Conditional Indirect Effects of Parental Racial Discrimination on Youth Externalizing Problems
 at Values of the Racial Socialization Moderators



Note. a) Racial Socialization (RS) Confidence b) RS Skills c) RS Stress-Call to Action; and d) RS Stress-General through parental racial worry.

Note. Johnson-Neyman line denotes values of the moderator beyond which the indirect effect is non-significant.

--- 95% CI Upper Limit
 ■ Conditional Indirect Effect
 --- 95% CI Lower Limit
 — Johnson-Neyman