

BRIEF REPORT

Race Moderates the Relation Between Internalized Stigma and Suicidal Thoughts and Behaviors in Youth With Psychosis-Risk Syndromes and Early Psychosis

LeeAnn Akouri-Shan¹, Samantha Y. Jay¹, Joseph S. DeLuca², Emily Petti³, Mallory J. Klaunig³, Pamela Rakhshan Rouhakhtar¹, Elizabeth A. Martin³, Gloria M. Reeves⁴, and Jason Schiffman³

¹ Department of Psychology, University of Maryland, Baltimore County

² Department of Psychiatry, Icahn School of Medicine at Mount Sinai

³ Department of Psychological Science, University of California, Irvine

⁴ Division of Child and Adolescent Psychiatry, Department of Psychiatry, University of Maryland School of Medicine

Suicide is a leading cause of death among youth on the psychosis spectrum. Internalized mental health stigma is one risk factor for suicide that may be particularly salient for youth with psychosis-risk syndromes and early psychosis. Among this population, Black youth may face exposure to racism-related stressors that may exacerbate the negative effects of internalized stigma. This study examined whether internalized stigma and race interact to predict suicidal thoughts and behaviors (STB) in a help-seeking sample of Black and White adolescents with psychosis-risk syndromes and early psychosis. Findings suggest that Black youth with early psychosis spectrum disorders may be particularly vulnerable to the negative effects of internalized stigma as they pertain to STB. Internalized stigma may therefore represent an important treatment target in suicide prevention efforts among this population.

Keywords: clinical high risk, early psychosis spectrum, suicidal thoughts and behaviors, internalized stigma, race

Suicide is a leading cause of death among youth with early psychosis spectrum disorders, and suicidal thoughts and behaviors (STB) are highly prevalent within this population (Pelizza et al., 2019; Sicotte et al., 2021). Recent research has also indicated that suicide rates are increasing among Black youth (Bridge et al., 2018; Lindsey et al., 2019), though few have studied potential explanatory

mechanisms. Internalized stigma of mental illness is one well-established risk factor for STB, and studies have demonstrated that youth with attenuated or early psychosis symptoms may experience elevated rates of internalized stigma, including perceived discrimination and feelings of shame and rejection associated with their symptoms and/or diagnosis (Colizzi et al., 2020). Among this group, different forms of stigma—for example, prejudice and discrimination related to both race and mental health—may be compounded for the youth of color (e.g., Anglin et al., 2016). In addition to individual-level stigma, Black youth may also be more likely to experience structural stigma in the form of systemic oppression and exclusion from opportunities and resources that might be available to their White peers (Anglin et al., 2021). Black youth are also more likely than White youth to be exposed to social, economic, and political adversity and other racism-related stressors (Anglin et al., 2021) that may confer additional vulnerability and contribute to a heightened risk for suicide (Baiden et al., 2020; Lindsey et al., 2019).

Despite evidence that stigma contributes to STB and may be compounded for those with multiple marginalized identities, as well as calls to consider how intersectionality affects both mental health stigma and risk for suicide (Oexle & Corrigan, 2018; Opara et al., 2020), no known studies have directly examined whether the relation between internalized mental health stigma and STB varies as a function of race in youth with psychosis-risk syndromes and early psychosis. Gaining a better understanding of how stigma and race intersect to influence STB may be important in informing suicide prevention efforts among this population.

This article was published Online First October 13, 2022.

The authors would like to thank the research participants and their families for their time, effort, and collaboration in this study. Jason Schiffman received funding from the National Institute of Mental Health (Grant R01MH112612), the Maryland Department of Health and Mental Hygiene, Behavioral Health Administration through the Maryland Center of Excellence on Early Intervention Program (MEIP; OPASS# 14-13717G/M00B4400241), and the Substance Abuse and Mental Health Services Administration (Community Intervention for those at Clinical High Risk for Psychosis, vis a vis MD State Dept of Health, SM081092-01). Joseph S. DeLuca received funding from the National Institute of Mental Health from a T32 Grant 1T32MH122394-01. The funding sources did not have a role in the writing of this article. All authors declare that they have no conflicts of interest to disclose.

The data that support the findings of this study are available from the corresponding author upon reasonable request.

Correspondence concerning this article should be addressed to Jason Schiffman, Department of Psychological Science, University of California, Irvine, 4201 Social and Behavioral Sciences Gateway, Irvine, CA 92697, United States. Email: jason.schiffman@uci.edu

The Present Study

This study examined whether internalized stigma and race interact to predict STB in a help-seeking sample of Black and White youth with psychosis-risk syndromes and early psychosis ($N = 34$). As stigma and associated stressors may be heightened among Black youth, we hypothesized that the effect of internalized stigma on STB would be more pronounced among Black versus White participants. Further, as STB has been linked to affective symptoms in clinical high risk for psychosis (CHR) and early psychosis (Pelizza et al., 2019; Taylor et al., 2015; Ventriglio et al., 2016), we opted to control for the presence of a mood disorder diagnosis in our analyses.

Method

Participants

Participants aged 12–18 were recruited through the Strive for Wellness clinic, affiliated with the University of Maryland, Baltimore County (UMBC), and the University of Maryland, School of Medicine (UMSOM), and referred for suspected psychosis-risk symptoms and related mental health concerns. The present study included only those who met the criteria for a psychosis-risk syndrome (i.e., those at clinical high risk for psychosis, or CHR) or early psychosis (EP). CHR/EP status was determined via a gold standard clinical interview for assessing psychosis spectrum symptoms (see below for more detail).

Procedure

All participants were accompanied by a legal guardian. Participants and their caregivers provided written assent and informed consent prior to study participation. Following the consent process, participants and their caregivers each completed a series of clinical interviews and self-report questionnaires. Study procedures were approved by the institutional review boards at UMBC and UMSOM.

Measures

Demographics

Race, age, and binary gender were self-reported by participants. The sample was limited to participants who identified as either Black (including three participants who identified as biracial or multiracial—i.e., Black and one or more other races¹) or White.

Kiddie Schedule for Affective Disorders and Schizophrenia, Present and Lifetime Version

STB was assessed via the Kiddie Schedule for Affective Disorders and Schizophrenia, Present and Lifetime Version (K-SADS-PL), a clinical interview that assesses for *Diagnostic and Statistical Manual (DSM-IV and DSM-5)* diagnoses in youth ages 6–18 (Kaufman et al., 1997). The K-SADS suicide screener was used to assess for lifetime STB in the forms of (a) recurrent thoughts of death, (b) suicidal ideation, and (c) suicidal acts/attempts. Items were rated as “no information” (0), “not present” (1), “subthreshold” (2), or “threshold” (3) and separately administered to participants and caregivers. A total STB score was then calculated by summing scores on each of the three items (e.g., Koren et al., 2019). The

highest lifetime score (chosen from either parent, child, or summary ratings²) was used in analyses.

Mood disorder diagnosis was assessed via the K-SADS and represents any lifetime depressive and/or bipolar spectrum diagnoses.

Internalized Stigma of Mental Illness Inventory

Internalized stigma was assessed using the Internalized Stigma of Mental Illness Inventory (ISMI), a 29-item measure that evaluates feelings of self-stigma in people with mental health concerns (Ritsher et al., 2003). Items were rated on a 4-point Likert scale (“strongly disagree” to “strongly agree”), with higher scores indicating greater stigma. Participants also had the option to endorse “Don’t Know,” which was subsequently coded as missing data. ISMI total scores were calculated using the mean of the total number of answered items. Reliability of the ISMI in our sample was $\alpha = .92$.

Structured Interview for Psychosis-Risk Syndromes

CHR/EP status was determined via the Structured Interview for Psychosis-Risk Syndromes (SIPS), a clinical interview that assesses for psychosis spectrum symptoms and psychosis-risk syndromes and was based on severity ratings (ranging from 0, or “not present” to 6, or “severe”) on any of five positive symptom domains (McGlashan et al., 2010). Participants were categorized as CHR if they endorsed symptoms at the level of a three or above, with the symptoms meeting SIPS frequency/duration criteria, or if they met criteria for schizotypal personality disorder and/or had a first-degree relative with psychosis, accompanied by a significant decline in functioning. Participants with EP-endorsed symptoms at the level of a six or above, with the symptoms occurring for a prolonged duration and/or considered to be “seriously disorganizing or dangerous.”

Results

Preliminary Analyses

The final analysis sample consisted of 34 participants with data on the ISMI, STB, and mood disorder measures (see Table 1, for descriptive statistics and group differences by race). All variables were within acceptable limits of normality and without outliers. Apart from internalized stigma and STB being moderately correlated in the expected direction ($r = .35$), no other significant correlations among internalized stigma, race, STB, and mood disorder diagnosis were observed.

Primary Analyses

A multiple regression analysis estimated the effects of internalized stigma (centered prior to the analysis), race (coded as 0 = Black, 1 = White), mood disorder diagnosis (coded as 0 = no, 1 = yes), and the interaction between internalized stigma and race on STB.

¹ Although no group should be conceptualized monolithically, research has suggested that individuals who identify as Black and one or more other races are often racialized as Black and may experience similar social consequences (Brunsma & Rockquemore, 2001; Lewis, 2016).

² Summary ratings are determined by the interviewer and consider all sources of available information (e.g., parent, child, other informants).

Table 1
Descriptive Statistics and Group Differences by Race

| Study variable | Black (<i>N</i> = 12) | White (<i>N</i> = 22) | Group differences |
|--|--------------------------------------|--------------------------------------|--|
| | <i>n</i> (%)/ <i>M</i> (<i>SD</i>) | <i>n</i> (%)/ <i>M</i> (<i>SD</i>) | |
| Clinical status | | | |
| CHR | 7 (58%) | 15 (68%) | <i>p</i> = .711, Fisher's exact test |
| EP | 5 (42%) | 7 (32%) | |
| Age (years) ^a | 15.78 (2.45) | 17.96 (3.08) | <i>t</i> (32) = -2.11, <i>p</i> = .043 |
| Binary gender | | | |
| Female | 7 (58%) | 10 (45%) | <i>p</i> = .721, Fisher's exact test |
| Male | 5 (42%) | 12 (55%) | |
| Internalized stigma (scale range: 1–4) | 1.89 (0.40) | 2.14 (0.60) | <i>t</i> (32) = -1.29, <i>p</i> = .206 |
| STB (scale range: 3–9) | 6.25 (2.63) | 6.50 (1.77) | <i>t</i> (32) = -0.33, <i>p</i> = .743 |
| Mood disorder ^b | 6 (50%) | 16 (73%) | <i>p</i> = .265, Fisher's exact test |

Note. *N* = 34. CHR = clinical high risk for psychosis; EP = early psychosis; STB = suicidal thoughts and behaviors.

^aBlack youth were more likely to be younger than White youth, though age was not significantly correlated with any other study variables of interest and was, therefore, not considered in analyses. ^bCoded as (0 = no mood disorder, 1 = mood disorder). Mood disorders included both depressive and bipolar spectrum disorders.

The overall model was significant ($R^2 = .31$), $F(4, 29) = 3.27$, $p = .025$. Mood disorder diagnosis had a nonsignificant effect on STB ($b = 0.55$), $t(29) = 0.80$, $p = .428$, $f^2 = 0.02$. There was a significant interaction between internalized stigma and race ($b = -4.27$), $t(29) = -2.76$, $p = .010$, $f^2 = 0.26$, suggesting that, when controlling for mood disorder diagnosis, the relation between internalized stigma and STB differed by race. The simple effects of internalized stigma were therefore probed for Black and White youth. We observed a large effect of internalized stigma on STB for Black participants ($b = 4.72$), $t(29) = 3.42$, $p = .002$, $f^2 = 0.40$, with higher levels of internalized stigma significantly predicting higher levels of STB. By contrast, there did not appear to be a significant effect of internalized stigma on STB for White participants ($b = 0.46$), $t(29) = 0.68$, $p = .504$, $f^2 = 0.02$.

Discussion

Although preliminary given the small sample, findings support the idea that within the psychosis-risk and early psychosis population, even though Black and White youth do not appear to differ significantly in the amount of internalized stigma they report, Black youth may be particularly vulnerable to the negative psychological effects of stigma as they relate to STB. Some have pointed to higher levels of public stigma associated with psychosis among communities of color (Rao et al., 2007), with Campbell and Mowbray (2016) suggesting that heightened mental health stigma in Black communities may reflect the “precarious social status of Black Americans in the United States” (p. 225) rather than specific cultural beliefs and practices per se. In other words, for a person of color, mental illness may be associated with further loss of status in ways that are more damaging than for someone in a more privileged group. As it pertains to our findings, Black youth experiencing internalized stigma in the context of psychosis spectrum symptoms might also experience higher levels of distress related to the implications of these symptoms for their position in society broadly speaking, which might then contribute to higher rates of STB.

Treatment-related disparities and medical mistrust may also play a role in the relation between internalized stigma and STB for Black youth on the psychosis spectrum. In one community sample of

Black adults, participants associated mental health care with forced treatment and discussed historical and personal examples of racism within health care settings (Mishra et al., 2009). These messages may affect the caregivers of Black youth with early psychosis spectrum symptoms and may also be transmitted intergenerationally to affect help-seeking attitudes among Black youth themselves. Black youth may also face reduced access to treatment, perpetuated by logistical barriers, inconsistencies in the quality of care, and a lack of culturally sensitive interventions (Oluwoye et al., 2021). Experiences of internalized stigma in this group may therefore exacerbate feelings of hopelessness, with the mental health system not perceived as a solution for psychosis-related symptoms, possibly increasing STB. Internalized stigma may also lead to maladaptive coping in the form of STB that is less likely to be offset by positive treatment experiences.

Black youth may face increased exposure to other microlevel (e.g., personal experiences of prejudice and discrimination) and macrolevel (e.g., social, economic, and political violence) stressors that are directly tied to systemic racism in the United States. Links between racism-related stress and negative mental health outcomes are well-documented among the youth of color (Priest et al., 2013), and prior studies have found that perceived racial discrimination has both direct and indirect (e.g., through the increased prevalence of mental health concerns such as depression) effects on STB among Black youth (Arshanapally et al., 2017). There has also been increasing attention to vicarious experiences of racial trauma through exposure to the race-related violence in the media (Tynes et al., 2019). For the youth of color, it may be that multiple and often overlapping experiences of the stigma associated with both psychosis and race, combined with their resulting psychological and social consequences, lead to increased risk for STB.

Limitations

The cross-sectional design prevents establishing temporal relations among variables and geographical location may limit complete generalizability. The small sample size may have limited our ability to detect small- to moderate-sized, and potentially clinically meaningful,

effects. For instance, contrary to existing research, we did not detect a significant relation between internalized stigma and STB in our White participants. Sample size may also have implications for the reliability of findings, though data distributions did not suggest that findings were driven by outliers. Furthermore, although Black and White participants did not differ statistically on levels of internalized stigma or prevalence of a mood disorder, these variables were numerically—and perhaps clinically meaningfully—different between groups, and lack of power may have obscured effects with possible implications for the main findings. Future research should aim to replicate our findings in larger samples of youth with early psychosis spectrum disorders, while also being mindful of the potential effects of relevant covariates. Our race variable categorized participants as either “Black” or “White,” failing to capture the significant amount of diversity that exists within these groups. Importantly, racial differences observed in this study are a product of social forces (e.g., systems of oppression) rather than inherent differences between racial groups (Guess, 2006). STB was conceptualized as a singular continuous variable, though there are likely distinct processes within this construct.

Conclusion and Future Directions

Findings suggest that compared to their White peers, Black help-seeking youth with early psychosis spectrum disorders may be particularly vulnerable to the negative effects of internalized stigma as they pertain to STB. Potential explanatory mechanisms include increased psychosis-related public mental health stigma among Black communities, decreased help-seeking behavior and access to effective and culturally sensitive treatment interventions, and increased exposure to a host of racism-related stressors that, when considered in conjunction with psychosis-related stigma, directly and indirectly impact STB. Our findings suggest that internalized stigma may represent an important treatment target in suicide prevention efforts for Black youth. Future research should continue to explore the role of other potential mediating and moderating variables among internalized stigma, STB, and race within youth with early psychosis spectrum disorders.

References

- Anglin, D. M., Ereshefsky, S., Klaunig, M. J., Bridgwater, M. A., Niendam, T. A., Ellman, L. M., DeVylder, J., Thayer, G., Bolden, K., Musket, C. W., Grattan, R. E., Lincoln, S. H., Schiffman, J., Lipner, E., Bachman, P., Corcoran, C. M., Mota, N. B., & van der Ven, E. (2021). From womb to neighborhood: A racial analysis of social determinants of psychosis in the United States. *The American Journal of Psychiatry*, *178*(7), 599–610. <https://doi.org/10.1176/appi.ajp.2020.20071091>
- Anglin, D. M., Greenspoon, M., Lighty, Q., & Ellman, L. M. (2016). Race-based rejection sensitivity partially accounts for the relationship between racial discrimination and distressing attenuated positive psychotic symptoms. *Early Intervention in Psychiatry*, *10*(5), 411–418. <https://doi.org/10.1111/eip.12184>
- Arshanapally, S., Werner, K. B., Sartor, C. E., & Buchholz, K. K. (2017). The association between racial discrimination and suicidality among African-American adolescents and young adults. *Archives of Suicide Research*, *22*(4), 584–595. <https://doi.org/10.1080/13811118.2017.1387207>
- Baiden, P., LaBrenz, C. A., Asiedua-Baiden, G., & Muehlenkamp, J. J. (2020). Examining the intersection of race/ethnicity and sexual orientation on suicidal ideation and suicide attempt among adolescents: Findings from the 2017 youth risk behavior survey. *Journal of Psychiatric Research*, *125*, 13–20. <https://doi.org/10.1016/j.jpsychires.2020.02.029>
- Bridge, J. A., Horowitz, L. M., Fontanella, C. A., Sheftall, A. H., Greenhouse, J., Kelleher, K. J., & Campo, J. V. (2018). Age-related racial disparity in suicide rates among US youths from 2001 through 2015. *JAMA Pediatrics* *172*(7), 697–699. <https://doi.org/10.1001/jamapediatrics.2018.0399>
- Brunsma, D. L., & Rockquemore, K. A. (2001). The new color complex: Appearance and biracial identity. *Identity: An International Journal of Theory and Research*, *1*(3), 225–246. https://doi.org/10.1207/S1532706XID0103_03
- Campbell, R. D., & Mowbray, O. (2016). The stigma of depression: Black American experiences. *Journal of Ethnic & Cultural Diversity in Social Work*, *25*(4), 253–269. <https://doi.org/10.1080/15313204.2016.1187101>
- Colizzi, M., Ruggeri, M., & Lasalvia, A. (2020). Should we be concerned about stigma and discrimination in people at risk for psychosis? A systematic review. *Psychological Medicine* *50*(5), 705–726. <https://doi.org/10.1017/S0033291720000148>
- Guess, T. J. (2006). The social construction of whiteness: Racism by intent, racism by consequence. *Critical Sociology*, *32*(4), 649–673. <https://doi.org/10.1163/156916306779155199>
- Kaufman, J., Birmaher, B., Brent, D., Rao, U., Flynn, C., Moreci, P., Williamson, D., & Ryan, N. (1997). Schedule for affective disorders and schizophrenia for school-age children-present and lifetime version (K-SADS-PL): Initial reliability and validity data. *Journal of the American Academy of Child & Adolescent Psychiatry*, *36*(7), 980–988. <https://doi.org/10.1097/00004583-199707000-00021>
- Koren, D., Rothschild-Yakar, L., Lacoua, L., Brunstein-Klomek, A., Zelezniak, A., Parnas, J., & Shahar, G. (2019). Attenuated psychosis and basic self-disturbance as risk factors for depression and suicidal ideation/behaviour in community-dwelling adolescents. *Early Intervention in Psychiatry*, *13*(3), 532–538. <https://doi.org/10.1111/eip.12516>
- Lewis, M. B. (2016). Arguing that Black is White: Racial categorization of mixed-race faces. *Perception*, *45*(5), 505–514. <https://doi.org/10.1177/0301006615624321>
- Lindsey, M. A., Sheftall, A. H., Xiao, Y., & Joe, S. (2019). Trends of suicidal behaviors among high school students in the United States: 1991–2017. *Pediatrics*, *144*(5), Article e20191187. <https://doi.org/10.1542/peds.2019-1187>
- McGlashan, T., Walsh, B., & Woods, S. (2010). *The psychosis-risk syndrome: Handbook for diagnosis and follow-up*. Oxford University Press.
- Mishra, S. I., Lucksted, A., Gioia, D., Barnet, B., & Baquet, C. R. (2009). Needs and preferences for receiving mental health information in an African American focus group sample. *Community Mental Health Journal*, *45*(2), 117–126. <https://doi.org/10.1007/s10597-008-9157-4>
- Oexle, N., & Corrigan, P. W. (2018). Understanding mental illness stigma toward persons with multiple stigmatized conditions: Implications of intersectionality theory. *Psychiatric Services*, *69*(5), 587–589. <https://doi.org/10.1176/appi.ps.201700312>
- Oluwoye, O., Davis, B., Kuhney, F. S., & Anglin, D. M. (2021). Systematic review of pathways to care in the U.S. for Black individuals with early psychosis. *NPJ Schizophrenia*, *7*(1), Article 58. <https://doi.org/10.1038/s41537-021-00185-w>
- Opara, I., Assan, M. A., Pierre, K., Gunn, J. F., III, Metzger, I., Hamilton, J., & Arugu, E. (2020). Suicide among Black children: An integrated model of the interpersonal–psychological theory of suicide and intersectionality theory for researchers and clinicians. *Journal of Black Studies*, *51*(6), 611–631. <https://doi.org/10.1177/0021934720935641>
- Pelizza, L., Poletti, M., Azzali, S., Paterlini, F., Garlassi, S., Scazza, I., Chiri, L. R., Pupo, S., & Raballo, A. (2019). Suicidal thinking and behavior in adolescents at ultra-high risk of psychosis: A two-year longitudinal study. *Suicide & Life-Threatening Behavior*, *49*(6), 1637–1652. <https://doi.org/10.1111/sltb.12549>
- Priest, N., Paradies, Y., Trener, B., Truong, M., Karlsen, S., & Kelly, Y. (2013). A systematic review of studies examining the relationship between reported racism and health and wellbeing for children and young people.

- Social Science & Medicine*, 95, 115–127. <https://doi.org/10.1016/j.socscimed.2012.11.031>
- Rao, D., Feinglass, J., & Corrigan, P. (2007). Racial and ethnic disparities in mental illness stigma. *Journal of Nervous and Mental Disease*, 195(12), 1020–1023. <https://doi.org/10.1097/NMD.0b013e31815c046e>
- Ritsher, J. B., Otilingam, P. G., & Grajales, M. (2003). Internalized stigma of mental illness: Psychometric properties of a new measure. *Psychiatry Research*, 121(1), 31–49. <https://doi.org/10.1016/j.psychres.2003.08.008>
- Sicotte, R., Iyer, S. N., Kiepara, B., & Abdel-Baki, A. (2021). A systematic review of longitudinal studies of suicidal thoughts and behaviors in first-episode psychosis: Course and associated factors. *Social Psychiatry and Psychiatric Epidemiology*, 56, 2117–2154. <https://doi.org/10.1007/s00127-021-02153-2>
- Taylor, P. J., Hutton, P., & Wood, L. (2015). Are people at risk of psychosis also at risk of suicide and self-harm? A systematic review and meta-analysis. *Psychological Medicine* 45(5), 911–926. <https://doi.org/10.1017/S0033291714002074>
- Tynes, B. M., Willis, H. A., Stewart, A. M., & Hamilton, M. W. (2019). Race-related traumatic events online and mental health among adolescents of color. *The Journal of Adolescent Health*, 65(3), 371–377. <https://doi.org/10.1016/j.jadohealth.2019.03.006>
- Ventriglio, A., Gentile, A., Bonfitto, I., Stella, E., Mari, M., Steardo, L., & Bellomo, A. (2016). Suicide in the early stage of schizophrenia. *Frontiers in Psychiatry*, 7, Article 116. <https://doi.org/10.3389/fpsy.2016.00116>

Received June 17, 2022

Revision received August 24, 2022

Accepted September 2, 2022 ■