The Relationship Between Minority Student Organization Membership and Willingness to Seek Mental Health Treatment, Mediated by Ethnic Identity

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Abstract

The following paper explored the relationship between ethnic minority student organization membership and involvement and willingness to seek professional mental health treatment, as mediated by ethnic identity. The hypotheses were that the greater the involvement in ethnic minority organizations, the greater the ethnic identity of the students, and that this mediator variable would be positively correlated with their attitudes toward seeking professional mental help. Independent sample t-tests comparing students involved and not involved in ethnic minority organizations found no statistically significant differences in help-seeking attitudes, but significant differences in ethnic identity. A linear regression with mediation analysis did not find significant correlations between degree of student involvement, ethnic identity, and help-seeking attitudes, but post-hoc LSD comparisons following a multivariate analysis of variance found significant race differences in help-seeking attitudes, with biracial/multiracial participants showing more willingness than Latinx/Hispanic participants to seek treatment. This study sheds light on the specific role student organizations may have on college initiatives to address mental health concerns on campus.

Keywords: ethnic minorities, student organizations, ethnic identity, help-seeking behavior, mental health

The Relationship Between Minority Student Organization Membership and Willingness to Seek Mental Health Treatment, Mediated by Ethnic Identity

Mental health in the United States has become a rising concern over that last few decades and is especially relevant among adolescent and young adult populations during this unique era of excessive access to information and the global pandemic. On college campuses specifically, destigmatizing mental health and encouraging professional treatment have been major goals for institutions across the country, as is supporting minority students during today's times. In 2019, 80% of college presidents believed that mental health has become a greater concern on their campuses in the last three years, with 72% of presidents increasing funding for mental health treatment and awareness (Turk et al., 2020). Mental health treatment rates on college campuses nationwide increased from 19% in 2007 to 34% in 2017 (Lipson et al., 2019). Despite these efforts, college students of color have consistently sought out mental health treatment less than White students (Chen et al., 2019; Hunt et al., 2015; Lipson et al., 2018). This reflects the general North American population wherein ethnic minorities (people with underrepresented cultural, national, or religious backgrounds), are more likely than White people to both delay seeking help and prematurely end mental health treatment (Evans & Sheu, 2019; Sue et al., 1994; Wells et al., 2001). Ethnic minorities have much less access to mental health services than White populations for a multitude of reasons, such as stigma related to mental health, cultural factors, systemic oppression, insurance coverage and language barriers, resulting in their increased reporting of mental health related symptoms to their primary care physician rather than a mental health specialist (Alegría et al., 2002; Snowden & Pingitore, 2002; Wang et al., 2005; Williams et al., 2007).

Reasons for disparities in mental health treatment vary across ethnic groups. Some studies attribute lower rates of help-seeking behavior in Asian American students (compared to European American and African American students) to self-stigma and lower levels of benefits of self-disclosure (Saykeo & Lawrence, 2018). In Black populations, people are more likely to communicate their mental health issues to their family, friends, and church than to a mental health professional because of high rates of perceived stigma, social pressures to "be strong and have faith", discrimination, and perceived behavioral control (Evans & Sheu, 2019; Mesidor & Sly, 2014; Taylor & Kuo, 2019). In the Hispanic community, the greater the North American acculturation (the assimilation to the dominant culture), the greater the willingness to seek professional mental health treatment and to discuss their mental health (Bauldry & Szaflarski, 2017).

Help-seeking behavior also varies according to the severity of symptoms. In the National Comorbidity Survey, Black Americans were most likely to seek out professional help for a serious emotional problem (87%) followed by European Americans (84%), and Hispanic or Latinx participants (81%). However, when asked how comfortable they would feel talking about personal problems with a professional, ethnic minorities expressed greater discomfort (Shim et al., 2009). Studies have shown that gender is also a predictor variable, with women seeking professional mental health treatment more often than men across all ethnicities (Matheson et al., 2014; World Health Organization, 2002).

Research on acculturation indicates that acculturation, ethnic identity, and mental health are all closely related (Balidemaj & Small, 2019). Strong ethnic identity in African Americans in particular is negatively correlated with depression and anxiety, although there is less help-seeking behavior for diagnosed disorders (Williams et al., 2018). Increased ethnic identity

among biracial and multiracial people correlated with higher self-esteem and fewer depressive symptoms (Brittian et al., 2013). Some studies suggest that a strong ethnic identity increases self-esteem and resilience (Khan & Khanlou, 2019), or that it is not correlated with mental health (Krow, 2020). Other studies suggest a positive correlation between acculturation and substance abuse in Asian Americans, African Americans, and Latinos (De La Rosa, 2002; Koneru et al., 2007).

One way for college students to explore and express their ethnic identity is by joining a campus-based cultural organization, such as The Black Student Union, La Comunidad, The Asian Student Union or Alpha Kappa Alpha. Student organizations as a whole, especially those that emphasize the importance of mental health, are positively correlated with a sense of belonging and mental health (Sontag-Padilla et al., 2018). The feeling of connectedness with one's community is positively correlated with social and psychological functioning and negatively correlated with anxiety, depression, past psychiatric treatment, and overall psychological well-being (Hagerty et al., 1996; Walton & Cohen, 2007). Perceived cultural engagement and inclusivity of ethnic minorities on college campuses is also positively correlated with a sense of belonging, for both students of color and White students (Museus et al., 2017; Museus et al., 2018). Ethnic identity among biracial/multiracial participants has been found to be significantly lower than monoracial ethnic minorities (Bracey et al., 2004). Research also suggests that biracial participants experience varying scenarios of racial priming, resulting in a fluctuating level of identification with their races (Gaither et al., 2013; Gillem et al., 2001).

Case (2011) found that predictors of campus involvement included past high school involvement, work study, involvement with faculty, and anticipated involvement in college. For women in particular, additional predictors included being White, living on campus the first year,

a presence of career goals, and sense of community. For men, participation in athletics was the only unique predictor of campus involvement.

In many universities there is now an abundance of student organizations whose aim is to increase campus involvement for minority students and create a space where they can thrive. Overall attitudes towards such organizations are positive among both minority students and White students (Negy & Lunt, 2008). Many studies have found that students involved in ethnic minority organizations have a greater sense of ethnic identity or self-awareness than those who are not (Ethier & Deaux, 1994; James et al., 2004; Mitchell & Dell, 1992; Moren et al., 1994; Treviño, 1992). African American and Asian American students feel that membership in an ethnic minority organization at a predominantly White institution increases cultural expression, self-advocacy, and validation of ethnic identity (Museus, 2008). Ethnic fraternity and sorority memberships, in particular, encourage a culture of care and support for each other that makes their members feel valued, increasing their degree of comfort with intimacy and willingness to share mental health concerns within their community (Garcia, 2020; McGuire, 2020).

Given the positive correlation between being involved in ethnic minority organizations and mental health outcomes, is such a correlation also evident in attitudes towards seeking professional mental health treatment when in need? This study aimed to answer this question by studying the relationship between the degree of involvement in ethnic minority organizations and such attitudes as mediated by ethnic identity. The hypotheses were that the greater the involvement in ethnic minority organizations, the greater the ethnic identity of the students, and that this mediator variable was positively correlated with their attitudes toward seeking help.

Method

Participants

Participants consisted of 65 ethnic minority undergraduate students from colleges and universities in the United States. Eighty percent ($N = 52$) of the participants were female, 17% ($N = 11$) were male, and 3% ($N = 2$) were non-binary. Thirty-one percent ($N = 20$) were Black/African American, 30% ($N = 19$) were Biracial/Multiracial, 19% ($N = 12$) were Asian/Asian American, 17% ($N = 11$) were Latinx/Hispanic and 5% ($N = 3$) were Arab/Middle Eastern. Seventy-two percent ($N = 47$) were not involved in an ethnic minority student organization and 28% ($N = 18$) were. Seventy-seven percent of students involved belonged to Black Student Union ($N = 14$), 27% ($N = 5$) belonged to La Comunidad, 17% ($N = 3$) belonged to an African student organization, 11% ($N = 2$) belonged to Alpha Kappa Alpha, and 5% ($N = 1$) belonged to another organization. All participants were recruited through social media, through ethnic minority student organization leaders, or through in-person convenience sampling on campus.

Measures and Procedures

Subsequent to obtaining approval from the college's Institutional Review Board and participants were provided with a link to an online Microsoft Forms survey. The study began with an informed consent prior to participation, and after agreeing to participate, participants filled out demographic questions including age, sex, attending institution, race, and any involvement in ethnic minority organizations. If participants were involved in an ethnic minority organization on campus, they were asked to list which one and their degree of involvement in it. If they were involved in more than one, they were asked to list up to three of them, and their degree of involvement in each one. Degree of involvement was rated on a 5-point Likert scale

from 1 (rarely participate) to 5 (very involved participant/organization officer). If participants were not involved in an ethnic minority organization, the survey proceeded to the next measure.

Participants then filled out the Revised Multigroup Ethnic Identity Measure - Revised (MEIM-R) to determine degree of ethnic identity strength (Phinney, 1992; Phinney et al., 1999). The MEIM-R is a questionnaire made up of 14 4-point Likert scale items (1 = lower, 4 = higher) that measure ethnic identity in terms of two factors: ethnic identity search and affirmation, and belonging and commitment. Sample items include "I have a clear sense of my ethnic background and what it means for me" and "I am happy that I am a member of the group I belong to" (see Appendix A). It is very widely used in studies on ethnic identity and exhibits high reliability ($\alpha >$ .80) across many ages and ethnicities.

Participants then filled out the Attitudes Toward Seeking Professional Psychological Help Scale - Shortened Form (ATSPPHS-SF) which consisted of 10 4-point Likert scale items (0 = low willingness, 3 = high willingness) that measured how willing participants were to seek professional mental health treatment. Sample items include "If I believed I was having a mental breakdown, my first indication would be to get professional attention" and "I might want to have psychological counseling in the future" (see Appendix B). The ATSPPHS-SF originated from a 29-item scale, and has been determined to be as efficient as the longer measure (Fischer & Farina, 1995; Fischer & Turner 1970).

The survey concluded with a debriefing statement explaining the purpose of the study and provided contact information in the event participants had any questions.

Results

Participants' MEIM-R score consisted of an average of the responses the 14 items. The scores could range from 1, indicating a low sense of ethnic identity, to 4, indicating a high sense

of ethnic identity. The ATSPPHS-SF scores consisted of the sum of the 10 items, with items 2, 4, 8, 9, and 10 reverse-scored. Scores could range from 0 to 30, with 0 representing no willingness and 30 representing greatest willingness to seek help. An independent samples t-test compared the mean ATSPPHS-SF scores of participants who were involved in an ethnic student minority organization to the mean ATSPPHS-SF scores of participants who were not, but found no statistically significant difference between them: $t(63) = .45$, $p = 0.653$. Another independent samples t-test compared the mean MEIM-R scores of participants who were involved to those who were not, and did find a statistically significant difference (with Bonferroni-corrected p value of 0.025 (i.e., 0.05/2 = 0.025)): $t(63) = 2.50$, $p = 0.015$, with mean ethnic identity score of involved participants ($M = 3.33$) being higher than the mean ethnic identity score of uninvolved participants ($M = 2.97$).

A linear regression with mediation analysis evaluated the mediating influence of ethnic identity on the relationship between degree of involvement in ethnic minority organizations and participants' attitudes towards seeking professional help. See Figure 1 for the conceptual framing of the relationships. The average degree of involvement scores and average ATSPPHS-SF scores were not significantly correlated: (ß = -.31, $p < .207$). No significant relationship was found between the average degree of involvement scores and average MEIM-R scores were also not significantly correlated: (ß = .22, $p < .379$). The average MEIM-R scores and average ATSPPHS-SF scores were also not significantly correlated: (ß = -.07, $p < .556$). Finally, the average degree of involvement scores remained not significantly correlated with the average ATSPPHS-SF scores after including the MEIM-R scores in the model: (ß = -.30, $p < .254$).

A post-hoc two-way MANOVA evaluated the differences in average MEIM-R and ATSPPHS-SF scores by sex and race (see Tables 1 and 2). No statistically significant effect was

found for sex (*Lambda*(4,108) = .98, $p > .05$), but a statistically significant effect was found for race (*Lambda*(8,108) = .63, $p = .001$, $n^2 = 0.204$). There was no statistically significant interaction effect for sex and race (*Lambda*(6,108) = .84, $p > .05$). Two Bonferroni-corrected ($\alpha = 0.025$ from 0.05/2) found no statistically significant race differences in mean MEIM-R scores ($F(4,55) = 2.97$, $p = .027$), but statistically significant race differences in mean ATSPPHS-SF scores: $F(4,55) = 4.21$, $p = .005$, $n^2 = 0.234$. A series of 10 Bonferroni-corrected ($\alpha = 0.005$ from 0.05/10) post-hoc LSD analyses compared the average ATSPPHS-SF scores across all possible racial comparisons, and only found one statistically significant attitude difference between Latinx/Hispanic participants ($M = 14.64$) and Biracial/Multiracial participants ($M = 22.47$) ($p < .001$).

Discussion

The purpose of this study was to explore the relationship between involvement in ethnic minority student organizations and professional help-seeking attitudes. The hypothesis was that ethnic identity would be a mediating variable between organization involvement and willingness to seek mental health treatment. The results of the t-tests indicated no organizational involvement differences in willingness to seek professional mental health treatment, perhaps due to the less-stigmatized support that is already available from ethnic minority student organizations themselves (Garcia, 2020; McGuire, 2020). The t-test results did indicate organizational involvement differences in ethnic identity, which may be indicative of enhanced ethnic identity as a result of organization involvement, or that people with a greater sense of ethnic identity are more likely to see out membership opportunities.

Although greater ethnic identity of students involved (versus not involved) in ethnic minority organizations is well documented in previous literature (Ethier & Deaux, 1994; James

et al., 2004; Mitchell & Dell, 1992; Moren et al., 1994; Treviño, 1992), and organizations are correlated with mental health outcomes (Hagerty et al., 1996; Sontag-Padilla et al., 2018; Walton & Cohen, 2007), the help-seeking behavior regression with mediation analysis among participants who were involved in organizations, however, did not find that either degree of organization involvement or ethnic identity were correlated with greater help-seeking attitudes, a finding supported by Krow's study (2020) among African American students. Biracial/ multiracial participants, with the lowest ethnic identity and highest scores on the ATSPPHS-SF, made up almost a third of the total sample size ($N = 18$) so they may have suppressed the overall sample mean MEIM-R scores. The linear regression with meditation analysis results may have also suffered from low statistical power given the small proportion of participants involved in ethnic minority organizations ($N = 18$ (of 65)).

The nonsignificant differences between monoracial and biracial/multiracial participants' MEIM-R scores contradict previous studies on the lower ethnic identity strength of biracial/multiracial groups (Bracey et al., 2004) and may have been influenced by the biracial/multiracial participants' environment at the time of the survey. Some respondents were recruited via social media, in which case the environment is unknown, while others were recruited while attending a meeting for their ethnic minority student organization, potentially influencing their level of ethnic identity (Gaither et al., 2013; Gillem et al., 2001). As 63% ($N = 19$) of the biracial/multiracial participants identified White/European American as one of their races, this may have resulted in the significantly higher mean ATSPPHS-SF score of biracial/multiracial participants in comparison to monoracial participants, given the greater likelihood of White participants to seek mental health treatment (Shim et al., 2009). The significant difference between biracial/multiracial and Latinx/Hispanic ATSPPHS-SF scores,

indicating a decreased likelihood of Latinx/Hispanic participants seeking mental health treatment, also confirms previous research (Alegría et al., 2002; Shim et al., 2009) and could be exacerbated by involvement in Hispanic and/or Latinx student organizations increasing ethnic identity and reducing acculturation, thus encouraging community support and discouraging formal treatment (Balidemaj & Small 2019; Bauldry & Szaflarski, 2017).

The sample demographics may have been a limitation in the current study. Eighty percent ($N = 52$) of the participants were female and there are known sex differences in both help-seeking behavior and college student organization membership, with higher female prevalence in both circumstances (Case, 2011; Matheson et al., 2014; World Health Organization, 2002). In accordance with previous literature, significance should have been seen had there been more male participants in the present study. Additionally, only 28 percent ($N = 18$) of the participants were involved in ethnic minority student organizations, almost all of which were Black student organizations. Since the goal of this study was to compare ethnic minority student involvement as a whole, a greater number of involved students and a greater representation of Hispanic and Asian organizations would have been necessary. Although many college campuses are presently having in-person activities and events, the COVID-19 pandemic and restrictions may still be impacting student engagement and level of involvement in clubs and organizations. The values and goals of different organizations may counteract each other as well; where some minority organizations may encourage mental health awareness and increase help-seeking behavior (Sontag-Padilla et al., 2018), others may focus on the value of community and intergroup support when experiencing distress (Garcia, 2020; McGuire, 2020; Williams et al., 2018).

Future research on organization involvement as a predictor of help-seeking behavior should collect data from a wider variety of ethnic minority organizations and consistently collect

data at club meetings in order to control the environment of biracial/multiracial participants. Additionally, items could be added to surveys evaluating the perceived goals of the club, such as mental health awareness, community support, etc., in order to account for differences among organizations. Further study can also be done on the directionality of the ethnic identity and ethnic minority organization membership relationship, to shed light on the specific role student organizations may have on college initiatives to address mental health concerns on campus.

References

Alegría, M., Canino, G., Ríos, R., Vera, M., Calderón, J., Rusch, D., Ortega, A. N. (2002). Inequalities in use of specialty mental health services among Latinos, African Americans, and non-Latino Whites. *Psychiatric Services*, *53*, 1547–1555.

Balidemaj, A., & Small, M. (2019). The effects of ethnic identity and acculturation in mental health of immigrants: A literature review. *International Journal of Social Psychiatry*, *65*(7–8), 643–655.

Bauldry, S., & Szaflarski, M (2017). Immigrant-based disparities in mental health care utilization. *Socius*, *3*. https://doi.org/10.1177/2378023116685718

Bracey, J. R., Bámaca, M. Y., & Umaña-Taylor, A. J. (2004). Examining ethnic identity and self-esteem among biracial and monoracial adolescents. *Journal of Youth and Adolescence*, *33*(2), 123-132.

Brittian, A. S., Umaña-Taylor, A. J., & Derlan, C. L. (2013). An examination of biracial college youths' family ethnic socialization, ethnic identity, and adjustment: Do self-identification labels and university context matter? *Cultural Diversity and Ethnic Minority Psychology*, *19*(2), 177–189.

Case, K. F. (2011). A gendered perspective on the predictors of student involvement in collegiate clubs and organizations. *Dissertation Abstracts International Section A: Humanities and Social Sciences*, *71*(10A), 3549.

Chen, J. A., Stevens, C., Wong, S. H., & Liu, C. H. (2019). Psychiatric symptoms and diagnoses among U.S. college students: A comparison by race and ethnicity. *Psychiatric Services*, *70*(6), 442-449.

De La Rosa, M. (2002). Acculturation and Latino adolescents' substance use: A research agenda for the future. *Substance Use and Misuse*, *37*(4), 429-456.

Ethier, K. A., & Deaux, K. (1994). Negotiating social identity when contexts change: Maintaining identification and responding to threat. *Journal of Personality and Social Psychology, 67*(2), 243–251.

Evans, N. & Sheu, J. (2019). The Relationship Between Perceived Discrimination and Utilization of Mental Health Services Among African Americans and Caribbean Blacks. *Journal of Immigrant and Minority Health*, *21*, 1241-1247.

Fischer, E. H., & Farina, A. (1995). Attitudes toward seeking professional psychological help: A shortened form and considerations for research. *Journal of College Student Development, 36*(4), 368–373.

Garcia, C. E. (2020). Belonging in a predominantly White institution: The role of membership in Latina/o sororities and fraternities. *Journal of Diversity in Higher Education*, *13*(2), 181-193.

Gaither, S. E., Sommers, S. R., & Ambady, N. (2013). When the half affects the whole: Priming identity for biracial individuals in social interactions. *Journal of Experimental Social Psychology*, *49*(3), 368–371.

Gillem, A. R., Cohn, L. R., & Thorne, C. (2001). Black identity in biracial Black/White people: A comparison of Jacqueline who refuses to be exclusively Black and Adolphus who wishes he were. *Cultural Diversity and Ethnic Minority Psychology*, *7*(2), 182–196.

Hagerty, B. M. K., Williams, R. A., Coyne, J. C., & Early, M. R. (1996). Sense of belonging and

indicators of social and psychological functioning. *Archives of Psychiatric Nursing*, *10*(4), 235-244.

Hunt, J. B., Eisenberg, D., Lu, L., & Gathright, M. (2015). Racial/ethnic disparities in mental health care utilization among U.S. college students: Applying the Institution of Medicine definition of health care disparities. *Academic Psychiatry*, *39(5),* 520-526.

James, S. Van Laar, C., Levin, S. & Sinclair, S. (2004). Ethnic enclaves and the dynamics of social identity on the college campus: The good, the bad, and the ugly. *Journal of Personality and Social Psychology 87*(1), 96-110.

Khan, A., & Khanlou, N. (2019). Ethnic identity, self-esteem, resilience and mental health among immigrant and Canadian-born Pakistani youth. *International Journal of Mental Health and Addiction*, *19*, 47-61.

Koneru, V. K., Weisman de Mamani, A. G., Flynn, P. M., & Betancour, H. (2007). Acculturation and mental health: Current findings and recommendations for future research. *Applied & Preventive Psychology*, *12*, 76-96.

Krow, S. (2020). African American college students' attitudes toward help seeking for mental health illness. *Walden Dissertations and Doctoral Studies Collection*, 8742. https://scholarworks.waldenu.edu/dissertations/8742

Lipson, S. K., Kern, A., Eisenberg, D., & Breland-Noble, A. M. (2018). Mental health disparities among college students of color. *Journal of Adolescent Health*, *63*(3), 348-356.

Lipson, S.K., Lattie, E. G., & Eisenberg, D. (2019). Increased rates of mental health service utilization by U.S. college students: 10-year population-level trends (2007–2017). *Psychiatric Services, 70*, 60–63.

Matheson, F. I., Smith, K. L., Fazli, G. S., Moineddin, R., Dunn, J. R., & Glazier, R. H. (2014).

Physical health and gender as risk factors for usage of services for mental illness. *Journal of Epidemiology & Community Health*, *68*(10), 971-978.

McGuire, K. M. (2020). "Men doing life together": Black Christian fraternity men's embodiments of brotherhood. *Men and Masculinities*, *23*(3-4), 579-599.

Mesidor, J. K. & Sly, K. F. (2014). Mental health help-seeking intentions among international and African American college students: An application of the theory of planned behavior. *Journal of International Students*, *4*(2), 137-149.

Mitchell, S. L., & Dell, D. M. (1992). The relationship between Black students' racial identity attitude and participation in campus organizations. *Journal of College Student Development*, 33, 39–43.

Moran, J. J., Yengo, L., & Algier, A. M. (1994). Participation in minority oriented co-curricular organizations. *Journal of College Student Development*, *35*(2), 143.

Museus, S. D. (2008). The role of ethnic student organizations in fostering African American and Asian American students' cultural adjustment and membership at predominantly White institutions. *Journal of College Student Development*, *49*(6), 568–586.

Museus, S. D., Yi, V., & Saelua, N. (2017). The impact of culturally engaging campus environments on sense of belonging. *Review of Higher Education: Journal of the Association for the Study of Higher Education*, *40*(2), 187-215.

Museus, S. D., Yi, V., & Saelua, N. (2018). How culturally engaging campus environments influence sense of belonging in college: An examination of differences between White students and students of color. *Journal of Diversity in Higher Education*, *11*(4), 467-483.

Negy, C., & Lunt, R. A. (2008). What college students really think about ethnic student organizations. *Journal of Diversity in Higher Education*, *1*(3), 176–192.

Phinney, J. S. (1992). The multigroup ethnic identity measure: A new scale for use with diverse groups. *Journal of Adolescent Research*, *7*(2), 156-176.

Roberts, R., Phinney, J., Masse, L., Chen, Y., Roberts, C., & Romero, A. (1999). The structure of ethnic identity in young adolescents from diverse ethnocultural groups. *Journal of Early Adolescence*, *19*, 301-322.

Saykeo, S. P. & Lawrence, E. (2018). Factors that affect help-seeking: Examining race differences between Whites, Asians, and African Americans. *Modern Psychological Studies*, *24*(1).

Shim, R. S., Compton, M. T., Rust, G., Druss, B. G., & Kaslow, N. J. (2009). Race-ethnicity as a predictor of attitudes toward mental health treatment seeking. *Psychiatric Services*, *60*(10), 1336-1341.

Snowden, L. R., & Pingitore, D. (2002). Frequency and scope of mental health service delivery to African Americans in primary care. *Mental Health Services Research*, *4*(3), 123–130.

Sontag-Padilla, L., Dunbar, M. S., Ye, F., Kase, C., Fein, R., Abelson, S., Seelam, R., & Stein, B. D. (2018). Strengthening college students' mental health knowledge, awareness, and helping behaviors: The impact of Active Minds, a peer mental health organization. *Journal of the American Academy of Child & Adolescent Psychiatry*, *57*(7), 500-507.

Sue, S., Zane, N, & Young K. (1994). Research on psychotherapy with culturally diverse populations. In T. Vertovec (Ed.), *Bergin and Garfield's handbook of psychotherapy and behavior change*. (4th ed, pp. 783–820). Wiley & Sons.

Taylor, R. E., & Kuo, B. C. (2019). Black American psychological help-seeking intention: An integrated literature review with recommendations for clinical practice. *Journal of Psychotherapy Integration, 29*(4), 325–337.

Treviño, J. G. (1992). Participation in ethnic/racial student organizations. *Dissertation Abstracts International*, *53*(12), 4230A.

Turk, J., Claudia Soler, M., Chessman, H., Gonzalez, Á. (2020). Pulse Point survey of college and university presidents on COVID-19. *American Council on Education*.

Wang, P. S., Lane, M., Olfson, M., Pincus, H. A., Wells, K. B., & Kessler, R. C. (2005). Twelve-month use of mental health services in the United States: Results from the National Comorbidity Survey Replication. *Archives of General Psychiatry 62*(6), 629–640.

Walton, G. M. & Cohen, G. L. (2007). A question of belonging: Race, social fit, and achievement. *Journal of Personality and Social Psychology*. *92*(1), 82-96.

Wells, K., Klap, R., Koike, A., & Sherbourne, C. (2001). Ethnic disparities in unmet need for alcoholism, drug abuse, and mental health care. *American Journal of Psychiatry*, *158*(12), 2027-2032.

Williams D. R., González H. M., Neighbors H., Nesse, R., Abelson, J. M., Sweetman, J., & Jackson, J. S. (2007). Prevalence and distribution of major depressive disorder in African Americans, Caribbean blacks, and non-Hispanic whites. *Archives of General Psychiatry 64*(3), 305–315.

Williams, M. T., Duque, G., Wetterneck, C. T., Chapman, L. K., & DeLapp, R. C. T. (2018). Ethnic identity and regional differences in mental health in a national sample of African American young adults. *Journal of Racial and Ethnic Health Disparities*, *5*(2), 312–321.

World Health Organization (2002). Gender and mental health. *World Health Organization*. https://www.who.int/gender/other_health/genderMH.pdf

Appendix A

Multigroup Ethnic Identity Measure–Revised (MEIM-R)

Use the numbers below to indicate how much you agree or disagree with each statement.

(4) Strongly agree (3) Agree (2) Disagree (1) Strongly disagree

1. I have spent time trying to find out more about my ethnic group, such as its history, traditions, and customs.

2. I am active in organizations or social groups that include mostly members of my own ethnic group.

3. I have a clear sense of my ethnic background and what it means for me.

4. I think a lot about how my life will be affected by my ethnic group membership.

5. I am happy that I am a member of the group I belong to.

6. I have a strong sense of belonging to my own ethnic group.

7. I understand pretty well what my ethnic group membership means to me.

8. In order to learn more about my ethnic background, I have often talked to other people about my ethnic group.

9. I have a lot of pride in my ethnic group.

10. I participate in cultural practices of my own group, such as special food, music, or customs.

11. I feel a strong attachment towards my own ethnic group.

12. I feel good about my cultural or ethnic background.

Appendix B

Attitudes Toward Seeking Professional Psychological Help Scale Shortened Form

(ATSPPHS-SF)

Read each statement carefully and indicate your degree of agreement using the scale below. In responding, please be completely candid.

(0) Disagree (1) Partly disagree (2) Partly agree (3) Agree

1. If I believed I was having a mental breakdown, my first inclination would be to get professional attention.
2. The idea of talking about problems with a psychologist strikes me as a poor way to get rid of emotional conflicts.
3. If I were experiencing a serious emotional crisis at this point in my life, I would be confident that I could find relief in psychotherapy.
4. There is something admirable in the attitude of a person who is willing to cope with his or her conflicts and fears without resorting to professional help.
5. I would want to get psychological help if I were worried or upset for a long period of time.
6. I might want to have psychological counseling in the future.
7. A person with an emotional problem is not likely to solve it alone; he or she is likely to solve it with professional help.
8. Considering the time and expense involved in psychotherapy, it would have doubtful value for a person like me.
9. A person should work out his or her own problems; getting psychological counseling would be a last resort.
10. Personal and emotional troubles, like many things, tend to work out by themselves.

Figure 1

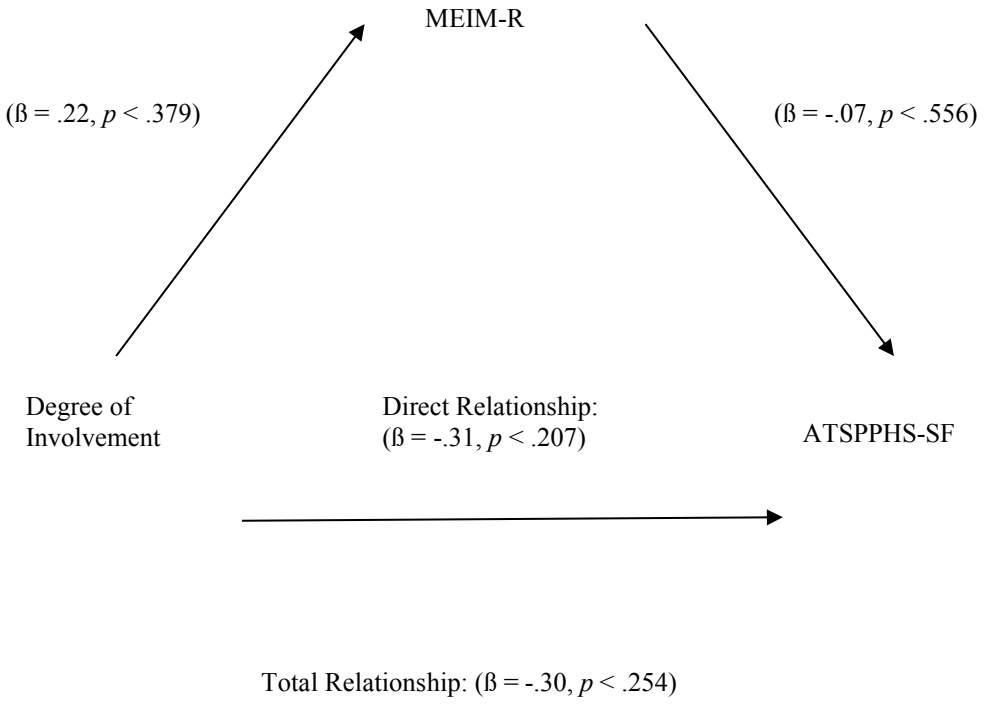

Figure 1: Conceptual framing of linear regression with mediation analysis

Table 1

Sex and Race Differences in MEIM-R Scores

Sex	Race	*M*	*SD*	*N*
Female	Arab/Middle Eastern	2.78	.33	3
	Asian/Asian American	3.17	.39	11
	Black/African American	3.33	.32	14
	Latinx/Hispanic	3.17	.49	10
	Biracial/Multiracial	2.84	.50	14
	Total	3.10	.46	52
Male	Arab/Middle Eastern	.	.	0
	Asian/Asian American	3.75	.	1
	Black/African American	3.03	.79	6
	Latinx/Hispanic	3.67	.	1
	Biracial/Multiracial	2.50	1.08	3
	Total	3.01	.85	11
Non-binary	Biracial/Multiracial	2.67	.71	2
	Total	2.67	.71	2
Total	Arab/Middle Eastern	2.78	.33	3
	Asian/Asian American	3.22	.40	12
	Black/African American	3.24	.51	20
	Latinx/Hispanic	3.21	.49	11
	Biracial/Multiracial	2.77	.60	19
	Total	3.07	.54	65

Table 2

Sex and Race Differences in ATSPPHS-SF Scores

Sex	Race	*M*	*SD*	*N*
Female	Arab/Middle Eastern	17.33	7.57	3
	Asian/Asian American	18.82	5.15	11
	Black/African American	20.64	5.11	14
	Latinx/Hispanic	15.10	5.95	10
	Biracial/Multiracial	22.07	3.50	14
	Total	19.38	5.46	52
Male	Arab/Middle Eastern	.	.	0
	Asian/Asian American	22.00	.	1
	Black/African American	15.83	4.26	6
	Latinx/Hispanic	10.00	.	1
	Biracial/Multiracial	25.67	3.22	3
	Total	18.55	6.27	11
Non-binary	Biracial/Multiracial	20.50	3.54	2
	Total	20.50	3.54	2
Total	Arab/Middle Eastern	17.33	7.57	3
	Asian/Asian American	19.08	5.00	12
	Black/African American	19.20	5.27	20
	Latinx/Hispanic	14.64	5.85	11
	Biracial/Multiracial	22.47	3.60	19
	Total	19.28	5.50	65