

A Comparison of Majority and Minority Students' Experiences at a Predominantly White Institution

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The current study explored how college students' experiences at a predominantly White institution (PWI) might differ depending on whether they belong to the majority or minority group. Participants completed an online survey including measures of college adjustment, collective self-esteem, depressive symptoms, and intergroup contact. Minority students ($n = 45$) reported significantly more depressive symptoms and more negative views of the PWI than did majority students ($n = 111$). Minority students also reported significantly lower levels of membership esteem and importance of the PWI to their identity. Furthermore, minority students who engaged in higher levels of intergroup contact with members of other ethnic groups reported that belonging to the PWI was more important to their self-concept. These preliminary findings suggest that ethnic minorities may experience more difficulties at PWIs, but the extent to which they interact with other ethnic groups might help buffer against this.

Keywords: intergroup contact, majority-minority group, collective self-esteem, college adjustment, predominantly white institutions

La présente recherche a exploré la façon dont les expériences des étudiants au niveau universitaire dans un établissement majoritairement blanc (ÉMB) pourraient différer selon le groupe majoritaire ou minoritaire auquel ils appartiennent. Les participants ont rempli une enquête en ligne qui incluait des mesures d'adaptation à l'université, d'estime de soi collective, des symptômes dépressifs et du contact intergroupe. Les résultats montrent que les étudiants minoritaires ($n = 45$) ont rapporté significativement plus de symptômes de dépression et d'opinions négatives de l'ÉMB que ceux du groupe majoritaire ($n = 111$). Les étudiants minoritaires ont également montré des niveaux inférieurs d'estime collective et d'importance de l'ÉMB pour leur identité. Par ailleurs, les étudiants minoritaires qui avaient plus de contact intergroupe ont indiqué qu'appartenir à l'ÉMB était plus important pour leur concept de soi. Ces résultats préliminaires suggèrent que les minorités ethniques pourraient éprouver plus de difficultés dans les ÉMB, mais que ces impacts négatifs pourraient être diminués avec le contact intergroupe.

Mots-clés : contact intergroupe, groupe majoritaire-minoritaire, estime de soi collective, adaptation au collège, établissement majoritairement blanc

"There is a war going on inside of me between my Blackness and your Whiteness. When I see myself in the mirror, I see a competent, talented Black woman. Then I go to class, look around, and realize that I need more. My Blackness seems too... um...Black, like I need to be more than who I am. I need what you [as a White person] have. I need an understanding of how things work, you know, politically. My Blackness, my personhood isn't enough. I need to Whiten myself to succeed" (Simmons, Lowery-Hart, Wahl, & McBride, 2013, p. 382).

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College is generally perceived as a time of growth where adolescents evolve into independent adults (see Read, Wardell, Vermont, Colder, Ouimette, & White, 2013); however, non-Caucasian students attending *predominantly white institutions* (PWIs) often find that this college environment presents a "harsh reminder of the realities of race" (Bourke, 2010, p. 131). Consequently, these students often experience more negative interpersonal, psychological, and academic outcomes relative to students from the ethnic majority. Minority students are more likely to struggle academically and report higher levels of academic stress (Negga, Applewhite, & Livingston, 2007) and, at least among Black female students, attending a PWI prospectively predicts poorer academic performance and, in turn, greater dropout rates (Boyratz, Horne, Owens, & Armstrong, 2013).

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Statistics suggest that graduation rates at four-year institutions are approximately 38% among African-Americans and approximately 45% among Hispanics, compared to approximately 57% among White, Non-Hispanic students (Knapp et al., 2005). Presumably, lower graduation rates among minority students can put them at a serious disadvantage. This can reverberate into their lives later, producing long-term implications (see Day & Newburger, 2002; United States Department of Labor, 2014). Indeed, recent statistics from the United States Department of Labor (2014) indicate that unemployment rates are higher while median weekly earnings are lower among individuals that do not have at least an Associate's degree (i.e., a two-year diploma). These data support census data published in 2002, as Day and Newburger (2002) reported that ethnic minorities who have earned at least a Bachelor's degree earn substantially more than those with only a high school diploma.

Essentially, minority students may face numerous challenges that may keep them from graduating alongside their peers; in turn, such challenges would affect them for the rest of their lives. Despite nationwide endeavors to diversify the college community and provide equal opportunities to students of all ethnic backgrounds, colleges are continually challenged to improve initiatives. Minority students are unable to 'lay aside their ethnicity' once joining a PWI; thus, PWIs cannot negate the strong importance of their unique backgrounds (Lett & Wright, 2003).

Effects of Minority Status Stress

Two theoretical models have been proposed to help explain minority students' experiences at PWIs, both of which see the negative interpersonal, psychological, and academic outcomes as a result of stress resulting from minority status. The transactional model, originally proposed by Lazarus and Folkman (1984) to understand the interaction between stress and coping, centers on how we cope with psychological stress, defined as "a particular relationship between the person and the environment that is appraised by the person as taxing or exceeding his or her resources and endangering his or her well-being" (Lazarus & Folkman, 1984, p. 19). In other words, the individual's appraisal process is highly important; how the stressful event is perceived along with the perceived availability of resources to help become central.

This model has been applied to understand the impact of stressors on college students, including minority students attending PWIs (e.g., Smedley, Myers, & Harrell, 1993). Indeed, by viewing each interaction as a transaction between individual and

environment, and by viewing psychological stress in this manner, it becomes plausible that encountering intolerance as an ethnic minority student can lead to psychological distress. To illustrate this, Smedley et al. (1993) argued that while all college students experience stress (e.g., academic, financial), minority students face unique stressors (e.g., social climate stress, interracial stress, racism and discrimination stress) that combine into minority status stress. These unique stressors threaten minority students' psychological health and academic performance, while also reducing their sense of belonging (Cabrera, Nora, Terenzini, Pascarella, & Hagedorn, 1999).

Indeed, when asked about their perceptions of the college community, African-American students attending PWIs often report negative community perceptions and a poorer sense of membership (Cuyjet, 1998; Maramba, 2008). They also report lower levels of belonging (Harwood, Huntt, Mendelhall, & Lewis, 2012), higher levels of alienation and isolation (Bourke, 2010; Brown & Davis, 2001), lower levels of social support (Negga et al., 2007), and less sense of control (Spurgeon, 2009). Minority students at PWIs also seem to struggle with finding a proper identity and niche within the institution. For example, as part of a survey conducted on undergraduate African-Americans at a large PWI, Taylor and Olswang (1997) found that although 61.8% of their sample felt there were activities on campus that reflected their interests, 58.6% did not participate in student organizations, and 56% did not feel they were a part of campus life. Furthermore, although approximately 69% reported being happy with their decision to attend the university, only 35% reported an actual sense of commitment to the PWI. In other words, while students may believe the campus reflects their general interests and remain content with their decision to attend the university, they continue to show lower levels of commitment to the PWI as a whole compared to majority students and may continue to form in-group identities (Simmons et al., 2013).

Relatedly, the Student-Institution Fit perspective argues the notion that the 'fit' between student and institution plays a highly important role in the students' subsequent adjustment, satisfaction, retention and persistence while attending that institution (Bowman & Denson, 2014). Indeed, one survey found that a lack of 'fit' was the second highest factor in student drop-out rates (Habley & McClanahan, 2004). This perspective, then, would propose that minority students' struggles and overall maladjustment at PWIs are a direct result of intolerance from other members of the institution (see Cabrera et al., 1999). Several studies using in-depth

interviews and focus groups support this notion, suggesting that several minority students attending PWIs perceive their interpersonal difficulties with the majority students to be a result of race issues. In one study, minority students reported engaging in interpersonal exchanges with majority students that were awkward and made them feel reduced to their race (Harwood et al., 2012). Additionally, other studies suggest that minority students believe many of their peers hold negative stereotypes, such as the belief that minority students were not accepted to the university based on academic merit (Bourke, 2010). More troubling, however, are accounts of overt acts of racial micro-aggressions from peers, such as racial slurs and jokes, or discrimination from the institution, such as segregated residence halls and poorer living conditions (Harwood et al., 2012), and racial profiling by campus police (Glenn & Johnson, 2012). In turn, such perceived intolerance can elicit poor intergroup contact, which subsequently contributes to low involvement on campus and, presumably, poor psychological health and esteem. For example, Arbona and Jimenez (2014) found that while Latino students' minority stress predicted their depressive symptoms, the degree to which they felt the campus was accepting of Latino students uniquely predicted depression.

Thus, both the transactional model and the Student-Institution Fit perspective propose a unique way that minority students may be affected by attending a PWI. Specifically, while the transactional model suggests that unique stressors minority students experience at PWIs contribute to poor psychological health and maladjustment, the Student-Institution Fit perspective suggests that perceived intolerance in a PWI by minority students can contribute to their dissatisfaction, poor academic performance and even attrition (e.g., Cabrera et al., 1999; Smedley et al., 1993). As such, it could be surmised that overall, minority students would report poorer psychological health than their majority student counterpart, as well as more negative feelings concerning their relation to the school as a whole and to their fellow students.

Impact of Intergroup Contact

Unfortunately, neither the *transactional model* nor the *Student-Institution Fit* perspective suggests possible solutions or interventions to buffer against the negative effects of attending PWIs on minority students. Yet, if minority students' difficulties while attending PWIs are a direct result of perceived intolerance and its associated psychological stress, then one way to buffer against these negative effects would be to reduce racial tensions on campus. Allport's (1958) *social contact hypothesis* suggests

that one way to decrease such racial tension and avoid racial stereotypes is by increasing intergroup interactions. This theory has often been cited as a method for understanding the socio-structural conditions under which poor interactions and tensions can change (Fischer, 2011). Furthermore, given the climate of residential college life, institutions have been cited as an ideal setting for testing the social contact hypothesis. Unfortunately, previous studies have failed to explore the possible moderating effects of intergroup contact as a way of remedying the challenges of attending a PWI for minority students. Consequently, it is unclear whether interacting with members of different ethnic backgrounds, either those who are part of the majority or minority groups, rather than interacting primarily with members of one's own ethnic group, would help to buffer against the negative effects of attending a PWI on minority students.

Although this area has not been studied per se, there are researchers that have argued that increasing students' diversity experiences on campus should improve outcomes for minority students (see Gurin, Dey, Gurin, & Hurtado, 2003; Hurtado & Ponjuan, 2005). More specifically, Gurin et al. (2003) proposed that the institution vary in terms of structural diversity, or the physical number of diverse groups on campus, informal interactional diversity, or experiences with peers from different ethnic backgrounds, and classroom diversity, or classes educating students about diversity issues. While much of their research has focused on classroom diversity, there is evidence that diversity courses can help to improve academic outcomes and create a sense of belonging (Hurtado & Ponjuan, 2005) among minority students.

There is also some evidence to suggest that interactions with diverse groups might also help to improve minority students' outcomes at PWIs in particular. For example, Museus (2008) found that becoming involved in ethnic student organizations helps to reduce feelings of isolation among minority students, presumably because joining such ethnic organizations allows these students to gain a sense of comradery with other ethnic minorities on campus. Taylor and Olswang (1997) also argued that one of the most important attributes cited by African-American students as necessary for success within their PWI was the ability to get along with people from other cultures. One student in their study cited the need to be 'bi-cultural', or having the ability to act both 'black and white.' Other research suggests that African-American students whose pre-college backgrounds are more racially similar to the PWI environment report more positive college experiences as well as better social and academic integration (D'Augelli & Hershberger, 1993; Davis, 1994). Indeed, it can be

surmised that the level of intergroup contact a minority student has with students from other ethnic backgrounds, whether it be students from the majority group or students from other minority groups, might improve their sense of identification and esteem.

Limitations of Previous Research

While research exploring ethnic minorities' experiences at PWIs is increasing, much of this research continues to focus exclusively on African-Americans rather than examining minority or non-Caucasian students more generally. This is problematic given that some researchers argue that different effects emerge when outcomes are assessed within a single ethnic group versus combining non-Caucasian students' experiences across various ethnic groups (see Cabrera et al., 1999, for a discussion). Furthermore, Cokley, McClain, Enciso, and Martinez (2013) found that African-American students reported significantly more stress relative to Asian and Latino American students, suggesting that stress among college students varies as a function of ethnic group. Consequently, it is unclear whether the negative impact of attending a PWI is unique to African-Americans or whether it affects all non-Caucasian students attending PWIs.

In addition, many previous studies have been qualitative, using in-depth interviews and focus groups with a relatively small group of students from a specific ethnic background at these campuses. Few studies have used quantitative analyses and those that have typically compared African-American students' experiences at PWIs to those at historically Black colleges and universities. This gap in the literature makes it difficult to understand whether the experiences that have been reported in previous research are truly unique; that is, to what extent minority students' experiences at PWIs differ from the majority (i.e., Caucasian, European-American). In fact, some research suggests that perceptions of racial discrimination on college campuses have similar effects on both majority and minority students (see Cabrera et al., 1999, for a discussion). Therefore, a quantitative comparison of majority and minority students attending PWIs is needed to clarify these issues.

The Current Study

In order to assess the possible moderating effect of intergroup contact on the challenges that minority students may experience in a PWI, the purpose of the present study was to quantitatively compare majority (i.e., Caucasian, European-American) students' experiences at a PWI to those of minority students,

broadly defined as any student who did not self-identify as European-American. Additionally, the present study remedied the aforementioned limitations; our study is quantitative, and focused on minority students more generally (versus solely African-American students). To do this, we recruited participants from a small, private liberal arts college in which the student population was approximately 80% Caucasian.

Consistent with the *transactional model* as it has been applied to minority students (Smedley et al., 1993) and the *Student-Institution Fit* perspective (e.g., Gurin et al., 2003; Hurtado & Ponjuan, 2005), we predicted that minority students would report poorer psychological health (i.e., lower college adjustment, higher depressive symptoms) and lower levels of collective self-esteem in reference to the PWI than would majority students (H1). Furthermore, previous research has shown that involvement in ethnic organizations (Museus, 2008), classroom diversity experiences (Gurin et al., 2003; Hurtado & Ponjuan, 2005), and previous experiences in predominantly-white environments (D'Augelli & Hershberger, 1993; Davis, 1994) can buffer against the negative effects of attending a PWI. As such, we hypothesized that intergroup contact would moderate the hypothesized differences between majority and minority students (see H1). Specifically, we predicted that among minority students, greater intergroup contact with members from different ethnic groups (majority students or minority students from a different ethnic group) would improve psychological health and collective self-esteem (H2).

Method

Participants

Participants were 156 (122 females, 34 males) undergraduate students recruited from a predominantly white liberal arts college in the northeastern United States. This college has a student body of approximately 4000, of whom only 20% are non-Caucasian. Participants were recruited from the general student population via campus-wide emails, social media, word of mouth, and announcements made to various student organizations. Participants had a mean age of 19.67 ($SD = 1.27$), ranging from 18 to 22; 50 participants were seniors (in their fourth year), 30 were juniors, 30 were sophomores, and 46 were freshmen (in their first year). One hundred and eleven of the participants identified as European-American and were classified in the majority group. The remaining 45 participants identified as either African-American ($n = 16$), Hispanic/Latino ($n = 17$), East or South Asian ($n = 10$), or Middle Eastern ($n =$

2) and were classified in the minority group. All participants were compensated with five USD upon completing the study.

Procedure and Measures

Interested participants were directed to an online survey hosted by Qualtrics. Upon providing informed consent and answering demographic questions to determine eligibility and group membership, participants completed the *College Adjustment Test* (Pennebaker, Colder, & Sharp, 1990), the *Center for Epidemiologic Studies Depression Scale* (Radloff, 1977), a modified version of the *Collective Self-Esteem Scale* (Luhtanen & Crocker, 1992), and a modified version of the *Social Contact Scale* (Spencer-Rodgers & McGovern, 2002). All measures were presented in random order, with the exception of the depression scale, which always appeared last to avoid potential mood priming effects. Descriptive statistics for majority and minority groups are presented in Table 1.

College Adjustment Test. The *College Adjustment Test* (CAT; Pennebaker et al., 1990) is a self-report measure of college adjustment (e.g., “worried about the impression you make on others.”) that has been used to assess coping among college students. The CAT assesses the extent to which participants experience 19 thoughts or feelings during the previous week using a 7-point scale from 1 (*not at all*) to 7 (*a great deal*). More specifically, the CAT assesses three aspects of college adjustment: positive affect (e.g., “liked your class”), negative affect (e.g., “worried about the way you look), and homesickness (e.g., “missed your home”). Following Pennebaker et al.’s (1990) recommendations, we combined items across the three subscales to assess overall college adjustment (see their article for scoring instructions). The CAT had good internal consistency in the current study, with a Cronbach’s alpha of .82.

Center for Epidemiologic Studies Depression Scale. The *Center for Epidemiologic Studies Depression Scale* (CES-D; Radloff, 1977) is a self-report measure of depressive symptomology asking participants to report the extent to which they experienced 20 depressive symptoms during the previous week (e.g., “I felt everything I did was an effort”). This well-validated scale commonly assesses depressive symptoms and has been shown to be appropriate across ethnic groups (see Roth, Ackerman, Okonkwo, & Burgio, 2008). Response options are on a 4-point scale from 0 (*rarely or none of the time*) to 3 (*most or all of the time*). Responses are summed so that scores can range from 0 to 60 with higher scores indicating more extreme depressive symptoms. The CES-D had high internal consistency in the current study, with a Cronbach’s alpha of .90.

Modified Collective Self-Esteem Scale. The original *Collective Self-Esteem Scale* (CSES; Luhtanen & Crocker, 1992) is a 16-item scale measuring participants’ identification to their social groups that has been used and validated across different ethnic groups (e.g., Crocker, Luhtanen, Blaine, & Broadnax, 1994). To assess identification with the college specifically, we modified the original CSES items to refer to the college rather than to all the participants’ social groups. To do this, the phrasing was changed in each item (e.g., “I am a worthy member of the social groups I belong to” vs. “I am a worthy member of the college”). The scale includes four subscales, each with four items: membership esteem (the extent to which an individual believes he or she is a good member of the group; e.g., “I am a worthy member of the college”), private collective self-esteem (the extent to which an individual perceives this group positively; e.g., “I feel good about belonging to the college”), public collective self-esteem (the extent to which an individual believes others perceive this group positively; e.g., “In general, others respect the college”), and importance to identity (the extent to which belonging to this group influences the belonging to the college is an important part of my

Table 1
Descriptive statistics for measures according to group membership

Variables	Majority group	Minority group
	<i>M (SD)</i>	<i>M (SD)</i>
1. Overall college adjustment	78.56 (14.45)	75.69 (14.59)
2. Membership self-esteem	5.78 (0.90)	5.50 (1.13)
3. Private collective self-esteem	5.88 (1.26)	5.36 (1.47)
4. Public collective self-esteem	5.63 (0.81)	5.43 (1.15)
5. Importance to identity	5.29 (1.12)	4.98 (1.07)
6. Depressive symptoms	14.16 (9.67)	18.18 (10.28)
7. Intergroup contact	15.13 (6.01)	21.24 (5.75)

Note. $N = 156$, Majority group ($n = 111$), Minority group ($n = 45$).

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self-image”). Each item is rated on a 7-point scale from 1 (*strongly disagree*) to 7 (*strongly agree*). Ratings for each subscale then were averaged to compute total membership esteem (Cronbach’s alpha of .78), private collective self-esteem (Cronbach’s alpha of .92), public collective self-esteem (Cronbach’s alpha of .77), and importance to identity (Cronbach’s alpha of .76) scores.

Modified Social Contact Scale. To assess intergroup contact, we modified Spencer-Rodgers and McGovern’s (2002) *social contact scale*, a three-item measure originally intended to assess contact with international students. This scale was modified to instead assess intergroup contact with different ethnic groups via informal conversation, studying, and in social gatherings. To do this, the phrasing was changed in each item (e.g., “how often do you study or do other class work with foreign students?” to “how often do you study or do other class work with students outside your ethnic group?”). The three modified items are rated on a 9-point scale from 1 (*never*) to 9 (*all the time*). The three modified items were summed so that higher scores indicate more intergroup contact with members of other ethnic groups. This modified scale also had high internal consistency with a Cronbach’s alpha of .92.

Results

Psychological Health

To determine if students’ reported psychological health differed as a function of group membership and intergroup contact, we conducted a multivariate regression in which participants’ CES-D and CAT scores were regressed onto an effects-coded group variable (-1 = Minority Group; +1 = Majority Group), participants’ centered intergroup contact scores, and the corresponding group x intergroup contact interaction. This analysis first tested a multivariate main effect, or omnibus effect, for each predictor variable on psychological health (based on a linear combination of participants’ CES-D and CAT scores). If this omnibus test was significant or marginal, we then examined individual effects for each of our outcome variables.

Consistent with Hypothesis 1 (i.e., that minority students would report poorer psychological health than majority students), the omnibus effect of group membership on participants’ reported psychological health was significant, $F(2, 140) = 5.15, p = .007$ ($\eta_p^2 = .07$). However, when we examined the effect of group membership for depressive symptoms and college adjustment separately, the effect was

significant only for depressive symptoms, $F(1, 141) = 7.82, p = .006$ ($\eta_p^2 = .05$); as predicted, minority group members reported significantly higher levels of depressive symptomology than did majority group members (see Table 1 for descriptive statistics for each group). Although group differences for college adjustment were in the predicted direction (see Table 1), the effect was not significant, $F(1, 141) = 1.84, p = .177$ ($\eta_p^2 = .01$). Thus Hypothesis 1 was partially supported.

We also found a marginal omnibus effect of intergroup contact on reported psychological health, $F(2, 140) = 2.91, p = .058$ ($\eta_p^2 = .04$). Again, when we examined the effects for depressive symptoms and college adjustment separately, the effect was significant for depressive symptoms, $\beta = -.33, F(1, 141) = 4.39, p = .038$ ($\eta_p^2 = .03$), but not for college adjustment, $\beta = .23, F(1, 141) = 1.02, p = .314$ ($\eta_p^2 = .01$). In other words, participants who reported higher levels of intergroup contact experienced significantly less depressive symptoms over the previous week, but similar levels of college adjustment, compared to students with lower levels of intergroup contact. However, the overall interaction between group and intergroup contact was not significant, $F(2, 140) = 0.89, p = .414$ ($\eta_p^2 = .01$). Furthermore, the group x intergroup contact interactions were not significant when we examined the effects for depressive symptoms, $F(1, 141) = 1.20, p = .275$ ($\eta_p^2 = .01$), and college adjustment, $F(1, 141) = 0.21, p = .649$ ($\eta_p^2 = .00$), separately. Thus, while minority group members did report significantly higher levels of depressive symptoms, this difference was not moderated by the participants’ level of contact with different ethnic groups, contrary to Hypothesis 2.

Collective Self-Esteem

To determine if levels of collective self-esteem differed as a function of group membership and intergroup contact, we conducted a second regression in which participants’ four CSES subscale scores were regressed onto the same effects-coded group variable, participants’ centered intergroup contact scores, and the corresponding group x intergroup contact interaction. As with our analyses for psychological health, this analysis first tested a multivariate main effect, or omnibus effect, for each predictor variable on collective self-esteem, which was based on a linear combination of participants’ four CSES subscale scores. Again, if this omnibus test was significant or marginal, we then examined individual effects for each of our outcome variables.

Consistent with Hypothesis 1 (i.e., that minority students would report lower levels of collective self-

esteem in reference to the PWI relative to majority students), the omnibus effect of group membership on collective self-esteem was significant, $F(4, 138) = 4.22, p = .003$ ($\eta_p^2 = .11$). As predicted, minority group members reported significantly lower levels of membership esteem, $F(1, 141) = 10.08, p = .002$ ($\eta_p^2 = .07$), private collective self-esteem, $F(1, 141) = 7.42, p = .007$ ($\eta_p^2 = .05$) and importance to identity, $F(1, 141) = 9.01, p = .003$ ($\eta_p^2 = .06$) than did majority group members, whereas public collective self-esteem scores did not differ as a function of group membership, $F(1, 141) = 0.29, p = .591$ ($\eta_p^2 = .06$; see Table 1 for group means). In addition, the omnibus effect of intergroup contact on collective self-esteem was also significant, $F(4, 138) = 5.76, p < .001$ ($\eta_p^2 = .14$). However, when we examined the effect of intergroup contact for each subscale separately, higher levels of intergroup contact were associated with significantly higher levels of membership esteem, $\beta = .06, F(1, 141) = 13.74, p < .001$, and importance to identity scores, $\beta = .04, F(1, 141) = 6.64, p = .011$ ($\eta_p^2 = .05$), but were not significantly related to participants' private, $\beta = .04, F(1, 141) = 3.48, p = .064$ ($\eta_p^2 = .02$), or public collective self-esteem, $\beta = -.01, F(1, 141) = 0.21, p = .877$ ($\eta_p^2 < .00$).

Finally, the overall interaction between group and intergroup contact for collective self-esteem was marginal, $F(4, 138) = 2.18, p = .075$ ($\eta_p^2 = .06$). When we examined this interaction for each subscale, we found the interaction was significant only for importance to identity, $F(1, 141) = 4.89, p = .029$ ($\eta_p^2 = .03$; all other $ps > .110$). To explore this interaction further, we examined the effect of intergroup contact on importance to identity separately for our two groups. Consistent with Hypothesis 2, intergroup contact was not significantly related to importance to identity scores among majority students, $\beta = .01, t(109) = 0.53, p = .597$, but was positively related to importance to identity scores among those in the minority group, $\beta = .08, t(43) = 3.12, p = .003$ (see Figure 1).

Summary

In summary, these analyses partially supported Hypothesis 1. Minority students reported marginally lower levels of psychological health overall compared to majority students, although the effect was significant only for depressive symptoms and not for college adjustment. Similarly, minority students reported marginally lower levels of collective self-esteem in reference to the PWI than did majority students; however, again, the effect was significant only for membership esteem, private collective self-esteem and importance to identity, but not for public collective self-esteem. Moreover, we found limited support for Hypothesis 2. Although minority students who reported higher levels of intergroup contact reported higher levels of importance to identity relative to those who reported lower levels of intergroup contact, we found no other significant interactions suggesting intergroup contact moderated (or buffered against) the other group differences for depressive symptoms, membership esteem or private collective self-esteem.

Discussion

Every day, minority students face challenges both inside and outside of the classroom. Indeed, they may feel that they need to “Whiten [themselves] to succeed” (Simmons et al., 2013, p. 382) and perhaps may suffer accordingly. To bring to light and perhaps begin to rectify these issues, the purpose of the present study was to quantitatively compare psychological health and collective self-esteem among majority (i.e., Caucasian, European-American) and minority (i.e., any student who did not self-identify as European-American) students at a small, liberal arts PWI. This was done in order to assess the possible moderating effect of intergroup contact on the challenges that minority students may face in a PWI. We hypothesized that minority group students, or students

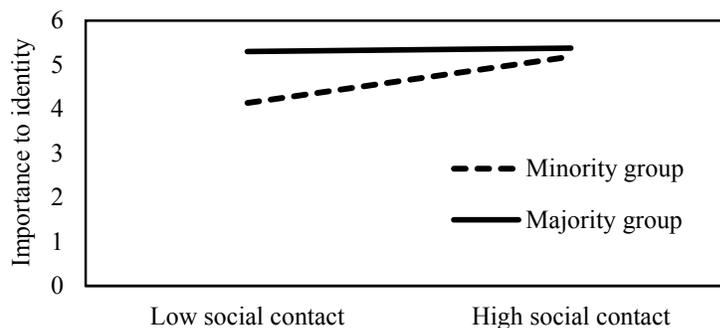


Figure 1. Majority and Minority students' reported importance to identity as a function of intergroup contact.

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that do not categorize themselves as European-American, would report poorer psychological health and lower levels of collective self-esteem; this hypothesis was partially supported. As predicted, minority students reported significantly higher levels of depressive symptomatology and significantly lower levels of membership esteem, private esteem, and importance to identity in regards to the college than did majority students. However, contrary to Hypothesis 1, while differences in terms of college adjustment were in the predicted direction, they were not significant.

Thus, consistent with the transactional model as it has been applied to ethnic minorities attending PWIs (e.g., Smedley et al., 1993), minority students generally reported lower levels of psychological health (that is, higher levels of depressive symptomatology) and collective self-esteem in regards to the PWI itself. Importantly, our findings also corroborate qualitative research suggesting that ethnic minorities at a PWI report psychological distress (e.g., Bourke, 2010; Brown & Davis, 2001; Harwood et al., 2012) and more negative views of the college community (e.g., Cuyjet, 1998; Maramba, 2008). However, while these studies assessed these perceptions only among minority students, our comparison of minority and majority students allowed us to determine whether majority students feel a similar sense of alienation, isolation, and collective self-esteem as the minority students. Our findings suggest, as Cabrera et al. (1999) and Smedley et al. (1993) have argued, that minority students may experience unique difficulties while attending PWIs that undermined their psychological health and integration on campus.

We further hypothesized that a higher level of intergroup contact with majority students reported by non-European-American students (i.e., the minority group on campus) would buffer against the negative effects of attending a PWI. Consistent with previous research (Phillips, 2005), minority students reported significantly higher levels of intergroup contact than did majority students; however, contrary to Hypothesis 2, intergroup contact moderated the effect of group membership only for importance to identity. Specifically, among minority group members, those who reported more intergroup contact also reported that belonging to the college was more important to their own self-concept than did those who reported less intergroup contact. Conversely, intergroup contact had little impact on the extent to which belonging to the college influenced majority students' self-concept.

Taken together, these findings suggest that intergroup contact helped to improve minority students' perceptions of how important the PWI was to their self-concept, but had relatively little impact on other indicators of collective self-esteem or psychological health. Previous research has shown that other diversity experiences, namely involvement in classroom diversity, also helps to improve minority students' sense of belonging at PWIs (Hurtado & Ponjuan, 2005); however, unlike intergroup contact, classroom diversity also appeared to have other beneficial effects, such as improving academic outcomes (Gurin et al., 2003). Given that we did not assess academic outcomes in this particular study, it is difficult to determine whether the different beneficial effects across studies is a result of the different types of diversity experiences, or whether these experiences are more likely to affect academic outcomes over psychological health and collective self-esteem.

Nevertheless, our results, along with previous research on diversity experiences (Gurin et al., 2003; Hurtado & Ponjuan, 2005), suggest that involving students in diversity experiences may help to minimize some of the differences between majority and minority students at PWIs, even if this difference is small. Our finding that minority students who engage in lower than average levels of intergroup contact believe the college has less influence on their self-concept suggests that these students are less integrated and points to a need to find ways to increase informal interactional diversity on university campuses. Unfortunately, despite the increasing structural diversity at many PWIs, intergroup interaction has not necessarily increased (see Chavous, 2005).

Additionally, while our focus has primarily been on the impact of intergroup contact on minority students, we found that majority students reported significantly less intergroup contact than minority students. This is not necessarily surprising given that minority students likely find it difficult to avoid interacting with members of different ethnic groups, whereas Caucasian students at PWIs may not have to seek out these interactions, thereby giving them the luxury of remaining in their 'comfort zone' (Phillips, 2005). For example, interviews with members of fraternities at a PWI suggest that while members of Black fraternities were familiar with most of the White fraternities on campus, few members of the White fraternities could identify any Black fraternities on campus (Ray, 2013). However, one could argue that if student involvement in such informal interaction diversity is only among minority students, these diversity experiences may have little impact on minority students' perceptions of

intolerance and discrimination on campus, which subsequently increases minority student status stress and, ultimately, threatens minority students' success in college (Smedley et al., 1993).

Our finding that minority students who experienced lower levels of intergroup contact simultaneously reported lower levels of importance to identity relative to those who reported higher levels of intergroup contact points to the pressing need to find a way to include these students on campus. Allport (1958) proposed that successful integration can occur only if certain conditions were met during intergroup interactions: (1) intergroup interactions must be meaningful; (2) members of the different groups must gain interdependence by reaching and maintaining common goals; (3) members of the different groups must achieve similar levels of social status within their environment; and (4) the institution must encourage positive intergroup interactions (see Chavous, 2005, for a discussion). Since the current findings provide some support for Allport's (1958) social contact hypothesis, creating an environment where these conditions can be met may be a start in finding a way to enhance intergroup interactions among students who do not report a positive college experience. Indeed, identifying ways to involve both majority and minority students in diversity experiences, particularly those that will foster equality and interdependence, will be particularly important in terms of improving minority students' outcomes at PWIs.

Limitations and Future Directions

One of the primary limitations in the current study was the large discrepancy in sample sizes, with more than twice the number of participants in the majority group compared to the minority group. Consequently, it is unclear whether some of the other differences, which were in the predicted direction, would have been significant with a larger sampling of minority students. Given that we recruited our sample from a small PWI with a student body of approximately 4,000, of whom only 20% are non-Caucasian, recruiting minority students proved to be extremely difficult without using purposive sampling (e.g., recruiting directly from ethnic organizations on campus) and risking a biased minority sample. Therefore, in future research, greater efforts should be made to obtain a larger sampling of minority students as well as equal samples of majority and minority students, both of which may be easier at a larger PWI. Similarly, in our sample we also had an underrepresentation of males ($n = 34$) in comparison to females ($n = 122$). Though recruiting proportionate gender groups may prove to be equally as difficult, it could be beneficial to attempt to do this in the future

as well. Additionally, to address possible confounds, future research could benefit from obtaining further demographic information including the students' location prior to attending the university and whether students are attending the PWI as an international student.

Another limitation of the current study was that it was cross-sectional and examined students' experiences across all class ranks (i.e., freshmen, sophomores, juniors, and seniors). Conceivably, students' experiences might differ depending on whether they are just entering the PWI versus nearing graduation. Thus, this area of research might benefit from longitudinal analyses comparing majority and minority students' experiences at a PWI throughout their undergraduate program to determine how the group differences might change over the course of four years. Such longitudinal analyses also might help to identify those students who are at risk of dropping out, which is particularly important given previous research findings suggesting that attending a PWI predicted poorer academic performance and higher dropout rates among African-American women (Boyras et al., 2013).

A final limitation of the current study was our grouping of all minority students together into one broad category. Although treating the different minority groups (i.e., African-American, Hispanic/Latino, etc.) under one banner is relevant and useful in the current context, it can mask the fact that some minority student groups may experience more or less psychological distress than others. For example, African-American students may be more affected by attending a PWI than Middle Eastern students are; however, putting all minority students into the same category can make this difficult to discern. Due to this, it may be beneficial to explore further into individual ethnic group differences in the future.

Conclusion

In summary, the present research suggests that ethnic minorities attending a PWI may experience psychological distress and hold more negative views of the college community. However, minority students who engage in more intergroup interactions might not be as negatively affected by the predominantly White environment, as suggested by the higher levels of importance to identity reported by minority students who engaged in higher levels of intergroup contact. While these findings are preliminary, they emphasize the importance of examining the influence of intergroup contact, particularly diversity initiatives that will help to foster positive intergroup contact among majority and minority students. Indeed,

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intergroup contact may be a possible intervention that will help to improve minority students' experiences at PWIs and, perhaps, help to increase retention/graduation rates among these students, who continue to lag behind Caucasian students (Knapp et al., 2005).

References

- Allport, G. W. (1958). *The nature of prejudice*. Garden City, NY: Doubleday.
- Arbona, C., & Jimenez, C. (2014). Minority stress, ethnic identity, and depression among Latino/a college students. *Journal of Counseling Psychology, 61*, 162-168.
- Bourke, B. (2010). Experiences of black students in multiple cultural spaces at a predominantly white institution. *Journal of Diversity in Higher Education, 3*, 126-135.
- Bowman, N. A., & Denson, N. (2014). A missing piece of the departure puzzle: Student-Institution Fit and intent to persist. *Research in Higher Education, 55*, 123-142.
- Boyratz, G., Horne, S. G., Owens, A. C., & Armstrong, A. P. (2013). Academic achievement and college persistence of African American students with trauma exposure. *Journal of Counseling Psychology, 60*, 582-592.
- Brown, M. C., & Davis, J. E. (2001). The historically Black college as social contract, social capital, and social equalizer. *Peabody Journal of Education, 76*, 31-49.
- Cabrera, A. F., Nora, A., Terenzini, P. T., Pascarella, E., & Hagedorn, L. S. (1999). Campus racial climate and the adjustment of students to college: A comparison between White students and African-American students. *Journal of Higher Education, 70*, 134-160.
- Chavous, T. M. (2005). An intergroup contact-theory framework for evaluating racial climate on predominantly white college campuses. *American Journal of Community Psychology, 36*, 239-257.
- Cokley, K., McClain, S., Enciso, A., & Martinez, M. (2013). An examination of the impact of minority status stress and impostor feelings on the mental health of diverse ethnic minority college students. *Journal of Multicultural Counseling and Development, 41*, 82-95.
- Crocker, J., Luhtanen, R., Blaine, B., & Broadnax, S. (1994). Collective self-esteem and psychological well-being among White, Black, and Asian college students. *Personality and Social Psychology Bulletin, 20*, 503-513.
- Cuyjet, M. J. (1998). Recognizing and addressing marginalization among African American college students. *College Student Affairs Journal, 18*, 64-71.
- D'Augelli, A. R., & Hershberger, S. L. (1993). African American undergraduates on a predominantly White campus: Academic factors, social networks, and campus climate. *Journal of Negro Education, 62*, 67-81.
- Day, J. C., & Newburger, E. (2002). *The Big Payoff: Educational Attainment and Synthetic Estimates of Work-Life Earnings*. Retrieved from <http://www.census.gov/prod/2002pubs/p23-210.pdf>.
- Davis, J. E. (1994). College in black and white: Campus environment and academic achievement of African American males. *Journal of Negro Education, 63*, 620-633.
- Fischer, M. J. (2011). Interracial contact and changes in the racial attitudes of White college students. *Social Psychology of Education, 14*, 547-574.
- Glenn, C. L., & Johnson, D. L. (2012). "What they see as acceptable:" A co-cultural theoretical analysis of black male students at a predominantly white institution. *Howard Journal of Communications, 23*, 351-368.
- Gurin, P. Y., Dey, E. L., Gurin, G., & Hurtado, S. (2003). How does racial/ethnic diversity promote education? *Western Journal of Black Studies, 27*, 20-29.
- Habley, W. R., & McClanahan, R. (2004). *What works in student retention? All survey colleges*. Iowa City, IA: ACT.
- Harwood, S. A., Hunt, M. B., Mendenhall, R., & Lewis, J. A. (2012). Racial microaggressions in the residence halls: Experiences of students of color at a predominantly White university. *Journal of Diversity in Higher Education, 5*, 159-173.
- Hurtado, S., & Ponjuan, L. (2005). Latino educational outcomes and the campus climate. *Journal of Hispanic Higher Education, 4*, 235-251.
- Knapp, L. G., Kelly-Reid, J. E., Whitmore, R. W., Wu, S., Huh, S., Levine, B., Berzofsky, M., & Broyles, S.G. (2005). *Enrollment in postsecondary institutions, fall 2002 and financial statistics, fiscal year 2002*. Washington, DC: National Center for Education Statistics.
- Lazarus, R. S., & Folkman, S. (1984). *Stress, appraisal, and coping*. New York, NY: Springer.
- Lett, D. F., & Wright, J. V. (2003). Psychological barriers associated with matriculation of African American students in predominantly White institutions. *Journal of Instructional Psychology, 30*, 189-196.

- Lett, D. F., & Wright, J. V. (2003). Psychological barriers associated with matriculation of African American students in predominantly White institutions. *Journal of Instructional Psychology, 30*, 189-196.
- Luhtanen, R., & Crocker, J. (1992). A collective self-esteem scale: Self-evaluation of one's social identity. *Personality and Social Psychology Bulletin, 18*, 302-318.
- Maramba, D. C. (2008). Understanding campus climate through voices of Filipino/a American college students. *College Student Journal, 42*, 1045-1060.
- 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*, 568-586.
- Negga, F., Applewhite, S., & Livingston, I. (2007). African American college students and stress: School racial composition, self-esteem and social support. *College Student Journal, 41*, 823-830.
- Pennebaker, J. W., Colder, M., & Sharp, L. K. (1990). Accelerating the coping process. *Journal of Personality and Social Psychology, 58*, 528-537.
- Phillips, C. D. (2005). A comparison between African-American and White students enrolled in an equal opportunity program on predominantly white college campuses: Perceptions of the campus environment. *College Student Journal, 39*, 298-306.
- Radloff, L. S. (1977). The CES-D scale: A self-report depression scale for research in the general population. *Applied Psychological Measurement, 1*, 385-401.
- Ray, R. (2013). Fraternity life at predominantly white universities in the US: The saliency of race. *Ethnic and Racial Studies, 36*, 320-336.
- Read, J. P., Wardell, J. D., Vermont, L. N., Colder, C. R., Ouimette, P., & White, J. (2013). Transition and change: Prospective effects of posttraumatic stress on smoking trajectories in the first year of college. *Health Psychology, 32*, 757-767.
- Roth, D. L., Ackerman, M. L., Okonkwo, O. C., & Burgio, L. D. (2008). The four-factor model of depressive symptoms in dementia caregivers: A structural equation model of ethnic differences. *Psychology and Aging, 23*, 567-576.
- Simmons, J., Lowery-Hart, R., Wahl, S. T., & McBride, M. C. (2013). Understanding the African-American student experience in higher education through a relational dialectics perspective. *Communication Education, 62*, 376-394.
- Smedley, B. D., Myers, H. F., & Harrell, S. P. (1993). Minority-status stresses and the college adjustment of ethnic minority freshmen. *Journal of Higher Education, 64*, 434-452.
- Spencer-Rodgers, J., & McGovern, T. (2002). Attitudes toward the culturally different: The role of intercultural communication barriers, affective responses, consensual stereotypes, and perceived threat. *International Journal of Intercultural Relations, 26*, 609-631.
- Spurgeon, S. L. (2009). Wellness and college type in African American male college students: An examination of differences. *Journal of College Counseling, 12*, 33-43.
- Taylor, E., & Olswang, S. G. (1997). Crossing the color line: African Americans and predominantly white universities. *College Student Journal, 31*, 11-18.
- United States Department of Labor. (2014). *Earnings and unemployment rates by educational attainment* [Data File]. Retrieved from http://www.bls.gov/emp/ep_table_001.htm.

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