

Engaging in the margins: Exploring differences in biracial students' engagement by racial/ethnic
makeup

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Paper presented at the 2014 Association for the Study of Higher Education Conference

Washington, D.C.

November 2014

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Introduction

The population of Americans who claim more than one racial background continues to grow at a drastic rate (Jones, 2005; Jones & Smith, 2001), resulting in an increasingly visible and active multiracial nation (Root, 1996). Results from the 2000 U.S. Census indicated that 7.3 million respondents checked more than one racial box (Jones, 2005). This growth has a direct impact on U.S. higher education as the median age of these “more than one race” individuals was reported at 23.4 years, signifying that the nation’s multiracial population is disproportionately young (Jones, 2005). This average age suggests that large portions of multiracial Americans are currently pursuing, or are headed toward the pursuit of higher education. Unfortunately, even with these demographics in mind, higher education scholarship and practice that centers on multiracial students remains stagnant and sparse leaving the field uniformed about this population (Museus, Sariñana, & Ryan, in press).

One of the main reasons multiracial students continue to be pushed to the margins of education is attributable to socio-historical understandings of race in America. Historically, race has been constructed within monoracial categories (Delgado & Stefancic, 2011) resulting in a lack of vocabulary and mechanisms that take into account those who exist outside of monoracial structures. These racial understandings inform traditional norms of data collection and analysis in which higher education researchers often re-categorize biracial students as monoracial or leave them out of studies altogether (Padilla & Kelley, 2005). This re-categorization or dropping of biracial students leaves educators uninformed “about the size or nature of their multiracial population, leaving them completely unable to address a rapidly growing group of students that

has unique and specific needs” (Padilla & Kelley, 2005, p. 11). Scholars (see Renn, 2000, 2003, 2004, 2008; King, 2011; Rockquemore & Brunnsma, 2008) have begun to take a deeper interest in identity development for multiracial college students. However, this one-sided focus eclipses multiracial students’ experiences outside of identity development leaving the field largely uninformed about other realities and experiences of multiracial students (Museus, Sariñana & Ryan, in press; Osei-Kofi, 2012) such as their academic achievement, sense of belonging on campus, and engagement in college, to name a few.

To address gaps in the literature and add to higher education scholars’ and practitioners’ knowledge of multiracial students outside of identity development, we focused this paper on student engagement for biracial students. Engagement is a critical topic that builds a foundational understanding of and guides future research on biracial students. For instance, engagement literature informs understandings of college transitions (Cabrera, Nora, Terenzini, Pascarella, & Hagerdorn, 1999), moral development (Evans, 1987), and persistence (Astin, 1975, 1993; Pascarella & Terenzini, 2005; Stage & Hossler, 2000; Tinto, 1975) amongst students. The lack of focus on engagement for multiracial students is alarming as scholars link student engagement to student development (Astin, 1993; Pascarella & Terenzini, 2005). The concept of engagement provides “practitioners with a framework for understanding and fostering student learning and success and also offer cues for developing rich contexts for student learning and development” (Wolf-Wendel, Ward, & Kinzie, 2009, 420-421). Therefore, understanding biracial students’ engagement practices may inform and lead to better understandings of the plethora of scholarship that exists on biracial students’ racial identity development as well as other critical aspects of student development.

An increasing amount of higher education literature demonstrates differences in engagement for monoracial students of color (see Harper, Carini, Bridges, & Hayek, 2004; Hawkins & Larabee, 2009). However, research on biracial student engagement remains scarce. The purpose of this research is to add to the limited scholarship on multiracial students by exploring the “rapidly growing population” of biracial college students. We shed light on who the biracial population is in U.S. higher education and how these students engage when compared to their monoracial peers, and to one another. Findings from this study expose the nuances of engagement for biracial students when controlling for racial makeup, subsequently problematizing the conceptualization of biracial students as a monolithic group. Moreover, by documenting who biracial students are and how they engage, this study builds a strong foundation for future explorations of the intricacies of multiraciality and multiracial student engagement in college.

Overview of the Literature

Student engagement is characterized as participation in educationally effective practices, both inside and outside of the classroom (Harper & Quaye, 2009, p.2). Student engagement has been, and continues to be a popular topic in higher education because of the plethora of integral outcomes it leads to. For instance, engagement has been found to influence college transition (Cabrera, Nora, Terenzini, Pascarella, & Hagerdorn, 1999), moral development (Evans, 1987), and persistence (Astin, 1975, 1993; Pascarella & Terenzini, 2005; Stage & Hossler, 2000; Tinto, 1975) to name a few. Put simply, students who spend more time and energy on sound educational practices get more out of their educational experiences. Because student engagement has been linked to student development (Astin, 1993; Pascarella & Terenzini, 2005), researching

engagement practices of biracial students may lead to important implications for supporting and promoting biracial students' development.

Early theories of engagement (e.g. Astin, 1984) focused explicitly on White students, which allowed for a raceless stance to engagement and student development theory (Patton, McEwen, Rendón, Howard-Hamilton, 2007). More recently, literature has begun to focus on the nuances of engagement for students with differing social identities (see Dayton, Gonzalez-Vasquez, Martinez, and Plum, 2004; Harper & Quaye, 2009; Kinzie, Thomas, Palmer, Umbach, & Kuh, 2007; Kuh, 2008). Specifically, with the shifting racial demographics of the U.S. and the increasing racial diversification in higher education, research on engagement for racial minority students has significantly increased during the past decade. For example, Kuh (2008) found that engagement in high impact practices (HIPs) is beneficial to all students' success and learning in higher education, but that participation in HIPs appears to be more valuable for students of color, who often participate in such practices at lower rates.

Finley and McNair (2013), with the support of the AAC&U, published *Assessing Underserved Students' Engagement in High Impact Practices* as a follow-up to Kuh's (2008) research. Findings from this study explored how racial minority students engage with their campuses differently than White students, resulting in differential impacts on various college outcomes. The researchers also explored underserved students groups' (African American, Asian American, Hispanic) engagement in and impact of HIPs. They found that White students engaged in more HIPs than racial minority students. However, when the researchers interrogate the impact of these HIPs, self-reported gains between racial groups differed from one another, with Asian American students often reporting the most gains, an important racial difference.

Extant literature further exposes differences in engagement between racial minority groups in U.S. higher education. For instance, Kim, Chang, and Park (2009) utilized Cooperative Institutional Research Program (CIRP) data to explore the levels at which Asian American undergraduates engaged with faculty. The authors found that compared to all other racial groups of students, Asian American students engaged less often with and reported lower quality of interaction with faculty at their institutions. Ying and colleagues (2001) also looked at Asian American engagement at a large university and found that Asian American students were significantly less engaged in cross-racial interactions when compared to all other racial groups. From these studies, it is evident that Asian American students engaged with faculty and peers at different, lower levels than their monoracial peers.

Engagement literature sheds light on a similar reality for Black and Latino/a students. For example, literature on Latina/o students' engagement has explored how cultural values of Latino/a students, such as familial obligations and a focus on community, differ from the cultural norms of the White academy and may impede their engagement and success (Dayton et al., 2004). Dayton and colleagues (2004) explained, "The cultural value of a strong family unit can sometimes be at odds with achieving a college degree. Many Latino students are first-generation college students who struggle to find the balance between their school and family obligations" (p.33). These cultural values are specific to Latina/o students' realities and experiences in college, impacting differences in their engagement when compared to monoracial peers.

Like Latina/o students, Black students also face obstacles to engagement on campus due to a misalignment between their culture and the White norms of the academy. Due to the historical construction of Blackness in the US, Black students face different barriers to engagement on campus than their monoracial peers of color. For instance, stereotypes that

construct Black women as hypersexual and/or strong “eventually seep into their collegiate experiences, which influences outcomes such as engagement and identity development” (Patton, Harris, Ranero, Villacampo, & Lui, 2014, p.42). Harper’s (2006) research on Black males elucidated how Black men also face issues of engagement, which is evident in their low college completion rate; the lowest of all other racial groups, as well as Black women. This dismal persistence rate for Black men can be linked to low levels of engagement on campus for these students (Harper, 2009). Black students, like other monoracial students of color, face several unique issues of engagement on the college campus.

Higher education research has also accounted for the impact of intersectionality and institutional characteristics in engagement for students of color. Previous research has interrogated the role that institutional type, such as HBCU’s (Nelson-Laird, Bridges, Morelon-Quainoo, Williams, & Holmes, 2007), women’s colleges (Kinzie et al., 2007) and community colleges (Witkow, Gillen-O’Neel, & Fuligni, 2012) play in engagement for these students. The complexities of identity have also opened up new avenues of inquiry on this topic. Studies have explored the influence of the intersections of race with gender (Harper, Carini, Bridges, Hayek, 2004; Hu & Wolniak, 2013), socioeconomic status (Hu, 2010), and Greek membership (Patton, Bridges, & Flowers, 2011) and their impact on student engagement. Findings from these studies expose and explain how students’ multiple identities, and the contexts they live and learn in, influence the ways in which they engage on campus.

Extant literature on students of color and engagement in college shows how engagement differs between racial groups. Furthermore, institutional type and the intersection of social identities, beyond race, complicate the ways in which these students engage. The cannon of literature on students of color is growing and subsequently, helping the field of higher education

better understand engagement and its many nuances for this student population. Unfortunately, this burgeoning cannon obscures one of the fastest growing populations in U.S. society and higher education (Jones, 2005; Jones & Smith, 2001), biracial Americans. This unilateral focus on monoracial students' engagement leaves higher education scholars and practitioners uninformed on this growing student population. This lack of focus has occurred for many reasons including socio-historical understandings of (mono)race, methods of data collection that fail to account for non-monoracial identities (Padilla & Kelley, 2005), and a general belief that multiracial students' experiences can be equated to those of monoracial students (Literte, 2010).

The small amount of research that *does* focus on this population suggests that multiracial students experience their race differently than their monoracial peers. For instance, multiracial students encounter unique multiracial microaggressions (Museus, Sariñana, & Ryan, in press), feel shut out by monoracially oriented student services (Literte, 2010), are ostracized and judged by monoracial peers of color (Basu, 2007; Rockquemore & Brunnsma, 2004, 2008), and must strategically navigate the campus peer environment in order to explore and form their racial identity (Renn, 2000, 2004). Moreover, due to phenotype, "good hair," cultural knowledge, and other external factors that act as a racial litmus test (Khanna, 2011), multiracial students are often pushed, pulled, and positioned betwixt and between monoracial students.

Literature on multiracial students has also exposed the nuances *within* the biracial student population when racial makeup is taken into account (Garrod, Kilkenny, & Gomez, 2014; Renn, 2004). For instance, Renn (2004) recognized that participants' racial makeup impacted the identity patterns they followed. For instance, of the five identity patterns multiracial students may enter into, students with two parents of color averaged approximately three different identity patterns, while students with Latina/o and White heritage averaged 1.6 patterns (Renn, 2004).

While these intra-racial findings are important, they continue to focus on identity development, which reinforces race as a biological, fixed category, ignores inequitable racial structures (Osei-Kofi, 2012), and leaves the field uninformed about the how racial makeup impacts other aspects of multiracial students' college experiences. In fact, Renn (2004), based on her findings, recommended that scholars explore the multiracial student population with large-scale quantitative surveys, such as NSSE, which we do in our study.

Since it is evident that multiracial students navigate and experience their race on campus differently than monoracial students, we posit that multiracial students engage differently on campus than their monoracial counterparts. Furthermore, we argue, like others, that “for multiracial individuals the ‘mix’ matters” (Garrod et al., 2014, p.3). Scholars support our argument in thinking “about multiracialized individuals as a group, one arrives at a collection of people with a wide range of histories, backgrounds, and lived experiences, suggesting great difficulty in identifying or describing multiracial students as belonging to a distinct racial identity group” (Osei-Kofi, 2012, p. 251; see also Brubaker, 2004; Gallagher, 2006). With this in mind, we examined the intricacies of racial identity *amongst* biracial students with differing racial/ethnic backgrounds and problematize the conceptualization of multiracial students as a monolithic group that all navigate their college experience similarly.

Methods

This study investigates the biracial student population in U.S. higher education and their levels of engagement by asking the following research questions:

1. Who are biracial college students and what types of institutions are they attending?
2. How do biracial students from divergent ethnic/racial makeups engage differently than one another and their monoracial peers on campus?

We approach this study with a critical lens that attempts to “forge challenges, illuminate conflict, and develop critique through quantitative methods in an effort to move theory, knowledge, and policy to a higher plane (Stage, 2007, p. 8) Focusing on multiracial students, and asking questions about their engagement through a criticalist stance challenges dominant ideologies concerning race and monraciality, traditional norms of data collection and analysis, and other master narratives that marginalize multiracial students. The aim of our research is to challenge the status quo and focus on equity in education, which are two main characteristics of critical research (Stage, 2007).

Data Source

The data for this study come from the 2013 and 2014 administrations of the National Survey of Student Engagement (NSSE). NSSE was designed to measure the time and energy that students invest in activities that relate to student learning and development. More specifically, NSSE asks students how often they engage in various effective educational practices as well as their perceptions of their college environment and perceived learning gains. Administered to first-year and senior students, NSSE 2014 was run at over 710 colleges and universities and NSSE 2013 at over 620.

Sample

The sample for this study consists of responses from nearly 189,000 first-years (40%) and over 278,000 seniors (60%) at 984 colleges and universities that participated in either the 2013 or 2014 administrations of NSSE. In situations where an institution participated in both years, data from the 2014 administration were used. Respondents in this study had to have responded to the NSSE survey question about racial/ethnic identification in order to be included. The students in this study were from a variety of majors, had mostly A or B grades, mostly of traditional college

age, and about half were first generation students. Very few were international students, and about two-thirds were White. Most of the students in the sample were enrolled full-time, few were taking all of their courses online, and about two-thirds of first-years and two in five seniors were living on campus. Slightly less than half of the students were at privately controlled institutions and from a variety of institution types, although the largest portion of students, around one-third, were at Master's-granting institutions with larger programs. For detailed information about the characteristics of students and institutions in this study, see Tables 1 and 2.

Measures

To address our first research question, we used a variety of demographic items (see Table 1) to examine the characteristics of biracial students and the characteristics of the institutions that biracial students attend (Table 2). Biracial students were identified by a survey item asking students to select their racial or ethnic identification. Students could select all categories that apply to them from the following options: American Indian or Alaska Native, Asian, Black or African American, Hispanic or Latino, Native Hawaiian or Other Pacific Islander, White, Other, I prefer not to respond. Students that chose two of these options, not including 'I prefer not to respond', were considered to be biracial. Students that chose only one racial/ethnic background option were considered to be monoracial. Students that chose three or more of these options were considered to be multiracial.

To answer our second research question, we examined the students' scores on five aggregate measures, called Engagement Indicators, created from multiple survey items: Collaborative Learning (CL), Discussions with Diverse Others (DD), Student-Faculty Interaction (SF), Quality of Interactions (QI), and Supportive Environment (SE). CL ($\alpha=.81$) represents how often students worked on group projects, asked others to help with difficult material or explained

it to others, and worked through course material in preparation for exams with peers. DD ($\alpha=.89$) represents how often students had discussions with people who are different from them in terms of race or ethnicity, economic background, religious beliefs, or political views. SF ($\alpha=.84$) represents how often students interacted with their faculty outside of courses such as talking about career plans, discussing course content, discussing academic performance, and working on non-course activities. QI ($\alpha=.82$) represents the quality of student interactions with their peers, advisors, faculty, and other staff and offices. SE ($\alpha=.89$) represents students' perceptions of how much their institution emphasizes services and activities that support their learning and development. These measures were rigorously tested using both qualitative and quantitative methods during a multi-year process to update the NSSE survey (BrckaLorenz, Gonyea, Miller, 2012).

Analyses

To address the first research question, descriptive analyses were examined to compare the demographic makeup of biracial students to the overall sample of students as well as to compare the patterns of attendance at different types of institutions. Differences greater than 5% were considered to be notable differences in representation because variances of this size have been associated with non-trivial effect sizes in NSSE data (National Survey of Student Engagement, 2009). To answer the second research question, students' scores on the five aggregate measures were examined, comparing biracial student scores to one another and to their monoracial peers. Mean scores of biracial students were ranked to see which biracial students were most and least engaged. Next, biracial student scores were compared to their monoracial counterparts using t-tests and Cohen's d effect sizes. For example, Asian and White biracial students were compared to Asian monoracial students and then to White monoracial students.

Results

In the following results, racial/ethnic backgrounds will be represented by the following: AI=American Indian or Alaska Native, AS=Asian, BL=Black or African American, LA=Hispanic or Latino, PA=Native Hawaiian or Other Pacific Islander, WH=White, OT=Other. The largest proportion of biracial students identified as WH/LA (32%; 2% of students overall), followed by WH/AS (15%), and WH/AI (15%). The remaining categories of students each made up 10% or less of those that identified as biracial. The smallest categories were AI/PA, PA/OT, AI/OT, and AI/AS. For more details on these distributions see Table 3.

When comparing biracial students as a group to the overall student population, their proportions of select demographic characteristics and select institutional characteristics were fairly similar. There were noticeably more biracial students attending institutions in the Far West (FY:14%/SR:21%) compared to the overall sample (FY: 9%/SR: 12%). Also, biracial students less frequently had mostly A grades (43%/47%) than the overall sample (48%/52%). For complete distributions, see Tables 1 and 2.

Means and standard deviations for biracial, monoracial, multiracial, and students who preferred not to respond to race can be found in Table 4. Bold scores in double-line boxes represent the three highest scores for each Engagement Indicator. Scores in shaded cells represent the three lowest scores for each Engagement Indicator. With the exception of Quality of Interactions, biracial students tended to have the highest engagement scores. AI/AS and AI/PA are represented in the highest engagement scores most often, followed by AS/PA and BL/PA students. Students who preferred not to respond about their race were noticeably more represented in the lowest Engagement Indicator scores, followed by PA/OT and AI/OT students.

When examining the statistical differences between biracial students and their monoracial peers, we noted three distinct patterns of engagement among biracial students. In the first pattern of difference, biracial peers were not statistically or practically different from their monoracial peers. AI/AS, AI/LA, AI/OT, AI/PA, BL/PA, LA/OT, and LA/PA students were all categorized into this pattern. In other words, for example, neither first-year nor senior AI/AS students were statistically significantly different ($p < .001$) from AI or AS students on any Engagement Indicator. The biracial students in this pattern of difference consisted of the bulk of AI biracial students and half of the PA and LA biracial students.

In a second pattern of difference where biracial students were primarily different from their monoracial peers, differences were observed on the Engagement Indicator Diverse Discussions with Others (DD). Although students may have been comparatively different in other ways, the biggest difference was in the DD indicator. In this group, biracial students were consistently higher than their monoracial peers in this area of engagement. AI/BL, AS/BL, AS/LA, AS/OT, AS/PA, BL/LA, BL/OT, PA/OT, and WH/PA students were all categorized into this pattern. In other words, for example, BL/LA students were more engaged in discussions with others who were different from them than Black or African American students (FY: $p < .001$, $d=.2$; SR: $p < .001$, $d=.2$) and Hispanic or Latino students (FY: $p < .001$, $d=.2$; SR: $p < .001$, $d=.3$). Otherwise, BL/LA students were equally engaged in other measures as Black or African American students and Hispanic or Latino students. The biracial students in this pattern of difference consisted of the bulk of AS and BL biracial students and half of the OT biracial students.

The third pattern of difference contained the only instances where biracial students were less engaged than their monoracial peers. Biracial students in this group were still higher than

their monoracial peers on Diverse Discussions with Others, but they sometimes displayed lower scores in the other areas of engagement. WH/AI, WH/AS, WH/BL, WH/LA, and WH/OT were all categorized in this pattern. This group consisted of the bulk of WH biracial students. Because the engagement of these students was more complicated, it is examined here in more detail.

Statistical and practical comparison between these biracial students and their monoracial counterparts appear in Table 5. Positive numbers indicate Cohen's *d* effect sizes ($p < .001$) when biracial engagement is higher than monoracial peers. Similar to the second group, these biracial students are consistently more engaged in interactions with people who are different from them. Negative numbers indicate Cohen's *d* effect sizes ($p < .001$) when biracial engagement is lower than their monoracial peers. Although lower engagement appears for some biracial students in Collaborative Learning and Supportive Environment, the majority of lower engagement for these biracial students is in their interactions with faculty members and their quality of interactions with students, faculty, advisors, and other staff and offices on campus. Again, the biracial students in this pattern of difference consisted of the bulk of students with White heritage.

Discussion

This study fosters an overdue conversation on the biracial student population in higher education. Results suggest that biracial student enrollment is concentrated at small institutions and institutions located in the West. Additionally, data also explores the racial/ethnic makeup of the biracial population, exposing that WH/LA (32%), WH/AI (17%), and WH/AS (14%), make up a large portion of this population. This is alarming as the majority of literature that focuses on biracial students in higher education is unequivocally focused on WH/BL biracial students (see Rockquemore & Brunson, 2008; Rockquemore, 1999). Subsequently, the field is left

uninformed on the experiences, engagement and otherwise, of the majority of the biracial population.

Beyond demographic characteristics, findings from this research shed light on the ways biracial students engage in higher education. Biracial students from all racial/ethnic backgrounds either engaged more than or equal to their monoracial counterparts in diverse discussions—no biracial group was less engaged than their monoracial peers on this measure. Furthermore, when disaggregating by race, a pattern was apparent. Students with American Indian heritage and/or Latino heritage were more likely to report the same amount of engagement in diverse discussions, and all other measures, as their monoracial peers. Biracial students with Black heritage and/or Asian heritage were more likely to report being engaged in diverse discussions than their monoracial peers, but engaged similarly to monoracial students on all other measures. Biracial students with Pacific Islander heritage were split between these two groups. AI/PA, BL/PA, and LA/PA were not differently engaged in diverse discussions, while AS/PA, PA/OT, and WH/PA were more engaged in diverse discussions. Similarly, a majority of biracial students with White heritage were more likely to report being engaged in diverse discussions than their monoracial peers, but did not engage similarly to monoracial students on other measures. Finally, students who marked “Other” and an additional racial heritage were spread across the three groups.

Existing literature sheds light on why biracial students may be consistently more engaged in diverse discussion than their monoracial peers in college. In *Mixed: Multiracial College Students Tell Their Life Stories*, several students wrote that their dual racial heritages afforded them the ability to traverse multiple cultures and understand differing perspectives. The editors explained, “being different or in between in fact makes them [mixed students] aware of their

unique vantage point” (Garrod et al., 2014, p. 13). Yancey and Lewis (2009) also explain that multiracial Americans are more comfortable navigating several different racial communities. Gloria Anzaldúa (1999) claimed that mixed race individuals have a “border identity” which leads to a “border consciousness.” Anzaldúa theorized that living in the borderlands, as many mixed race Americans do, provides individuals with the knowledge (and burden) of traversing two or more cultures as one being. This current research adds empirical evidence to support the ideology that *embodying* racial diversity allows one to more easily access and navigate diverse situations and discussions

While biracial students’ increased engagement in diverse discussions is an interesting and positive finding, the complexities, and negative engagement for biracial students with White heritage is concerning. A majority (79%) of the biracial students in this study, all of whom had White heritage, were less engaged than their monoracial peers on measures such as student-faculty interactions, perceptions of a supportive environment, quality of interactions, and collaborative learning. Previous literature on multiracial identity development touches on many of these measures and how they impact non-monoracial college students.

For instance, Renn (2004, 2008) relayed that multiracial students expressed encounters of racial ignorance and hostility from professors and teaching assistants. In 2010, Basu explored the gender differences in biracial men and women’s experiences with racial identity and racial stereotypes in college. One biracial participant relayed, “One professor...liked putting [the biracial students] on the spot...she [the professor] said to the whole class...what did you guys think of her [the biracial student]?” (p.109). This quote, and overall finding, is consistent with Renn’s (2004) assertions that biracial students may have negative interactions with faculty due to their multiple racial identities.

Biracial students' interactions with monoracial peers have also been a focus of literature on multiracial students (and identity development) in higher education. Research on this subject explores the challenges and barriers that biracial students encounter within monoracial peer groups, organizations, and other spaces on campus (see King, 2011; Literte, 2010; Renn, 2004; Rockquemore & Brunnsma, 2008). Both institutional and individual characteristics impact biracial students' perceptions of the campus environment and their interactions with peers. For instance, multiracial students had difficulty finding similar peers they could relate to (Renn, 2000), felt their peers categorized them as confused, or "Tragic" (Bettez, 2010), and encountered continual, jarring questions about their racial identity (Basu, 2003; Garrod et al., 2014). Still, other research explored biracial students' positive experiences in their campus and peer environments. For instance, Basu (2007) found that biracial women students sought out and found validating race-based campus organizations that lead to perceptions of a supportive campus environment.

Extant literature, like the research at hand, exposes how biracial students experience engagement in college differently. However, across the literature, the aspect that influences biracial students' experiences remains consistent. Appearance impacts how biracial students fit into, experience, and navigate their campus environment (Renn, 2000, 2004; Rockquemore & Brunnsma, 2008). Therefore, findings from this research lead one to believe that appearance and/or phenotype also impacts biracial students' engagement on campus.

Due to their appearance, and more specifically racial ambiguity, biracial students with White heritage are more apt to have their identity and authenticity called into question by campus constituents (Renn, 2004), causing a lack of fit and other challenges on campus. For instance, students who are racially ambiguous often encounter the "What are you?" question, which is a subtle form of racial discrimination (Jackson, 2010; Johnston & Nadal, 2010; Omi &

Winant, 1986). Furthermore, many practitioners do not see a reason to cater to these students as they can and should be able to utilize services historically made for monoracial students (Literate, 2010). Unfortunately, this may not be the case for biracial students with White heritage, who do not “look” monoracial and subsequently do not fit in and/or are not accepted into these spaces. Therefore, engagement within and with monoracial spaces is more difficult for these students when compared to monoracial peers and biracial peers with two parents of color. Renn (2004) explained that students with two parents of color have less difficulty gaining “entry into the spaces of other monoracial students...an entrée not as easily available to mixed students with white heritage or for those who with ‘racially ambiguous appearances...’” (p. 139). Therefore, having White heritage, and subsequently “Whiter” features, makes it more difficult for these biracial students to navigate and engage in spaces and organizations that have been created and maintained for and by monoracial campus groups.

Limitations

Although this study used two years of administration data, and analyzed the responses of nearly 500,000 students at close to 1,000 colleges and universities, the number of students in some biracial categories was still quite small. Fewer than 40 students identified as AI/PA, AI/OT, and PA/OT. It is possible that despite the size of our study, some of the groups studied are small enough that actual differences in the engagement of these groups and their monoracial peers may not be statistically detectable. Another limitation of our study are the relatively small number of American Indian or Alaska Native students and biracial students with American Indian or Alaska Native heritage both in our study and in the literature. It is worth noting that more biracial students indicated American Indian or Alaska Native heritage than students that identified as only American Indian or Alaska Native. Further study of American Indian or

Alaska Native students could help to better explain the engagement of these students. Another limitation of this study is the ambiguous identity of students identifying with an “Other” racial/ethnic identification. Details about the identity of these students are unclear, making it difficult to interpret the engagement results of these students and even more difficult to improve the engagement experience for these students.

Implications and Conclusion

Scholars in higher education should greatly increase research on biracial students and engagement as such work is important to a more complete understanding of college students and the areas in which higher education practitioners fail to meet the needs of large and growing groups of student. Research must take an institution level approach and interrogate how biracial students from different racial/ethnic backgrounds engage differently at different institutional types. For instance, what is the difference in engagement, if any, for biracial students at small liberal arts colleges, large PWIs, and HBCUs? Moreover, does the racial makeup of the student body at an institution impact engagement for certain racial groupings of biracial students? Within this research, biracial students with White heritage may have been less engaged than their monoracial counterparts because the majority of the sample population was drawn from PWIs. Future research should look into the nuances of engagement for biracial students with Latino heritage at Hispanic Serving Institutions, for biracial students with Black heritage at HBCUs, and Native Indian students at Tribal Colleges and Universities.

Geographical influences in biracial students’ engagement should also be explored. This current study revealed that biracial students are concentrated at institutions on the West Coast. Previous research cited the positive impact having a “critical mass” of multiracial and biracial students had on other mixed race students’ experiences (Renn, 2000). Biracial students may be

engaged on the West Coast, where more biracial students are enrolled, than in other geographical regions. Moreover, US race relations were constructed, maintained, and operate in different manners in divergent regions of the nation. These race relations may influence institutional politics of race as well as biracial students' engagement at these institutions.

This current study also has strong implications for how future studies (and institutional assessments) of biracial students are conducted. The nuances within and across biracial students' engagement suggest that biracial students, when disaggregated by racial/ethnic makeup do not engage in the same manners. Therefore, it is not best, in research or practice, to categorize biracial students as a monolithic group (e.g. biracial, multiracial, more than one race). Scholars agree that thinking about biracial people as a group is misleading because these individuals, who are often lumped together, have a plethora of diverse experiences due to their racial/ethnic makeup, lived realities, and histories (Brubaker, 2004; Gallagher, 2006; Osei-Kofi, 2012). Finally, quantitative research on biracial student engagement must be followed up with or complimented by qualitative research. While this research provides generalizability and a strong foundation on the topic at hand, the field is still left uniformed as to *why* biracial students from different racial/ethnic backgrounds engage differently. Qualitative research would help paint a more detailed picture of the quantitative findings from this research and would complement both quantitative studies such as this one as well as the qualitative work on multiracial student development.

Results from this study also guide practitioners in their support of the biracial population. It is important to note that while only five racial/ethnic "pairings" of biracial student groups reported lower measures of engagement on various items, such as student-faculty interaction and supportive environment, these five groups made up 79% of the sample. It is evident that the

biracial student population requires more support in and facilitation of campus engagement. Fortunately, this research explores deeper the nuances of engagement for biracial students with differing racial/ethnic makeups and affords practitioners the ability to offer targeted support for these students.

For instance, WH/OT, WH/BL, WH/LA biracial first year and senior students reported lower quality of interactions on campus than their White and/or monoracial counterparts of color. Therefore, practitioners must not only identify, but also attempt to understand and address the needs of this sub-group of biracial students. While this quantitative research study identifies that these students report less quality in their interactions, it is paramount that practitioners take time to speak with these students and ask them what their concerns and challenges may be when it comes to engagement on campus, and specifically their quality of interactions.

Additionally, WH/AI, WH/BL, WH/AS, and WH/LA first year students consistently reported being less engaged in student-faculty interactions than their monoracial counterparts of color. In other words, these biracial groups reported less interaction with faculty than their Asian, Black, Latina/o, and American Indian peers. This may contribute to the finding that biracial students less frequently had mostly A grades (43%/47%) than the overall sample (48%/52%). Therefore, support for biracial students must extend beyond social/peer environments and focus on the academic engagement of these students. An intentional mentoring program could be set up, for example, between professors and biracial students, targeting those with White heritage. Weekly or monthly meetings between faculty and these biracial students could deal with topics such as study habits, professional development, and other academic issues that concern biracial students.

This is the first quantitative empirical study to look at and expose the complex and

multiple ways in which biracial students engage in higher education. Findings provide new information on the make up of the biracial population in US colleges and universities, where they are enrolled, and how they engage. This study challenged dominant ideologies of biracial students; such as the population being majority BL/WH biracial students and that these students can be categorized as a monolithic group that has similar experiences. This research provides a strong foundation for further exploration into how exactly biracial students may be conceptualized and understood within higher education research and practice. It is imperative that scholars and practitioners continue to focus on this student population as it is growing rapidly and, as this research shows, biracial students' needs are multifaceted and worthy of being explored and met.

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Table 1 Select Student Characteristics for the Overall Study Sample and Biracial Student Sample

		First-Year Percentages (%)		Senior Percentages (%)	
		Overall Sample	Biracial Sample	Overall Sample	Biracial Sample
Major	Arts & Humanities	10	12	11	14
	Biological Sciences, Agriculture, & Natural Resources	11	12	9	10
	Physical Sciences, Mathematics, & Computer Science	6	6	5	5
	Social Sciences	11	13	13	17
	Business	14	12	17	13
	Communications, Media, & Public Relations	4	5	4	4
	Education	8	6	9	6
	Engineering	8	8	7	6
	Health Professions	15	13	13	12
	Social Service Professions	4	5	5	5
Grades	Mostly A grades	48	43	52	47
	Mostly B grades	44	47	43	47
	Mostly C grades or lower	8	10	5	6
First-generation		41	43	47	46
Gender	Female(2013)/Woman(2014)	65	65	64	64
Age	19 or younger	87	90	<1	1
	20-23	7	6	62	65
	24-29	2	2	16	18
	30-39	2	2	11	10
	40-55	2	1	10	6
	Over 55	0	0	1	1
International Student		7	5	5	4
Racial/ ethnic background*	American Indian or Alaska Native	<1	-	<1	-
	Asian	7	-	6	-
	Black or African American	8	-	8	-
	Hispanic or Latino	8	-	7	-
	Native Hawaiian or Other Pacific Islander	<1	-	<1	-
	White	63	-	67	-
	Other	1	-	1	-
	Multiracial	8	100	6	100
I prefer not to respond	4	-	5	-	
Social fraternity/sorority member		9	8	10	10
Living on campus		68	69	18	20
Taking all courses online		3	2	11	8
Full-time enrolled		96	97	83	85

*Biracial students were not counted in monoracial categories (i.e. each student is represented only once).

Table 2 Select Institution Characteristics for the Overall Study Sample and Biracial Student Sample

		First-Year Percentages (%)		Senior Percentages (%)	
		Overall Sample	Biracial Sample	Overall Sample	Biracial Sample
Private control		41	39	36	34
Carnegie classification	RU/VH	15	17	15	16
	RU/H	11	12	13	13
	DRU	7	6	6	5
	Master's L	29	28	34	35
	Master's M	9	9	9	8
	Master's S	5	4	4	4
	Bac/A&S	12	13	9	10
	Bac/Diverse	9	7	8	6
	Other	3	3	2	2
Institution size	Special focus/very small	6	6	5	4
	Small	21	18	17	15
	Medium	33	32	32	30
	Large	40	44	46	50
Selectivity (Barrons)	Not available/special	6	6	6	6
	Noncompetitive	2	2	2	2
	Less competitive	8	8	8	7
	Competitive	42	41	45	45
	Very competitive	26	25	25	24
	Highly competitive	13	14	11	12
	Most competitive	4	6	3	4
Region	New England	9	8	7	6
	Mid East	20	18	17	15
	Great Lakes	14	11	14	9
	Plains	7	5	7	5
	Southeast	28	27	28	25
	Southwest	7	10	9	12
	Rocky Mountains	5	6	6	6
	Far West	9	14	12	21
	Outlying Areas	1	1	<1	1

Table 3 Percentages of Biracial and Monoracial Students

		Count	Overall Percentages (%)	Biracial Percentages (%)*
American Indian or Alaska Native/Asian	AI/AS	36	0.0	0.1
American Indian or Alaska Native/Black or African American	AI/BL	663	0.1	2.4
American Indian or Alaska Native/Hispanic or Latino	AI/LA	266	0.1	1.0
American Indian or Alaska Native/Native Hawaiian or Other Pacific Islander	AI/PA	20	0.0	0.1
American Indian or Alaska Native/Other	AI/OT	38	0.0	0.1
Asian/Black or African American	AS/BL	325	0.1	1.2
Asian/Hispanic or Latino	AS/LA	445	0.1	1.6
Asian/Native Hawaiian or Other Pacific Islander	AS/PA	548	0.1	2.0
Asian/Other	AS/OT	326	0.1	1.2
Black or African American/Hispanic or Latino	BL/LA	1167	0.2	4.3
Black or African American/Native Hawaiian or Other Pacific Islander	BL/PA	81	0.0	0.3
Black or African American/Other	BL/OT	670	0.1	2.4
Hispanic or Latino/Native Hawaiian or Other Pacific Islander	LA/PA	115	0.0	0.4
Hispanic or Latino/Other	LA/OT	303	0.1	1.1
Native Hawaiian or Other Pacific Islander/Other	PA/OT	21	0.0	0.1
White/American Indian or Alaska Native	WH/AI	3984	0.9	14.6
White/Asian	WH/AS	4047	0.9	14.8
White/Black or African American	WH/BL	2600	0.6	9.5
White/Hispanic or Latino	WH/LA	9092	1.9	33.2
White/Native Hawaiian or Other Pacific Islander	WH/PA	727	0.2	2.7
White/Other	WH/OT	1880	0.4	6.9
American Indian or Alaska Native	AI	2211	0.5	-
Asian	AS	29037	6.2	-
Black or African American	BL	36704	7.9	-
Hispanic or Latino	LA	34483	7.4	-
Native Hawaiian or Other Pacific Islander	PA	1304	0.3	-
White	WH	303864	65.1	-
Other	OT	6750	1.4	-
Multiracial-more than two categories	MR	4673	1.0	-
I prefer not to respond	PNR	20523	4.4	-

*Biracial students were not counted in monoracial categories (i.e. each student is represented only once).

Table 4 Engagement Indicator Scores for Biracial, Monoracial, Multiracial, and Students Who Prefer Not to Respond (PNR)

	First-Year										Seniors									
	CL		DD		SF		QI		SE		CL		DD		SF		QI		SE	
	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD	Mean	SD
AI AS	33.5	13.8	42.2	19.9	23.4	14.9	39.8	15.0	35.3	14.4	40.6	15.6	39.7	20.9	30.0	18.1	45.9	16.0	44.1	16.9
AI BL	31.3	14.2	42.5	16.7	21.9	15.3	40.6	13.5	36.5	15.0	30.2	15.8	46.9	15.6	24.2	16.5	43.0	12.4	35.6	15.3
AI LA	31.8	14.3	43.0	16.4	20.4	16.2	41.1	13.2	38.6	14.3	32.8	15.8	46.2	15.4	25.8	18.0	43.4	13.6	36.2	16.6
AI OT	25.0	14.4	42.1	17.6	22.7	16.6	36.4	17.7	32.2	14.5	32.0	12.8	47.0	16.4	30.5	20.2	43.3	11.7	37.4	16.5
AI PA	36.0	15.4	44.0	15.6	24.0	18.2	41.3	9.9	41.1	18.4	33.0	13.6	48.0	13.0	32.5	18.0	37.9	15.5	31.9	20.9
AS BL	31.7	13.8	44.7	14.3	21.1	15.5	38.7	12.6	36.3	14.4	33.0	15.6	46.3	14.9	25.2	17.7	41.5	13.5	33.6	15.3
AS LA	34.4	13.8	44.8	15.5	20.2	14.0	42.1	12.4	39.8	13.7	35.1	14.8	46.2	14.8	23.8	16.4	41.2	12.4	33.5	15.0
AS OT	35.6	13.8	44.1	15.8	20.6	15.0	40.6	11.8	37.5	15.0	34.9	14.5	45.7	14.5	23.9	15.1	40.5	12.9	34.7	13.9
AS PA	37.3	13.8	44.9	14.6	20.8	15.4	41.6	12.7	38.5	13.7	36.2	14.1	46.0	14.9	26.7	17.0	42.9	12.2	34.1	14.5
BL LA	31.7	14.4	44.4	16.3	21.7	15.8	40.7	12.9	39.0	14.5	32.8	14.9	46.8	14.9	25.4	17.8	43.3	11.4	36.0	14.4
BL OT	33.4	13.8	44.4	15.0	22.8	14.4	41.2	11.8	39.4	13.1	32.0	15.2	45.0	16.0	25.7	16.6	42.6	11.8	34.1	14.9
BL PA	33.1	16.5	42.2	13.8	23.8	15.2	41.6	11.2	34.1	15.2	33.3	14.0	48.0	14.0	26.5	17.0	42.0	12.1	37.8	15.5
LA OT	31.9	13.3	43.7	14.8	23.0	16.5	42.3	13.1	37.6	13.7	33.0	13.9	43.8	16.8	26.1	15.2	42.0	13.1	32.4	15.6
LA PA	34.5	12.8	39.6	15.4	21.7	15.5	40.5	15.2	38.0	14.1	34.1	13.7	46.6	14.5	23.4	14.4	43.2	12.1	33.0	13.6
PA OT	35.0	15.5	42.1	19.1	12.1	10.4	34.3	19.6	37.1	21.3	28.9	15.5	52.9	9.1	24.2	17.3	46.3	7.8	31.4	18.1
WH AI	32.3	14.1	43.7	14.8	20.9	14.5	42.7	11.8	37.7	13.8	31.3	14.6	44.7	15.1	24.8	16.2	42.6	11.4	32.6	14.4
WH AS	33.2	13.9	43.2	14.6	18.6	13.5	42.0	11.4	37.5	13.1	33.2	14.2	43.8	15.1	24.7	15.7	42.5	11.0	34.1	13.4
WH BL	32.0	14.0	45.7	14.5	20.8	14.9	41.3	12.4	38.5	13.4	32.0	14.2	46.5	14.8	24.8	16.8	42.7	11.3	34.9	14.1
WH LA	32.5	13.6	43.3	15.2	20.1	14.2	42.1	11.9	38.6	13.3	33.0	14.2	44.3	15.3	24.4	16.1	42.5	11.5	34.3	14.0
WH OT	33.3	13.6	44.7	15.3	21.0	14.1	41.3	12.7	36.0	14.2	33.7	14.0	44.6	15.2	26.2	16.2	41.5	11.5	32.5	14.2
WH PA	34.7	13.5	43.3	14.7	19.8	13.8	42.1	12.5	37.6	13.4	33.9	14.1	45.2	15.0	25.2	15.8	43.1	11.4	34.0	13.7
AI	32.2	15.1	41.0	17.0	23.3	16.4	40.3	14.2	36.6	14.5	30.4	15.8	42.1	16.8	24.7	17.7	42.4	14.3	33.4	15.8
AS	33.5	13.5	39.5	16.4	21.6	14.6	40.7	12.5	36.3	13.7	34.3	14.0	40.6	16.6	24.8	15.9	41.8	12.0	34.1	14.2
BL	31.8	15.0	41.4	16.6	23.1	16.1	40.9	13.2	39.1	14.6	31.1	15.5	43.5	16.4	24.3	17.0	44.1	12.6	36.1	15.5
LA	31.9	14.0	41.0	17.0	21.1	15.5	40.5	13.8	39.1	14.5	32.7	14.5	42.6	17.0	24.0	17.0	43.0	12.7	34.8	15.4
OT	32.5	14.5	42.6	16.6	22.7	15.6	40.5	13.5	36.9	14.9	32.8	14.6	44.4	16.3	25.1	16.3	41.7	12.9	33.4	15.2
PA	31.7	14.1	40.1	16.2	21.7	16.1	40.8	13.4	38.0	14.5	33.3	14.7	40.3	17.6	23.9	16.0	43.2	12.3	34.8	15.3
WH	32.7	13.8	40.8	15.3	20.1	13.8	42.8	11.5	38.1	13.2	32.5	14.6	40.9	15.6	24.5	16.3	43.3	11.2	33.7	13.8
Multiracial	33.1	14.1	45.8	15.1	22.2	15.2	41.1	12.7	37.8	14.1	32.7	14.6	46.7	14.9	25.3	16.2	42.3	12.1	33.2	15.0
PNR	31.2	14.5	42.2	16.1	19.8	14.4	39.7	12.8	35.0	14.2	31.0	14.9	42.3	16.4	23.1	16.3	39.0	12.9	29.7	14.7

Note: Shaded cells represent the three lowest Engagement Indicator Scores. Outlined cells represent the three highest Engagement Indicator scores.

Table 5 Biracial Engagement Compared to Monoracial Peers

WH/AI compared to WH and AI respectively										
	CL		DD		SF		QI		SE	
First-Year	•	•	.2	.2	•	-.2	•	.2	•	•
Senior	-.1	•	.2	.2	•	•	•	•	-.1	•
WH/AS compared to WH and AS respectively										
	CL		DD		SF		QI		SE	
First-Year	•	•	.2	.2	-.1	-.2	•	.1	•	.1
Senior	•	-.1	.2	.2	•	•	•	•	•	•
WH/BL compared to WH and BL respectively										
	CL		DD		SF		QI		SE	
First-Year	•	•	.3	.3	•	-.1	-.1	•	•	•
Senior	•	•	.4	.2	•	•	•	-.1	•	•
WH/LA compared to WH and LA respectively										
	CL		DD		SF		QI		SE	
First-Year	•	•	.2	.1	•	-.1	-.1	.1	•	•
Senior	•	•	.2	.1	•	•	-.1	•	•	•
WH/OT compared to WH and OT respectively										
	CL		DD		SF		QI		SE	
First-Year	•	•	.3	.1	•	•	-.1	•	-.2	•
Senior	•	•	.2	•	.1	•	-.2	•	•	•

Key: • no statistically significant difference ($p < .001$); a positive number indicates the Cohen’s d effect size when biracial students’ engagement is higher than their monoracial counterpart; a negative number indicated the Cohen’s d effect size when biracial students’ engagement is lower than their monoracial counterpart