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Diversity-Related Experiences and Academic Performance Among Ethnic Minority College Students

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DIVERSITY-RELATED EXPERIENCES AND ACADEMIC PERFORMANCE AMONG ETHNIC MINORITY COLLEGE STUDENTS

by

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ABSTRACT

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by

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College completion rates are improving for ethnic minority students, but they are still particularly vulnerable to college dropout and financial hardships. Previous research has shown that diversity-related experiences, including discrimination and campus diversity initiatives, are related to sense of school belonging and academic success. The purpose of this study was to examine the links between various diversity-related experiences and academic outcomes of ethnic minority students, in the hope that shedding light on various barriers and supports available to students of color may help illuminate areas where we are helping or failing students who need our support.

The present study found evidence that cross-racial interactions result in both positive and negative experiences for ethnic minority students. Microaggressions, positive and negative cross-racial interactions, and cocurricular diversity activities were positively correlated, suggesting that microaggressions occur frequently when crossing

racial divides or engaging in conversations related to diversity. Results suggest that students of color who make efforts to engage in diversity activities are at an increased risk of experiencing negative effects associated with microaggressions (e.g., negative links to mental health, psychological well-being, self-esteem, and emotional turmoil). Despite these seemingly negative correlates of diversity-related activities, these multicultural experiences play a significant role in making students of color feel welcome on campus.

Consistent with prior literature, results from this study indicate that diversity experiences on college campuses are important correlates of feelings of belonging for ethnic minority students. In the present study, positive cross-racial interactions, campus racial climate, cocurricular diversity activities, and microaggressions were linked to school belonging. Diversity-related experiences examined in this study appeared to have little to no ability to predict academic achievement. Only age predicted GPA. Age and positive cross-racial interactions predicted academic aspirations; however, the model was only marginally significant ($p = .05$). No variables significantly predicted retention; overall model was nonsignificant ($p = .15$). Demographic and diversity-related variables predicted retention with 67% accuracy. Thus, in general, diversity-related experiences seemed to predict school belonging better than academic performance. These findings can inform policy and college-based initiatives aimed at creating learning environments that foster inclusion and dignity for historically marginalized students.

(106 pages)

PUBLIC ABSTRACT

Diversity-Related Experiences and Academic Performance Among Ethnic Minority College Students

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Students of color experience numerous educational disadvantages compared to White students. These disadvantages begin in elementary school and continue into college and adulthood. Ethnic minority students typically have less resources available to them than White students and are typically less prepared for college—academically and financially. Once students of color enroll in college, they face additional barriers due to discrimination and negative attitudes towards diversity. These factors play a key role in student engagement and persistence. The campus racial climate of a university, defined as the overall racial environment of the campus, has been shown to strongly influence students' feelings of belonging to an institution. This study examined the links among experiences of discrimination, campus openness to diversity, multicultural experiences, academic success, and feelings of school belonging for students of color, in order to identify ways in which we can improve the educational experiences of disadvantaged students.

The current study found evidence that many diversity-related experiences such as cross-racial interactions, campus racial climate, cocurricular diversity activities, and discrimination, strongly influenced feelings of school belonging for students of color. These findings add support to previous research that suggests that diversity experiences

on college campuses play a significant role in making students feel welcome at an institution. However, diversity-related experiences examined in this study appeared to have little correlation to academic performance and retention.

School belonging did not correlate with academic performance. It seems students' grades may be better explained by internal factors, like motivation, rather than external factors, like the campus environment. Perceptions of more negative cross-racial interactions and more discrimination experiences were linked with more negative perceptions of the campus racial climate. Campus racial climate was linked to students' desire to pursue higher education in the future. As the amount of positive cross-racial interactions students experienced increased, so did the amount of negative cross-racial interactions. This suggests that higher levels of cross-racial interactions result in both positive and negative experiences. More cross-racial interactions and cocurricular diversity activities were associated with more experiences of discrimination. This suggests that students of color are likely to experience discrimination when interacting with persons of different racial backgrounds or engaging in conversations related to diversity. Overall, diversity-related experiences linked to feelings of school belonging more than academic performance. Findings provide guidance for college-based initiatives to improve campus racial climates, in order to create more welcoming environments for students of color.

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CHAPTER I

INTRODUCTION

Educational disparities plague our education system today. Students of color experience educational disparities across developmental periods, beginning in elementary school and continuing into adulthood. Racial inequality in education opportunity has been extensively documented, including quality of instruction, physical resources, school funding, tracking, and representation in curriculum (Skiba, Michael, Nardo, & Peterson, 2002). Empirical studies have shown that students of color enter elementary school with lower levels of oral language, prereading, and premathematics skills, in addition to less general knowledge than their White and Asian peers (Farkas, 2003). This only worsens over time. According to Farkas, Black children begin elementary school approximately 1 year behind their White classmates in vocabulary knowledge, but by the time they graduate high school they are approximately 4 years behind their White peers. Every year during school, Black students learn less than White students on average (Farkas, 2003).

Ethnic minority children are afforded fewer opportunities to learn than White children. Parents of ethnic minority children typically have lower levels of education and test scores. Additionally, ethnic minority children usually attend schools that cover less advanced material and employ lower-performing teachers, amidst lower performing students (Farkas, 2003). Students of color, especially Black students, are more likely to be expelled, suspended, and suffer punitive consequences than White students (Skiba et al., 2002). Also, Black students are more likely to suffer harsher disciplinary strategies, such as corporal punishment, and are less likely to receive mild disciplinary alternatives

than their White classmates. Furthermore, ethnic minority students are overrepresented in special education and school dropouts (Skiba et al., 2002) and have lower access to health care coverage than their White peers. According to the U.S. Census Bureau, the uninsured rates in 2015 were 5.2% for Black children, 4.2% for Asian children, and 7.3% for Latinx children, compared to 4.3% of White children (Barnett & Vornovitsky, 2016).

Demographic variables such as socioeconomic status (SES), educational background, and parents' level of education all play a role in the disadvantage of students of color. Ethnic minority students typically have less resources available to them than White students and are typically less prepared for college academically, as well as financially. Once students of color enroll in college, they face additional barriers to academic success due to discrimination and nonaffirming campus climates for diversity. These factors play a key role in academic engagement and persistence (Johnson, Wasserman, Yildirim, & Yonai, 2014). Unfortunately, since students of color do not enroll in college as frequently as White students (Kim, 2011), they often attend college at schools that are predominantly White (Butrymowicz, 2014; U.S. Department of Education, National Center for Education Statistics, 2010). These schools often fail to attend adequately to issues of social justice and campus racial climate, broadly defined as the overall racial environment of the college campus (Solorzano, Ceja, & Yosso, 2000). Research has demonstrated the effects of campus racial climate on institutional commitment and persistence for students of color (Johnson et al., 2014; Museus, Nichols, & Lambert, 2008), as well as feelings of belonging to the institution (Johnson et al., 2007; Yosso, Smith, Ceja, & Solórzano, 2009).

Many students of color drop out of college, which serves to further perpetuate the system of disadvantage. The vast number of ethnic minority individuals that do not attain a college degree is problematic because it ensures that large percentages of subsequent generations of students of color will be first generation college students, if they attend college at all. According to the Pell Institute, the likelihood of enrolling and persisting in college is strongly related to parents' education (Engle & Tinto, 2008).

The importance of earning a college degree can be seen in the trajectories of persons of color across adulthood. Ethnic minority individuals typically earn less money than Whites, have lower access to health care, and live in more hazardous environments. For example, American Indian reservations have historically been systematically targeted for locations for hazardous waste incinerators, solid waste landfills, and nuclear waste storage facilities (Lipsitz, 2012). Blacks also frequently experience increased health risks because of where they live. In many cities, like Washington, D.C., air pollution levels are higher in poorer areas where Black populations live (Burger & Gochfeld, 2011). In addition to environmental disparities, ethnic minorities often receive poorer medical attention, which may explain this population's higher mortality rates. According to Indian Health Service (2015), American Indians born today have a life expectancy that is 4.2 years less than the national average. Similarly, Blacks experience a life expectancy that is 3.5 years less than Whites (Centers for Disease Control and Prevention, 2015).

As this country grows more and more racially diverse, citizens should be concerned with what that means for our country, including widening educational achievement gaps and income imbalances between race groups. Although college

enrollment is up, it is not increasing as much as it has in the past, and some ethnic groups are continuing to lag behind. The American Council on Education has identified a disturbing trend in the U.S. concerning the level of education of younger generations. Findings show that the younger generation no longer achieves a much higher level of education that its predecessors. As of 2009, the number of adults aged 25 to 29 who had obtained an associate degree or higher (37.8%) was only marginally higher than adults aged 30 and older (35.1%) who had obtained the same level of education (Kim, 2011). Only two racial groups, Asians (65.6% versus 54.2%) and Whites (44.9% versus 38.5%), made notable gains over their elders in postsecondary attainment. No gains were observed for Blacks (24.7% versus 25%) and Latinxs (17.9% versus 17.9%), and American Indians (16.9% versus 21.6%) actually experienced a decrease in postsecondary attainment compared to their elders (Kim, 2011). This gap is particularly notable amongst ethnic minority men. Young men of color, with the exception of Asians, have fallen behind their predecessors in college degree attainment. This is not the case among White males (Kim, 2011).

Not only is underrepresentation in postsecondary education problematic for persons of color, it is concerning for the communities in which persons of color reside. Research by economist Enrico Moretti (2004) has shown that academic attainment actually benefits the community as a whole, not just those who receive a degree. Findings suggested that having a highly educated workforce can boost a community's economy because areas with highly educated residents tend to attract employers who pay better, which in turn gets filtered back into the community when those employees spend money

locally. As a result, wages of workers at all levels of education were higher in metropolitan areas with more college-educated residents (Moretti, 2004). Helping to decrease educational attainment gaps between race/ethnic groups will ultimately have a positive effect on underprivileged communities as a whole.

Understanding the impact of experiences of discrimination, campus openness to diversity, and multicultural experiences on academic success and feelings of belonging for students of color allows researchers to better understand the complexities of campus diversity climate, and also potentially allows researchers to improve this population's quality of life. Students of color are particularly vulnerable to college dropout and financial hardships that can affect college success. The diversity climate of this campus is an important factor to consider for evaluating the potential disadvantages of ethnic minority students at this university. Therefore, this study explored predictors of school belonging, educational aspirations, academic performance, and retention among students of color. Predictors of academic outcomes include aspects of campus diversity climate (e.g., discrimination, formal and informal multicultural experiences) and barriers to academic pursuit (e.g., low SES, first generation college status). Utah State University (USU) presents an interesting context to study these factors because of its predominately White, conservative student population. The purpose of this study was to examine how this campus' unique environment facilitates or hinders academic success among ethnic minority students.

CHAPTER II

LITERATURE REVIEW

Histories of disadvantage set ethnic minority college students up for vulnerability. Substantial gaps in college enrollment between racial groups persist. In 2009, 46% of Whites between the age of 18 and 24 were enrolled in college, while only 35% of Blacks and 29% of Latinxs were enrolled. This gap was even more substantial for Black and Latinx males (Kim, 2011). Grade point averages and graduation rates for students of color are lower than their White peers. Research by Fischer (2010), suggested that these performance gaps cannot be explained by background factors, like academic preparation for college and parents' SES. Fischer (2010) also pointed out that students of color are less likely to graduate on time when compared with White and Asian students. In fact, most students of color who enroll in college do not graduate at all. According to Museus (2011), approximately 40% of Black students and 47% of Latinx students who enroll in a 4-year college or university earn a bachelor's degree within 6 years, compared to 59% of White students. In 2010, 19.8% of Blacks 25 years of age and older and 13.9% of Latinxs had a bachelor's degree or higher, compared to 30.3% of Whites (U.S. Census Bureau, 2012, p. 151).

Recent educational trends suggest that the future looks more promising for ethnic minority students. A recent report by the U.S. Department of Education, National Center for Education Statistics, stated that from 1990 to 2014, the percentage of 25-29 year olds who attained a bachelor's degree or higher increased for Blacks (from 13% to 22%), Latinxs (from 8% to 15%), and Asians/Pacific Islanders (from 43% to 61%), as well as

Whites (26% to 41%; Kena et al., 2015). The report also stated that most of the increase for Latinxs over this period (4%) occurred in the most recent decade. Additionally, from 1995 to 2014, the percentage of 25-29 year olds who attained a master's degree or higher increased for Blacks (from 2% to 4%), Latinxs (from 2% to 3%), and Asians/Pacific Islanders (from 11% to 18%), as well as Whites (from 5% to 9%; Kena et al., 2015).

A previous report by the U.S. Department of Education, National Center for Education Statistics (2012), showed that the number of degrees earned in 2009-2010 among U.S. residents increased compared to 1999-2000 for students of all racial/ethnic groups for each level of degree, but at varying rates. Among U.S. residents, the number of students earning associate's degrees increased by 50% from academic years 1999-2000 to 2009-2010. This corresponded to an increase of 35% among Whites, 58% among Asian/Pacific Islanders, 59% among American Indian/Alaska Natives, 89% among Blacks, and 118% among Latinxs. The number of students earning bachelor's degrees increased by 34% during the same time period. This corresponded to an increase of 26% among Whites, 51% among Asian/Pacific Islanders, 42% among American Indian/Alaska Natives, 53% among Blacks, and 87% among Latinxs (U.S. Department of Education, National Center for Education Statistics, 2012).

The report also showed an increase in the number of advanced degrees earned by students of all racial/ethnic groups (U.S. Department of Education, National Center for Education Statistics, 2012). The number of students earning master's degrees increased by 50% from academic years 1999-2000 to 2009-2010. This corresponded to an increase of 37% among Whites, 79% among Asian/Pacific Islanders, 75% among American

Indian/Alaska Natives, 109% among Blacks, and 125% among Latinxs. The number of students earning doctoral degrees increased by 32% during the same time period. This corresponded to an increase of 26% among Whites, 56% among Asian/Pacific Islanders, 35% among American Indian/Alaska Natives, 47% among Blacks, and 60% among Latinxs (U.S. Department of Education, National Center for Education Statistics, 2012).

Although college enrollment and degree attainment for ethnic minority groups is improving, their White counterparts still account for the majority of college degrees. Among U.S. residents earning college degrees in 2009-2010, White students earned 66% of associate's degrees, 73% of bachelor's degrees, 73% of master's degrees, and 74% of doctor's degrees (U.S. Department of Education, National Center for Education Statistics, 2012). A more recent report by the U.S. Department of Education, National Center for Education Statistics, stated that from 1990 to 2014, the gap between Whites and Blacks in the rate of attaining a bachelor's degree or higher widened from 13 to 18 percentage points, and the gap between Whites and Latinxs widened from 18 to 26 percentage points (Kena et al., 2015). Additionally, the gap between Whites and Latinxs in the attainment of a master's degree or higher has widened from 4 percentage points to 6 percentage points from 1995 to 2014 (Kena et al., 2015).

The trajectories of ethnic minorities across adulthood are also disadvantaged when compared with the White majority. Much of this is influenced by education level. Earning a college degree has been linked with lower unemployment rates and increased access to health care (U.S. Census Bureau, 2010, 2012), higher income and lower instances of poverty, more government tax revenue and less reliance on social safety-net

programs, lower smoking rates and more positive perceptions of personal health, lower incarceration rates, higher levels of civic participation (i.e., volunteer work, voting, blood donation; Baum, Ma, & Payea, 2013), and a healthier economy for the community in which college-educated residents reside (Moretti, 2004). Earning a college degree is important for ethnic minority individuals and their surrounding communities, as well as the country as a whole.

Unemployment rates have been linked with education level and ethnicity. According to the U.S. Department of Labor, rates of unemployment were linked to education level in 2015; 8% of those who did not have a high school diploma were unemployed, along with 5.4% of high school graduates, 3.8% of those with an associate's degree, 2.8% of those with a bachelor's degree, 2.4% of those with a master's degree, 1.5% of those with a professional degree, and 1.7% of those with a doctoral degree (U.S. Department of Labor, Bureau of Labor Statistics, 2016a). Additionally, unemployment rates were also tied to ethnicity in 2016, with 3.4% of Whites, 6.3% of Blacks, 3.3% of Asians, and 4.5% of Latinxs 25 years or older unemployed (U.S. Department of Labor, Bureau of Labor Statistics, 2016b).

Income, poverty rates, and health insurance coverage have all be linked with ethnicity. According to a recent U.S. Census Bureau report, median income for White households in 2014 was $60,256; whereas, the median income for Black households was $35,398 and Latinx households was $42,491 (DeNavas-Walt & Proctor, 2015). The report also stated that the ratio of Black to White income in 2014 was 0.59 and the ratio of Latinx to White income was 0.71 (DeNavas-Walt & Proctor, 2015). The poverty rate

for Whites continues to be lower than the poverty rate for any other racial group. In 2014 the poverty rate for Whites was 10.1%, whereas the poverty rate for Blacks was 26.2%, the rate for Asians was 12%, and for Latinxs it was 23.6% (DeNavas-Walt & Proctor, 2015). Additionally, ethnic minorities continue to suffer from lower access to health care coverage because of their economic disadvantage. According to the U.S. Census Bureau, the uninsured rate in 2015 for Blacks was 11.1%, the rate for Asians was 7.5%, and for Latinxs was 16.2%, compared to 6.7% for Whites (Barnett & Vornovitsky, 2016).

Going to college is more important now than ever. The U.S. economy rewards college graduates at much higher rates today than ever before. The earnings gap between workers with a college degree and those who do not have a college degree has widened dramatically over the past forty years. During this time period, the median earnings for workers with a bachelor's degree or higher rose substantially while workers with a high school diploma experienced no significant increase in income, and workers with less than a high school diploma lost ground (Kelly, 2005). Factory and farm employment has experienced a major decline in recent years. The largest job growth, and largest segment of the workforce today, is "office" related. As a result, more well-paying jobs require at least some level of college education (Kelly, 2005). The economic importance of higher education is projected to continue to grow. According to the Georgetown Center on Education and the Workforce, 62% of all jobs will require at least some college education by 2018, an increase from 59% of jobs in 2007 (Carnevale, Smith, & Strohl, 2010).

Ethnic minorities typically earn less money than Whites, which makes for even more of a reason to focus on college completion for persons of color. According to the

U.S. Department of Labor, Bureau of Labor Statistics (2015), Whites often earn roughly the same or more money at lower levels of education than ethnic minority individuals. In 2014, the median weekly income of full-time workers aged 25 years or older was $696 for Whites who graduated high school but did not attend college, compared to $637 for Blacks and $689 for Latinxs with some college or associate's degree. Similarly, Blacks with at least a bachelor's degree had median weekly earnings of $970, compared with $1,219 for White workers with the same level of education. Additionally, White workers with a bachelor's degree had a median weekly income of $1,132 in 2014, compared to $1,149 for Blacks and $1,235 for Latinxs with advanced degrees (U.S. Department of Labor, Bureau of Labor Statistics, 2015).

When one stops to consider the growing population of ethnic minorities in this country, the economic and societal importance of improving educational attainment for persons of color becomes even more apparent. The U.S. Census Bureau projects by the year 2020 there will be a 77% increase in the number of Latinxs, a 32% increase in Blacks, a 26% increase in American Indians, and less than 1% increase in the White population (Kelly, 2005). The majority of the population growth is projected to occur among the least educated populations. The educational attainment gaps between ethnic minorities and Whites are widening. If these disparities persist, they will have a major impact on the future U.S. population (Kelly, 2005).

Already the U.S. has lost its position as the most educated nation in the world, particularly with regard to our younger population, which constitutes the future of our workforce (Kelly, 2005). Currently ethnic minorities earn substantially less than Whites

at equivalent levels of education (U.S. Department of Labor, Bureau of Labor Statistics, 2015), which has a significant impact on the total personal income of the U.S, often considered a measure of the wealth of a country. The projected decline in average U.S. personal income by the year 2020, an estimated $400 a year (in 1999 dollars), will result in lower tax contributions as well (Kelly, 2005). Projected demographic changes in the population by 2020 will lead to a substantial increase in the number of adults without high school diplomas, an additional seven million, and an additional five million with just a high school diploma, as well as declines at each educational level from high school diploma to a graduate degree (Kelly, 2005). If these disparities persist, the projected result is a less educated workforce and numerous professional jobs going unfilled (Kelly, 2005).

Defining Academic Success

College or academic success has been defined in terms of student retention and academic performance (Sparkman, Maulding, & Roberts, 2012). College outcomes are frequently measured by students' cumulative GPA, students' satisfaction with campus social life, and on-time graduation (i.e., 4 years to completion; Fischer, 2010). Research on college student experiences has suggested that there is a strong relationship between belonging, defined as academic and social integration into the institution, and student retention and graduation (Stebleton, Soria, & Huesman, 2014). A study conducted at a large, public, predominately White university examining sense of school belonging and persistence in 254 Black and 291 White first-year college students found that sense of

belonging had a direct positive effect on students' institutional commitment, and significant indirect effects on intentions to persist and actual persistence. Findings from this study are consistent with considerable evidence suggesting sense of school belonging is related to educational outcomes such as GPA, satisfaction, commitment, and persistence (Hausmann, Ye, Schofield, & Woods, 2009). Evidence has shown that as sense of school belonging increases, so does the likelihood that a student will remain in college (Hausmann, Schofield, & Woods, 2007).

In a racially diverse sample of junior high, high school, and college students from Midwestern and Western states, Mallett et al. (2011) found that a feeling of belonging to an academic context was a critical determinant of academic achievement and persistence for students of color, even more so than White students. Findings suggested that junior high, high school, and college students of color experienced greater fluctuations in belonging uncertainty than their White peers. Results showed that one's ethnic identification and personal experiences with discrimination threatened sense of school belonging in students of color, but not White students (Mallett et al., 2011).

Support and belonging are important factors in learning and academic success for students. Extensive research examining student beliefs has shown that students with greater perceptions of support from peers and instructors generally have less distress and higher levels of academic engagement and achievement. According to Zumbrunn, McKim, Buhs, and Hawley (2014), "Students' need for relatedness or belonging, defined as the extent to which students feel accepted and supported by teachers and peers…may be especially important at the college level" (p. 662), when students gain autonomy and

form new friendships as they transition from high school to college. Students spend much of their time in college with peers. Numerous studies have found that these peer relationships play a crucial role in retention and success. These studies and more have shown that sense of school belonging effects persistence and withdrawal from an institution (Zumbrunn et al., 2014).

A study of 212 predominately White undergraduates at a large Midwestern university found that instructor support, both academic and social, played an important role in a student's sense of school belonging. Students who felt comfortable and accepted tended to have higher perceptions of self-efficacy, which was linked to academic engagement and achievement. Students who felt more capable of succeeding tended to be more engaged in class participation, which was strongly linked with students' grades (Zumbrunn et al., 2014). Major differences in students' perception of belonging seemed to relate primarily to interactions with classmates. Only students with high belonging perceptions reported feeling accepted, supported, respected, and valued by their peers. These feelings of belonging appeared to stem from comfort, familiarity, and shared interests and experiences with their classmates. Findings of this study suggested that student perceptions of classroom academic and social support affect students' motivation, engagement, and academic achievement (Zumbrunn et al., 2014).

Campus Racial Climate

Campus racial climate has been defined as the current perceptions, attitudes, and expectations that define the institution and its members (Hurtado, Milem, Clayton-

Pedersen, & Allen, 1999). Campus racial climate is linked with the historical legacy of inclusion or exclusion at the institution, its structural diversity (referring to the composition of the student body, faculty, and staff), the psychological climate (including experiences of discrimination and sense of school belonging), and behaviors on campus that include interactions inside and outside the classroom (Hurtado et al., 1999). Research has shown that the racial climate of a campus significantly and negatively relates to social satisfaction on campus (Fischer, 2010).

Research on college retention has shown student success and failure in college stems from both academic and social factors. A study consisting of a sample of 4,000 diverse undergraduates at 28 colleges and universities across the U.S. found that ethnic minority student satisfaction with social life on campus was linked to the racial climate they perceived on campus and the performance pressures they felt to not conform to the negative group stereotypes they perceived were prevalent on campus (Fischer, 2010). Another study of 240 Black and White undergraduate students at large, predominately White, Midwestern university found that students' social lives and associated opportunities were strongly associated with his or her racial background and that perceptions of negative campus climate were directly related to student emotional distress, academic disengagement, and substance use (Fisher & Hartmann, 1995). These factors were negatively associated with students' development (Fisher & Hartmann, 1995) and have been strongly linked with not graduating on time, according to a more recent study examining data from a national survey of 4,000 diverse undergraduates from universities across the U.S. (Fischer, 2010).

Factors Associated with College Success

According to the Pell Institute, a number of demographic factors have been shown to predict college outcomes, including parents' level of education and SES (Engle & Tinto, 2008). Discrimination, whether observed or experienced, has been linked with poorer student outcomes for students of color (Nadal, Wong, Griffin, Davidoff, & Sriken, 2014). Extensive research examining microaggressions has documented their harmful effects on ethnic minority student engagement and outcomes (Blume, Lovato, Thyken, & Denny, 2012; Minikel-Lacocque, 2013; Nadal et al., 2014; Solorzano et al., 2000). Students of color also face barriers to academic success due to family obligations and financial strain (Linden, 2007; Hahn & Price, 2008). Additionally, a negative campus climate can have a detrimental effect on ethnic minority student success. Positive multicultural experiences on campus, adequate resources available to students, and campus support for diversity can serve to foster ethnic minority student engagement, and lead to better outcomes for these students.

Family Socioeconomic Status and Educational Background

According to the Pell Institute, low-income, first generation college students are more likely than their peers to delay entry into college after high school, attend college closer to home, live-off campus, attend college part-time, and work full-time while enrolled (Engle & Tinto, 2008). A national survey of college-qualified students who did not enroll in college found that noncollege goers' parents typically had lower levels of educational attainment, specifically a high school degree or less (Hahn & Price, 2008).

First generation college students typically have fewer resources available to them, which may cause them to take longer to graduate, if they graduate at all. Data from the National Center for Education Statistics' Beginning Postsecondary Study showed that low-income, first generation students were nearly four times more likely to leave higher education after the first year than their peers (Engle & Tinto, 2008).

Some barriers first generation college students face include a lack of parental financial support, which may require the student to work while in school, and a lack of experience with higher education. If a student's parents do not have college degrees, the student may lack an understanding of the demands of college, as well as the kind of emotional support students with college-educated parents have. As a result, these students may take lighter loads in college or drop out (Sparkman et al., 2012). Additionally, first generation college students and students from lower socioeconomic families may have diminished academic aspirations because they do not see higher education as a possibility. Research by Mallet et al. (2011) found that questioning whether one fits in the context of higher education negatively affected high school students' intentions to enroll in college and their academic achievement once they began to pursue a college degree. Unfortunately, since ethnic minority students represent a large portion of low SES and first generation college students this is yet another way in which they are academically disadvantaged.

Lower SES constitutes another barrier for students of color. According to a national survey of college-qualified students who did not enroll in college, over one third of noncollege goers were from low SES families (Hahn & Price, 2008). Additionally,

SES has been linked with standardized test scores, which are often used to determine a student's readiness to attend college. According to Stanford professor Sean Reardon, the gap in standardized test scores between affluent and low-income students has grown by approximately 40% since the 1960s (Reardon, 2011). Additionally, research conducted at the University of Michigan found that the college entry gap between the bottom-income and top-income quartiles increased from 39% to 51% since the late 1980s (Bailey & Dynarski, 2011). Research by Langhout, Drake, and Rosselli (2009) showed that only 3% of college students at highly ranked universities in the U.S. were from the bottom income quartile. The majority of the student population at these universities, approximately 75%, were from the top income quartile (Langhout et al., 2009).

SES also influences a student's ability to succeed in college. Students from lower income families graduate from college at a much lower rate than their more privileged peers. Research by Langhout et al. (2009) suggested that 40% of students from the top income quartile graduate with a bachelor's degree in 5 years, compared with only 6% from the lowest income quartile. Research by Bailey and Dynarski (2011) found that the imbalance in college completion between high- and low-income students has grown by approximately 50% since that late 1980s. This is cause for concern because college completion is the single most important predictor of success in the workforce, and a strong determinant of subsequent earnings (Bailey & Dynarski, 2011). A review of the research showed that undergraduates who identified as low income or poor worked more, studied less, had lower grades, were less involved in extracurricular activities, and had lower levels of school belonging than their higher income peers. These results indicated

that lower SES negatively affects college students' experiences and outcomes (Langhout et al., 2009).

A national survey of college eligible students who did not enroll in college found that college costs, availability of financial aid, and uncertainty about the steps needed to enroll in college remain significant barriers to obtaining a college education (Hahn & Price, 2008). Another obstacle is inadequate preparation for college, although this is less a barrier to access than to success once students have enrolled in college (Brock, 2010). According to analysts, rising tuition costs and reductions in grants have made attending college more difficult for young adults from low SES families. An extensive study by the National Center for Education Statistics began tracking the educational attainment of a large sample of eighth graders in 1988, and continued tracking the participants into their mid-twenties through 2000. The study found that among those who scored in the bottom quartile on a mathematics test during high school, 30.3% from high SES families earned a bachelor's degree or more, compared with only 2.9% of those from low SES families. Among those with the highest scores on the mathematics test, 28.8% from low SES families completed college, compared with 74.1% from high SES families (Danziger & Ratner, 2010). Parents constitute the most common source of college funding for students. Unfortunately, it has become harder for some parents to afford college tuition because of the increasing inequality in income over the past forty years. This is particularly true for fathers with a high school education or less, who have experienced a large decline in earnings over the last few decades (Danziger & Ratner, 2010).

Researchers have shown an increasing link between family income and college

attendance (Belley & Lochner, 2007). As Anthony Carnevale (2008) pointed out, equally qualified students have vastly different college-going opportunities, depending on their SES. Carnevale stated, in reference to data collected from the U.S. Department of Education's National Education Longitudinal Study, "among the most highly qualified students (the top testing 25%), the kids from the top socioeconomic group go to four-year colleges at almost twice the rate of equally qualified kids from the bottom socioeconomic quartile" (Carnevale, 2008, p. 57). One hypothesis for the increasing link between family SES and education is that low-income young adults who want to attend college cannot find financing, because of binding credit constraints, or are less willing to borrow money (Belley & Lochner, 2007; Carneiro & Heckman, 2002).

Lack of financing may be one reason why some students delay college completion or continue to work while in school. According to the U. S. Department of Education, National Center for Education Statistics (2014), only 39% of students who entered college in 2006 graduated within 4 years; 15.9% took 5 years to graduate, and 20.2% took 6 years to graduate. These numbers are worse for ethnic minority students. For example, most White students from the 2006 cohort graduated within 5 years (58.7%) compared to about a third of Black students (34.9%; U.S. Department of Education, National Center for Education Statistics, 2014). Research has shown that college students from higher-income families are less likely to work while in college than their less privileged classmates (Belley & Lochner, 2007). Working more can have a negative impact on academic success. According to the U.S. General Accounting Office (2003), students who work more than 20 hours a week are less likely to earn a degree.

Shrinking budgets, particularly for state-supported institutions, is yet another problem for students (Maestas, Vaquera, & Zehr, 2007). In a Center on Budget and Policy Priorities analysis of the rising cost of higher education, Oliff and colleagues explained that college tuition has risen much faster than inflation or family incomes since the 1990s (Oliff, Palacios, Johnson, & Leachman, 2013). According to the U.S. Department of Education, National Center for Education Statistics (2013), average college tuition prices have risen from $3,489 (current U.S. dollars) in 1981 to $19,339 in 2011. From 2001 to 2011 undergraduate costs, including tuition, room, and board, at public institutions rose 40% (U.S. Department of Education, National Center for Education Statistics, 2013). Oliff et al. confirmed student loans have doubled in recent years and suggested reduced public subsidies for higher education are partially to blame. State governments have been consistently reducing the amount of money they invest in state schools in recent years and the substantial rise in education costs and declining public support for higher education have resulted in the financial burden of college education shifting dramatically from states to students and their families. Rapidly rising tuition costs at colleges and universities likely widen enrollment gaps between those from high SES and low SES families (Oliff et al., 2013).

Diminished educational resources may be contributing to poor graduation rates for ethnic minority and low SES students. Academic quality suffers when budgets shrink. Research has shown that investments in higher education can help students, especially those from lower-income families, complete their degrees. Student support services expenditures in particular have had a large impact on graduations rates of students with

fewer financial resources and lower levels of academic preparation (Oliff et al., 2013; Webber & Ehrenberg, 2009). State funding cuts have also led to a decrease in the amount of full-time, tenure-tracked professors at colleges and universities, which reduces the likelihood that students will graduate from college (Ehrenberg & Zhang, 2004; Oliff et al., 2013).

Discrimination Experiences

Some researchers have attested that discrimination based on race is one of the leading factors affecting the achievement and attrition of ethnic minority students (Feagin, 1992). The college subculture at predominantly White universities is steeped in White American cultural values. As a result, alienation and discrimination are every day experiences, with omnipresent unstated assumptions involving the priority of Whiteness. This context alienates students of color by placing them on the defensive, whether consciously or subconsciously (Feagin, 1992). Ethnic minority students face numerous barriers to college success, from aggression and social exclusion to dismissal of subculture and typecasting. All of these factors are part of the White campus culture dominating universities in this country and result in the disadvantage of students of color (Feagin, 1992). Although personally experiencing racial prejudice can be traumatizing, witnessing it can be damaging as well (Fisher & Hartmann, 1995). One study of 240 undergraduates at a predominately White university in the Midwest found that 46% of White students and 54% of Black students had witnessed racial prejudice among students on campus. These findings suggested that students have a good chance of indirectly experiencing racial discrimination on their college campus, even if they are not

themselves a direct victim of discrimination (Fisher & Hartmann, 1995).

A burgeoning new literature has documented the negative impacts of covert discrimination, referred to as "microaggressions." Chester Pierce was the first to use the term microaggression. He stated,

> Probably the most grievous of offensive mechanisms spewed at victims in racism and sexism are microaggressions. These are subtle, innocuous, preconscious, or unconscious degradations, and putdowns, often kinetic but capable of being verbal and/or kinetic. In and of itself a microaggression may seem harmless, but the cumulative burden of a lifetime of microaggressions can theoretically contribute to diminished mortality, augmented morbidity, and flattened confidence. (Pierce, 1995, p. 281)

According to Sue et al. (2007), almost all interracial encounters are prone to microaggressions. Microaggressions appear in three forms: microassaults, microinsults, and microinvalidations. "A microassault is an explicit racial derogation characterized primarily by a verbal or nonverbal attack meant to hurt the intended victim through name-calling, avoidant behavior, or purposeful discriminatory actions" (Sue et al., 2007, p. 274). Microassaults are most likely to be conscious and deliberate. Some examples include referring to someone as "colored" or "Oriental," discouraging racial interactions, displaying a swastika, and deliberately serving a White customer before an ethnic minority customer (Sue et al., 2007). "A microinsult is characterized by communications that convey rudeness and insensitivity and demean a person's racial heritage or identity" (Sue et al., 2007, p. 274). These are usually subtle snubs that are often unintended by the perpetrator (Sue et al., 2007). Some examples of microinsults include embracing stereotypes such as "all Asians are good at math" or "all Blacks are good at basketball," assuming that ethnic minority students are less intelligent than White students, or asking

a minority student to speak for their whole race in class. “Microinvalidations are characterized by communications that exclude, negate, or nullify the psychological thoughts, feelings, or experiential reality of a person of color” (Sue et al., 2007, p. 274). Some examples include complimenting Asian Americans on their English or repeatedly asking where they were born or telling a Black person “I don’t see color.” Perpetrators of microinvalidations are often unaware of the insensitive and disparaging nature of their own behaviors (Sue et al., 2007).

A wealth of literature on microaggressions has examined the effects of microaggressions on ethnic minorities, including emotional turmoil and negative impacts on mental health, psychological well-being, and self-esteem. One such study consisting of a sample of 225 undergraduate students from diverse backgrounds attending a large public Latinx-serving university in the Northeast asked participants about their experiences with racial and ethnic microaggressions in the previous six months, including assumptions of inferiority, criminality, and similarity, as well as microinvalidations and microaggressions. Results indicated that racial microaggressions were negatively related to self-esteem, and microaggressions occurring in educational settings are particularly strongly linked to self-esteem (Nadal et al., 2014).

Numerous studies of college campuses indicated that racial microaggressions occur frequently on college campuses, and often result in feelings of distress for ethnic minority students, which can have an impact on their academic performance and mental health (Blume et al., 2012; Jones & Galliher, 2015; Minikel-Lacocque, 2013; Nadal et al., 2014). In a survey of 178 ethnic minority students at a predominantly White university,

students of color reported experiencing an average of 291 racial and ethnic microaggressions over the previous 90 days (Blume et al., 2012). Studies have suggested that racial microaggressions, overt racism, systemic racism, and racial stereotypes can negatively influence one's sense of self and perception of campus life, causing students of color to feel marginalized and disconnected from their educational institution, resulting in feelings of isolation and being misunderstood (Nadal et al., 2014; Solorzano et al., 2000). Microaggressions pose a threat to the health and mental health of students of color. A study examining the relationship of microaggressions with alcohol use and anxiety among 684 students, 178 of which were ethnic minority students, at a predominantly White university found that college students of color who experience greater numbers of microaggressions may be at increased risks for higher anxiety and underage binge drinking, as well as adverse consequences due to alcohol use. Stress, anxiety, and alcohol misuse have been associated with poor academic performance and college dropout (Blume et al., 2012).

Ethnic minority students also face challenges due to stereotype threat. People who belong to a group for which there is a negative stereotype may be particularly vulnerable to underperformance in the domain to which the stereotype pertains, especially if this domain is an important aspect of their identity. It is not necessary that the person believe the stereotype, he or she need only believe that others accept the negative stereotype (Fischer, 2010). Victims of microaggressions often express feeling invisible, because they feel their unique identities and characteristics are not acknowledged when they are seen as only fitting preconceived stereotypes, or as being extraordinary exceptions to

stereotypes of their race (Nadal et al., 2014). Experiments examining stereotype threat randomly assign members of a stereotyped group to a control or threat condition, sometimes adding a comparison group to whom the stereotype is not relevant, and compare mean performance of the conditions (Nguyen & Ryan, 2008).

In a seminal experiment conducted by Steele and Aronson (1995), Black students were assigned to one of three conditions of stereotype threat and were administered a difficult ability test. In the stereotype threat condition, the students were told that the test was indicative of their intellectual ability; whereas, in the other conditions the students were told the test was a problem-solving task, or were given no specific instructions. Students in the stereotype threat condition solved fewer test problems correctly than those in the other conditions, which was consistent with the performance interference hypothesis (Nguyen & Ryan, 2008). Many researchers have replicated and extended the stereotype threat effect on cognitive ability tests for Black and Latinx populations. Meta-analytic findings examining more than 10 years of experimental research on stereotype threat and its effects on cognitive ability test performance have supported the notion that the overall performance of stereotyped test takers was negatively influenced by situational stereotype threat (Nguyen & Ryan, 2008).

Stereotype threat can have damaging effects on self-esteem (Nadal et al., 2014). Studies have suggested that the development of a person's self-concept is as much a social process as an individual one. A person often internalizes a self-concept that reflects views important others have of the person. "Thus, if a person perceives that others may view her or him as an inferior, a criminal, a perpetual foreigner, or any other stereotype, it

is possible that she or he may internalize these impressions, which may negatively influence her or his sense of self" (Nadal et al., 2014, p. 463). According to Fischer (2010), stereotype threat negatively affects students of color due to a hyperawareness of their race or ethnicity when they are in a position in which their performance could be judged to confirm or disconfirm a stereotype. In contemporary U.S. society, negative stereotypes exist about the intellectual abilities of certain ethnic minority groups. Fischer explained that the added pressure of stereotype threat increases anxiety in students of color and leads to lower academic performance and decreased satisfaction with college. These factors are strongly related to racial disparities concerning timely graduation (Fischer, 2010).

Another concern for ethnic minority students is racially motivated hate crimes. According to the Federal Bureau of Investigation, educational settings are the third most common setting for racial bias hate crimes and ethnicity bias (national origin bias) hate crimes. Schools and colleges constituted 8.7% of the 2,871 reported racial bias offenses in 2013, and 9.3% of the 655 reported ethnicity bias offenses (Criminal Justice Information Service Division, 2013). Victims of hate crimes often experience aversive psychological states including feelings of vulnerability, depression, anxiety, fear, hostility, and post-traumatic stress. Additionally, victims often express decreased perceptions of benevolence in the world and lower self-esteem. Also, the psychological distress these victims experience continues longer, almost 3 years on average, than victims of nonbias hate crimes (Craig, 1999). Racially motivated hate crimes on college campuses can create a hostile environment for students of color. Some researchers

believe that racist hate crimes are particularly likely to create an atmosphere of suspicion, anger, and animosity, as well as civil unrest (Craig, 1999).

Multicultural Experiences

Research has indicated that diversity experiences have a positive impact on retention and academic development. One such study of 421 students at the University of New Mexico, a Latinx-serving institution, found that cross-racial interactions, displaying positive behaviors to diversity, and being supportive of affirmative-action goals positively impacted sense of school belonging, one aspect of retention (Maestas et al., 2007). Scholars have argued that campus curricular diversity requirements foster better communication of sociocultural differences so that students can improve their chances of contributing to and succeeding in an increasingly diverse society (Chang, 2002). Several studies examining curricular diversity initiatives in undergraduate education have consistently found that such initiatives have positive effects on students' interest in racial understanding, openness to cultural awareness, appreciation of multiple cultures, and reduction of racial bias (Astin, 1993; Chang, 2002; Denson, 2009). One study of undergraduate students attending an ethnically diverse public university in the Northeast examined whether or not diversity course requirements reduced racial prejudice and promoted intergroup understanding. Results showed that students who had nearly completed their requirement made significantly more favorable judgments of Blacks than those who had just started their requirement. Given the course variability examined in this sample, findings suggested that learning about one significant difference in U.S. society (such as gender or class differences) may also transfer well to thinking about

other differences and subsequently reduce multiple types of prejudice (Chang, 2002).

Several studies have examined the positive effects of general diversity experiences on academic outcomes. A national longitudinal study comprised of 25,000 students from 217 four-year institutions found that emphasizing diversity, either as a matter of institutional policy or faculty research and teaching, as well as providing students with curricular opportunities to confront racial issues, was associated with widespread beneficial effects on students' affective and cognitive development (Astin, 1993). Additionally, diversity policies and multicultural experiences were linked with increased satisfaction in most areas of the college experience, along with increased commitment to promoting racial understanding and environmental issues (Astin, 1993). Other positive student outcomes resulting from commitment to diversity on campus included leadership, citizenship, participation in cultural activities, commitment to developing a meaningful philosophy of life, and reduced materialistic values. According to the study, in reference to outcomes that are relevant to the goals of most education programs, the effects of emphasizing diversity and multiculturalism appeared to be uniformly positive for students (Astin, 1993).

More recent research has shown a positive correlation between diversity experiences and learning (i.e., active thinking, engagement in learning) and democracy outcomes (i.e., compatibility of differences, perspective-taking, and racial/cultural engagement; Gurin, Dey, Hurtado, & Gurin, 2002). A study by Pascarella and colleagues found that students' involvement in diversity experiences during college had statistically significant positive effects on critical thinking ability (Pascarella, Palmer, Moye, &

Pierson, 2001). Additionally, Umbach and Kuh (2002) found that students at liberal arts schools that participated in diversity-related activities reported higher levels of academic challenge, participated more often in active or collaborative learning, reported greater gains in personal or educational growth, were more satisfied with their college experience, and viewed their campus environment as more strongly supporting their academic and social needs (as reported in Shaw, 2005).

One study utilizing a national longitudinal data set of college students found that cross-racial interaction had positive effects on students' intellectual, social, and civic development. Results from the study suggested that colleges could enhance such experiences by enrolling larger portions of students of color. Findings of the study applied uniformly to White students; unfortunately, this was not always the case with students of color (Chang, Astin, & Kim, 2004). Another study conducted by Chang, Densen, Sáenz, and Misa (2006) found that higher levels of cross-racial interaction had positive effects on students' cognitive development, self-confidence, and openness to diversity. According to the study's results, the most direct and powerful way to realize developmental gains was through a student's own level of cross-racial interaction, although just being in an environment where other students were interacting frequently also contributed to students' development (Chang et al., 2006). These results are consistent with subsequent research which suggested that students not only benefit from engaging with racial diversity through related knowledge acquisition and cross-racial interaction, but also from being on a campus where other students are more engaged with diversity, regardless of their own level of engagement (Densen & Chang, 2009). A meta-

analysis examining the effects of curricular and cocurricular diversity activities on racial bias outcomes found that these activities were effective at reducing racial bias for all students (both Whites and students of color), although Whites experienced the largest benefits (Denson, 2009).

Findings from a national survey of 11,680 undergraduates from 370 four-year institutions indicated that students who socialized with diverse peers and discussed racial issues outside of the classroom with peers had higher levels of college satisfaction, and intellectual and social self-concept (Chang, 1999). Results of a qualitative study of 103 students from two ethnically diverse universities in southern California indicated that experiencing an ethnically diverse campus community engenders a sense of belonging and inclusion for many students, which was associated with better adjustment to college and a more positive and enriched sense of ethnic identity (Santos, Ortiz, Morales, & Rosales, 2007). Additionally, a racially diverse college community was strongly related to a student's development of multicultural competence, as well as philosophical changes in students' views about ethnicity, equality, and social justice. Students reported that attending a racially diverse campus made them more open and understanding of ethnic-others and more able to establish meaningful cross-ethnic relationships (Santos et al., 2007).

Campus environments where a positive attitude toward diversity prevails have been shown to be beneficial for all students, not just students of color. One measure of campus support for diversity is the level of diversity of an institution's faculty. Faculty diversity can directly affect outcomes for ethnic minority students. Findings of multiple

studies indicated that students who persisted in college typically had more interaction with faculty than students who voluntarily withdrew from college. Zumbrunn et al. (2014) pointed out that many students interact frequently with faculty throughout their college careers and "the salience of faculty-student relationships to the academic success and persistence of students has been highlighted in findings from multiple studies" (p. 662). Quality faculty interactions are important for student engagement, sense of school belonging, and academic achievement. This is especially true for students of color. A study examining data from a national survey of 4,000 diverse undergraduates from universities across the U.S. found that students who reported a higher number of same race professors in their sophomore year of college had higher overall grades than those who reported a lower number of same race professors. Results of the study indicated that having professors of the same race had a particularly positive effect on grades for Black students; each professor of the same race was associated with a 0.036 increase in cumulative GPA (Fischer, 2010).

Availability and Utilization of Support Resources

Research conducted at the University of New Mexico indicated that academic support programs and faculty interest in a student's development increased students' sense of belonging to their institution (Maestas et al., 2007). Sadly, not all students have adequate access to support resources, particularly students who attend community colleges. Often community colleges serve the least prepared and most nontraditional students. Unfortunately, these institutions tend to offer much less guidance than Ivy

League schools and highly selective liberal arts colleges, despite serving a population that could arguably benefit the most from academic guidance (Brock, 2010). It is not uncommon to have counselor to student ratios of 1 to 1,000 in community colleges (Grubb, 2001). According to a national survey of entering community college students, 32% of these students did not attend a first-year student orientation program and 57% did not meet with an academic advisor during their first month of college (Brock, 2010).

Student support services, like academic advising and orientation programs, have been shown to positively influence academic achievement. A study examining academic performance, retention, and graduation rates of first-year college students enrolled in an orientation course found that 90% of students enrolled in the course returned to school for their sophomore year compared to 78% of first-year students not enrolled in the course (Cambridge-Williams, Winslers, Kitsantas, & Bernard, 2013). The graduation rate after seven years for those in the orientation course was 70% compared to 56% of students not involved in the course. Additionally, those students enrolled in the orientation course had higher academic self-efficacy and self-regulated learning (Cambridge-Williams et al., 2013). A Department of Education report examining the Student Support Services Program found that more than two-thirds of full-time first-year students that received Student Support Services in community colleges persisted to their second year of college (Brock, 2010). Clearly, access to adequate university support systems is a predictive factor in college outcomes. Unfortunately, ethnic minority students typically have less access to services like advising and orientations because of where they attend college, usually community colleges.

Context of Utah State University

Political Views

Utah is highly conservative, as evidenced by residents' political leanings and religious affiliations. The majority of residents in Utah are republican. The state of Utah has not voted for a democrat for president in the last 52 years and has only voted for a democratic presidential candidate seven times in the last 100 years (four of those times were for Franklin Roosevelt; Leip, 2016). The last democratic president Utah residents voted for was Lyndon Johnson in 1964. Additionally, Utah has not had a democratic governor since 1980 (Leip, 2016).

Religious Affiliation

USU is located in a region where the predominant religion is The Church of Jesus Christ of Latter-day Saints (LDS). Reliable statistics concerning the percentage of USU students who identify as LDS is difficult to find, according to the university newspaper, but director of admissions Katie-Jo Nielson stated that 71% of incoming first-year students in fall 2014 who provided religious identification information indicated that they were LDS (Campbell, 2014). This is even higher than the average of LDS persons across the state of Utah, 62%, according to reports by the LDS church (Meyers, 2012). According to a national survey, Utah is the second-most religious state in the U.S., second to only Mississippi (Meyers, 2012). It is common for adolescents in Utah to serve an LDS religious mission, which lasts between 6 and 24 months. Males typically begin their missions at age 18 and females at age 19 (Church of Jesus Christ of Latter-day

Saints, 2016a).

Key Diversity Events

Utah is often considered a nonaffirming place for lesbian, gay, bisexual, transgender, queer, intersex, and asexual (LGBTQIA; those who are gender nonconforming and/or not heterosexual) individuals. The LDS church publically opposes gay marriage and "homosexual behavior" (The Church of Jesus Christ of Latter-day Saints, 2016b; Winslow & Edwards, 2015). A nondiscrimination bill passed in 2015, backed by the LDS church and LGBTQAI advocates, added sexual orientation and gender identity to Utah's nondiscrimination laws in housing and employment, but also clarified exemptions for religious institutions and their affiliates and provided protections for religious expression. Although the bill was an improvement from previous policies, it still gives people the right to discriminate against LGBTQIA persons on religious grounds (Roche & Romboy, 2015).

Utah was one of the six states involved in the 2006 Swift Raids. According to the Center for Immigration Studies (Kammer, 2009), the Swift Raids on December 12, 2006, constituted the largest immigration enforcement action in U.S. history. Almost 1,300 undocumented immigrants were arrested at six meat processing plants owned by Swift & Co. in Utah, Colorado, Texas, Nebraska, Iowa, and Minnesota. Work at the plants was characterized by difficult and dangerous conditions. Wages of workers at these facilities at the time of the raids was 45% lower than in 1980, after adjusting for inflation. Currently Swift recruits a large number of refugees who are legal immigrants (Kammer, 2009).

Ethnic Composition of the Community

USU is a predominantly White institution located in Logan, Utah. According to the U.S. Census Bureau (2015b), the ethnic composition of Logan in 2010 was 79.1% White, 13.9% Latinx, 3.3% Asian, 1.0% Black, 1.0% American Indian/Alaska Native, and 0.5% Native Hawaiian/Pacific Islander. The county in which Logan resides, Cache County, is comprised of even higher percentages of White persons than Logan (85.5% White in 2010; U.S. Census Bureau, 2015a). According to USU's Office of Analysis, Assessment, and Accreditation (2016), of the 25,952 students enrolled at USU during the spring 2016 semester, 81.5% were White, 5.6% were Latinx, 1.8% were American Indian/Alaska Native, 1.2% were Asian, 0.8% were Black, and 0.4% were Native Hawaiian/Pacific Islander.

Summary and Objectives

In summary, students of color are academically disadvantaged, beginning in elementary school and increasing into adulthood. These histories of disadvantage set students of color up for vulnerability and affect their trajectories across adulthood. Ethnic minority students experience numerous barriers to success in college stemming from demographic factors, such as SES and parents' level of education, experiences of discrimination and negative perceptions of campus climate, financial strain, and uncertainty about steps involved in applying to college. A wealth of research has shown that experiences of discrimination, including microaggressions and stereotype threat, and perceptions of negative campus climate have a direct relationship with student emotional

distress, academic disengagement, retention, and substance use. There are several protective factors that have been shown to have a positive effect on student outcomes including multicultural experiences, through course curriculum and peer relationships, university support systems, and campus support for diversity.

This study aims to understand predictors of academic functioning for college students of color. Examining the diversity climate of USU will shed light on potential disadvantages of minority students at predominantly White, conservative universities. Institutions such as USU provide an excellent context to study academic functioning for ethnic minority students because, unfortunately, most ethnic minority students are forced to attend college at predominantly White institutions. USU also provides an interesting contrast with other predominantly White institutions that are located in less conservative communities, which potentially allows researchers to observe the influence of conservativism on academic functioning for ethnic minority students. Therefore, this study will focus on demographic and diversity-related experiences as predictors of school belonging and academic outcomes (i.e., retention, performance, education aspirations) among students of color. The purpose of this study is to examine how this campus' unique environment facilitates or hinders equal status among students of different racial/ethnic backgrounds.

Research Questions

RQ_1: What are the diversity-related experiences of ethnic minority college students in a predominately White, conservative college community? Specifically, what

are their perceptions of the opportunities for multicultural interactions, formal and informal support for diversity, and discrimination/harassment?

RQ_2: What are the barriers (e.g., financial stress, competing obligations) and supports (e.g., student support services, formal and informal mentoring) reported by ethnic minority college students?

RQ_3: What are the associations between multicultural experiences, barriers/support for education, and ethnic minority student school belonging and academic success (i.e., GPA, academic aspirations, retention)?

CHAPTER III

METHOD

Design

This study sought to understand predictors of academic functioning for students of color, specifically how demographic and diversity-related campus climate variables correlated with school belonging, retention, academic performance, and educational aspirations within this population. A survey methodology was used to obtain self-reports of school belonging and campus support for diversity during the spring semester of 2015. The study was initiated by the USU diversity council and reviewed and approved by the USU Institutional Review Board.

This study used a correlational design and collected data about demographic information, grade point average, academic aspirations, amount of formal and informal diversity experiences on campus, discrimination experiences on campus, and satisfaction with the university climate. Retention was determined by checking student identification numbers against enrollment data for the fall 2015 semester. Analyses to determine statistical significance between variables were completed using SPSS.

Participants

Participants consisted of undergraduate and graduate students attending a large public university in Utah. Total enrollment at the time of data collection (spring 2015 semester) across main campus and several regional campuses was 25,441. Of those

enrolled, 2,498 identified as belonging to a racial/ethnic group other than White. Participants were recruited through email during the spring 2015 semester and entered into a drawing for one of ten iPad minis for completion of the survey. In order to oversample minority students, all ethnic minority students were identified through the university registration system, known as Banner, and invited to participate in the study. Notifications were also sent out to Access & Diversity listservs, (e.g., LBGTQ, multicultural student clubs). In addition, a random sample of 2,000 students was also identified from the university registration system and asked to complete the survey via email, in order to provide a subsample that more closely resembled broad university demographic characteristics for future comparative analyses. Additional email reminders were sent out over the course of the spring 2015 semester. The portal to participate in the study was closed by the end of spring semester.

A total of 908 students completed the survey; 382 students marked an ethnic/ racial background other than White and were included in this study. Participants were asked to give their student identification number, which was used to determine if they were enrolled in classes at USU during the fall 2015 semester. Participation was confidential, using the participant's student identification number only to align the enrollment data for each participant and email addresses only to enter participants into the iPad drawing, or if they asked to receive more information regarding this survey or an upcoming study. Students who asked to receive information regarding this survey or upcoming studies were emailed a newsletter outlining some of the research findings shortly after the conclusion of the spring 2016 semester. These participants' emails were

retained, in order to contact them for future studies.

Table 1 presents demographic data for the sample. For ethnic identification questions, participants were asked to select all that apply, resulting in numbers adding up to over 100%. Nineteen tribal communities were represented in the sample. The mean age of participants was 25.13 (*SD* = 6.98; range 18 – 61); 91.1% of the sample was 35 years of age or younger. A series of ANOVAs and chi-square analyses assessed for differences among the ethnic groups for all demographic variables. Because participants were not asked to select one most salient ethnic identity category, for the purposes of comparisons, individuals who selected more than one ethnic minority label (*n* = 18) were categorized by the first ethnicity chosen, creating a mutually exclusive categorization. Additionally, multiethnic individuals who selected White as one of their identities were categorized into the racial/ethnic minority category they selected (*n* = 104). A total of 15 analyses were conducted related to demographic variables. A Bonferoni correction yielded an alpha of .0033.

Asian students reported significantly higher levels of parent education than Latinx students, $F(5, 367) = 5.57$, $p < .001$, mean difference = .700, $p = .022$). The chi-square analysis for first-generation college student status was significant, χ^2 (5, $n = 254$) = 17.81, $p = .003$. Asian and Middle Eastern students were less likely to be first-generation college students, while Latinx students were more likely to be first-generation students. The chi-square analysis for class standing was significant, χ^2 (20, $n = 380$) = 61.18, $p < .001$. Asian students were more likely to be enrolled at the graduate level, while Native American and Latinx students were more likely to report undergraduate class standing.

Table 1

Demographic Information for Sample

	Asian (n = 131)				Black (n = 34)				Hispanic or Latinx (n = 160)				Middle Eastern (n = 6)				Native American or Alaska Native (n = 44)				Native Hawaiian or Other Pacific Islander (n = 25)			
Variable	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%
Age	25.4	6.4			25.0	8.0			24.9	6.9			24.7	4.3			26.3	8.9			22.6	4.0		
Avg. parent education	3.9	1.5			4.2	1.5			3.2	1.7			5.3	1.0			3.7	1.4			4.2	1.2		
Family income	3.0	1.6			3.0	1.6			2.9	1.6			2.8	1.9			2.9	1.7			3.2	1.2		
First generation college student																								
Yes			36	37.5			6	33.3			65	60.2			0	0.0			12	48.0			5	31.3
No			60	62.5			12	66.7			43	39.8			5	100.0			13	52.0			11	68.8
Class standing																								
First year			15	11.5			3	9.1			18	11.3			0	0.0			8	18.6			6	24.0
Sophomore			14	10.7			8	24.2			30	18.8			1	16.7			7	16.3			3	12.0
Junior			23	17.6			4	12.1			37	23.1			0	0.0			11	25.6			8	32.0
Senior			20	15.3			8	24.2			46	28.7			5	83.3			11	25.6			3	12.0
Graduate			59	45.0			10	30.3			29	18.1			0	0.0			6	14.0			5	20.0
Enrollment status																								
Full-time			123	93.9			25	78.1			138	86.3			6	100.0			34	79.1			21	84.0
Part-time			8	6.1			7	21.9			22	13.8			0	0.0			9	20.9			4	16.0
Gender																								
Male			68	51.9			15	44.1			67	41.9			5	83.3			20	45.5			15	60.0
Female			62	47.3			19	55.9			93	58.1			1	16.7			24	54.5			10	40.0
Transgender			1	0.8			0	0.0			0	0.0			0	0.0			0	0.0			0	0.0
Employment status																								
Not employed			31	23.7			6	17.6			31	19.4			3	50.0			19	43.2			7	28.0
Part-time			84	64.1			24	70.5			104	65.1			3	50.0			13	29.5			13	52.0
Full-time			16	12.2			4	11.8			25	15.7			0	0.0			12	27.3			5	20.0

(*table continues*)

	Asian (n = 131)				Black (n = 34)				Hispanic or Latinx (n = 160)				Middle Eastern (n = 6)				Native American or Alaska Native (n = 44)				Native Hawaiian or Other Pacific Islander (n = 25)			
Variable	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%
Marital status																								
Single			33	74.6			5	84.8			120	24.1			4	66.7			28	63.6			17	70.8
Married			97	25.4			28	15.2			38	75.9			2	33.3			16	36.4			7	29.2
Parenting																								
Yes			18	13.7			9	26.5			24	15.1			1	16.7			14	31.7			4	16.0
No			113	86.3			25	73.5			135	84.9			5	83.3			30	68.2			21	84.0
Sexual orientation																								
Heterosexual			123	93.9			32	94.1			144	91.1			4	66.7			38	86.4			24	96.0
LBGTQ			7	5.4			2	5.9			12	7.6			2	33.4			4	9.1			1	4.0
Residency status																								
U.S. citizen			70	53.8			30	88.2			129	81.6			1	16.7			42	97.7			25	100.0
International student			53	40.8			4	11.8			26	16.5			5	83.3			0	0.0			0	0.0
Speak language other than English at home																								
Yes			87	66.4			8	23.5			106	66.3			6	100.0			13	29.5			5	20.8
No			44	33.6			26	76.5			54	33.8			0	0.0			31	70.5			19	79.2
Lived in Utah majority of life																								
Yes			49	37.7			16	47.1			67	42.9			1	16.7			22	51.2			15	60.0
No			81	62.3			18	52.9			89	57.1			5	83.3			21	48.8			10	40.0
Religious identification																								
LDS			36	29.0			9	27.3			48	30.4			0	0.0			13	31.7			20	80.0
Other Christian			27	21.8			15	45.5			75	47.5			3	50.0			1	26.8			3	12.0
Buddhist			15	12.1			0	0.0			0	0.0			0	0.0			1	2.4			0	0.0
Muslim			3	2.4			1	3.0			0	0.0			1	16.7			0	0.0			0	0.0
Hindu			11	8.9			0	0.0			0	0.0			0	0.0			0	0.0			0	0.0
Other religion			6	4.8			1	3.0			3	1.9			0	0.0			11	26.8			0	0.0
Nonreligious (Atheist, Agostic, other)			26	21.0			7	21.2			32	20.3			2	33.3			5	12.2			2	8.0

Note. Total $N > 382$ due to representation of some individuals in multiple ethnic groups.

All other ANOVAS and chi-square analyses yielded nonsignificant results.

Asian students and Middle Eastern students were more likely than chance to be international students, χ^2 (5, n = 379) = 69.61, p < .001. Black students, Native American/Alaska Native students, and Native Hawaiian/Pacific Islander students were significantly less likely to speak a language other than English at home, χ^2 (5, n = 381) = 55.16, p < .001). Significantly more Asian students were Buddhist, Muslim, and Hindu, χ^2 (30, n = 371) = 153.66, p < .001. There were no differences among the ethnic groups for age, family income, part-time vs. full-time status, gender, employment status, marital status, parenting status, and sexual orientation.

Measures

The primary measure used in this study was the Diverse Learning Environments Survey (http://heri.ucla.edu/dleoverview.php) and enrollment data obtained during the fall 2015 semester. The Diverse Learning Environments Survey (DLE, 2015) assessed student perceptions of the university climate, experiences with faculty, staff, and peers, and academic outcomes for students. Permission was granted from the Higher Education Research Institute (HERI) to use the survey and modify it to fit our needs. Some components of the survey include discrimination and harassment experiences, cross-racial interactions, institutional commitment to diversity, sense of belonging, student financial difficulty, diversity in the curriculum, and student support services.

All subscales were derived from the DLE survey. Scale scores were constructed by calculating the mean across all items. As long as respondents answered more than half

of the items, any missing items were replaced with the individual's mean score for the other items. The DLE survey also included some demographic questions (e.g., age, sexual orientation, income, parental education, language spoken at home, religious identification, residency status, etc.). Some additional demographic questions were added (for example, a question asking whether participants had lived in Utah for the majority of their life was added).

Campus Climate

Campus racial climate consisted of 10 items with scores ranging from 1-5 (1 = *strongly disagree or very dissatisfied*, 5 = *strongly agree or very satisfied*) that assessed the general atmosphere for diversity at USU. Higher scores indicated greater perceptions of positive campus climate. Sample items included: "Utah State University promotes the appreciation of cultural differences"; "Utah State University has campus administrators who regularly speak about diversity"; Please rate your satisfaction with Utah State in each area: Racial/ethnic diversity of the faculty, Racial/ethnic diversity of the student body. This subscale was created using a portion of the DLE Campus Climate subscale developed by Eagan, Mayorga, and Ramirez (2015). Reliability for the original subscale was high (Cronbach's alpha = .916). Ten items (of the 20 original items) were included from this subscale that pertained to diversity, with special emphasis placed on ethnic/ racial aspects of campus climate, and did not overlap with Sense of School Belonging (a new scale created for this thesis project). Reliability for the modified subscale was high (Cronbach's alpha = .908).

Curriculum Inclusion

Curriculum inclusion consisted of eight items with scores ranging from 1 (*none*) to 4 (*5 or more*) that assessed how much of the students' curriculum at USU included content related to diversity. Higher scores indicated greater instances of curriculum inclusion. Sample items included: How many courses have you taken at USU that included the following: Materials/readings about race/ethnicity, Materials/readings about socioeconomic class differences, Materials/readings about sexual orientation. This subscale was created by modifying the DLE Curriculum Inclusion subscale developed by Hurtado, Arellano, Cuellar, and Guillermo-Wann (2011). Reliability for the original subscale was high (Cronbach's alpha = .854). The subscale was modified to include the following DLE survey items: Materials/readings about socioeconomic class differences, Materials/readings about sexual orientation, Materials/readings about disability. One item from the original scale was omitted from newer versions of the DLE survey and was therefore not included in the modified scale: Materials/readings on issues of oppression as a system of power and dominance. Reliability for the modified subscale was high (Cronbach's alpha = .903).

Cocurricular Diversity Activities

Cocurricular diversity activities consisted of five items ranging from 1-5 (1 = *never*, 5 = *very often*) that assessed students' participation in cocurricular diversity activities while attending USU. Higher scores indicated greater participation in cocurricular diversity activities. Sample items included: Since entering USU, how often have you: attended presentations, performances, or art exhibits on diversity, participated

in ongoing campus-organized discussions on racial/ethnic issues, participated in Access & Diversity Center activities. This subscale was created by modifying the DLE Cocurricular Diversity Activities subscale developed by Hurtado et al. (2011). Reliability for the original subscale was high (Cronbach's alpha = .903). The subscale was modified to reflect specific activities available at USU. "Lesbian, Gay, Bisexual, and Transgender Center" and "Ethnic and Cultural Center" were combined into "Access & Diversity Center," since these centers are housed under the Access & Diversity Center at USU. Additionally, "Women's/Men's Center" was changed to "Center for Women & Gender," to make it specific to USU. Reliability for the modified subscale was high (Cronbach's alpha = .879).

Positive Cross-Racial Interactions

Positive cross-racial interactions consisted of six items ranging from 1-5 (1 = *never*, 5 = *very often*) that assessed students' experiences of positive cross-racial interactions with other students at USU. Higher scores indicated greater experiences of positive cross-racial interactions. Sample items included: To what extent have you experienced the following with students from a racial/ethnic group other than your own? Had meaningful and honest discussions about race/ethnic relations outside of class, shared personal feelings and problems, dined or shared a meal. This subscale was created by modifying the DLE positive cross-racial interactions subscale developed by Hurtado et al. (2011). Reliability for the original subscale was high (Cronbach's alpha = .882). One item in the original subscale was omitted from newer versions of the DLE survey, and therefore was not included in the modified subscale: Attended events sponsored by

other racial/ethnic groups. Another item was not included in the modified subscale because it was on a 1-3 scale, whereas all other items in the subscale were on a 1-5 scale and fell under the same question cluster: Made an effort to get to know people from diverse backgrounds. Reliability for the modified subscale was high (Cronbach's alpha = .898).

Negative Cross-Racial Interactions

Negative cross-racial interactions consisted of three items ranging from 1-5 (1 = *never*, 5 = *very often*) that assessed students' experiences of negative cross-racial interactions with other students at USU. Higher scores indicated greater experiences of negative cross-racial interactions. The three items asked: To what extent have you experienced the following with students from a racial/ethnic group other than your own? Had guarded, cautious interactions, had tense, somewhat hostile discussions, felt insulted or threatened because of your race/ethnicity. This subscale was created using the DLE Positive Cross-Racial Interactions subscale developed by Hurtado et al. (2011) as a model. The items in the same question cluster as the Positive Cross-Racial Interactions subscale that pertained to negative cross-racial interactions were used to form the Negative Cross-Racial Interactions subscale. Reliability for the newly created subscale was adequate (Cronbach's alpha = .781).

Experiences with Microaggressions

Microaggressions consisted of nine items ranging from 1 to 5 (1 = *never*, 5 = *very often*) that assessed students' experiences of subtle forms of discrimination at USU.

Higher scores indicated greater experiences of microaggressions. Sample items included: "Please indicate how often you have: Heard insensitive or disparaging racial remarks from: Students at USU"; Please indicate how often you have personally experienced the following forms of bias/harassment at USU: Verbal comments, Exclusion (e.g., from gatherings, events). This subscale was created by modifying the DLE Microaggressions subscale developed by Hurtado et al. (2011). Reliability for the original subscale was high (Cronbach's alpha = .889). One item in the original subscale was omitted from newer versions of the DLE survey, and was therefore not included in the modified subscale: Been mistaken as a member of a racial/ethnic group that is not your own. One item was added to the modified subscale because it seemed to fit well with the Microaggressions construct: Experienced discrimination. Reliability for the modified subscale was high (Cronbach's alpha = .893).

School Belonging

Sense of school belonging consisted of four items ranging from 1 to 5 (1 = *strongly disagree*, 5 = *strongly agree*) that assessed the students' feelings of belonging to USU. Higher scores indicated greater sense of school belonging. Sample items included: "I see myself as a part of the campus community"; "If asked, I would recommend Utah State University to others"; "I feel a sense of belonging on this campus." This subscale was created for this thesis project. Reliability was adequate (Cronbach's alpha = .744).

Procedure

The survey began with participants clicking the link supplied to them in the email

inviting them to participate in the study. The email invitation included information about the details of the study, requirements for participation, information about how to qualify for the iPad drawing, and a link to the survey (see Appendix A). Once participants clicked on the survey link, they were transported to the Qualtrics survey, which required them to read the informed consent (see Appendix B) and consent to participation in the study.

After consent was obtained, participants were asked about their role at USU and their experiences as a student on this campus. Demographic information followed a disclaimer explaining the relevance of this information and reiterating confidentiality. Demographic questions were included at the end of the survey in order to avoid priming participants to respond to questions in a certain way. At the end of the survey, participants were asked to enter their student identification number in order to combine participants' survey data with their enrollment status for the subsequent semester, while maintaining participant confidentiality. Participants were asked to provide their email address in order to be entered into the drawing for an iPad. Participants also had the option of selecting to receive information about the results of the survey upon its completion (174 participants requested this) and could request to be contacted for participation in future studies (161 participants requested this).

Analytic Plan

Scale scores were calculated and evaluated for internal consistency for constructs such as school belonging, informal multicultural experiences, didactic diversity

experiences, discrimination experiences, and others. Descriptive statistics, including means, standard deviations, and frequency distribution tables, were used to answer research questions 1 and 2. Bivariate correlations were calculated among all study variables. Multiple and logistic regression analyses were used to assess the relative contribution of multicultural experiences, discrimination experiences, and other campus climate variables in predicting academic success (i.e., GPA, educational aspirations, and retention).

CHAPTER IV

RESULTS

Descriptive Statistics

Means and standard deviations or frequencies for all study variables are presented separately for each ethnic minority subsample in Tables 2 through 5. On average, participants reported relatively neutral perceptions of the campus racial climate and somewhat low experiences of curriculum inclusion. Participants reported relatively low engagement in cocurricular diversity activities and somewhat limited experiences of microaggressions. Average scores were at the middle of the scale for experiences of positive cross-racial interactions and at the lower end of the scale negative cross-racial interactions.

The majority of participants reported at least some financial difficulty, with the exception of Middle Eastern students. Participants reported relatively low instances of competing responsibilities, including missing class due to family responsibilities or employment, or contributing money to support family. The majority of participants reported that they had utilized the Academic Resource Center or other tutoring services, career services, academic advising, financial aid advising, Campus Recreation, Student Health & Wellness Center, professors' office hours, and study groups. The majority of participants reported that they had not utilized student support services, Disability Resource Center, Access & Diversity Center, or university Counseling and Psychological Services.

Table 2

Diversity-Related Academic Experiences for Sample

	Asian (n = 122)		Black (n = 28)		Hispanic or Latinx (n = 158)		Middle Eastern (n = 6)		Native American or Alaska Native (n = 44)		Native Hawaiian or Other Pacific Islander (n = 24)	
Variable	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*	*M*	*SD*
Campus racial climate[a]	3.4	0.7	3.2	0.8	3.3	0.7	3.0	0.7	3.4	0.8	3.7	0.8
Curriculum inclusion[b]	1.7	0.7	1.9	0.7	1.9	0.7	1.8	0.4	2.2	0.8	1.8	0.7
Cocurricular diversity activities[a]	1.8	0.9	1.7	0.8	1.9	1.0	1.7	1.1	2.0	1.2	1.9	1.0
Positive cross-racial interactions[a]	3.1	1.1	3.3	0.9	3.1	1.0	3.3	1.2	3.0	1.0	3.2	1.2
Negative cross-racial interactions[a]	1.9	0.9	2.0	0.9	1.9	1.0	2.4	1.0	2.1	1.1	1.6	0.9
Microaggressions[a]	1.6	0.7	1.6	0.6	1.7	0.7	1.8	0.6	1.8	1.0	1.5	0.5

[a] Possible range: 1-5.
[b] Possible range: 1-4.

Table 3

Barriers to Academic Success Reported for Sample

	Asian (n = 122)				Black (n = 28)				Hispanic or Latinx (n = 158)				Middle Eastern (n = 6)				Native American or Alaska Native (n = 44)				Native Hawaiian or Other Pacific Islander (n = 24)			
Variable	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%
Financial difficulty																								
None			37	30.3			4	14.3			42	27.6			4	66.7			9	20.9			5	20.8
Some			58	47.5			16	57.1			69	45.4			2	33.3			19	44.2			12	50.0
Major			27	22.1			8	28.6			41	27.0			0	0.0			15	34.9			7	29.2
Competing responsibilities[a]																								
Missed class due to family responsibilities	1.5	0.6			1.8	0.6			1.6	0.6			1.8	0.4			1.8	0.6			1.8	0.6		
Missed class due to employment	1.3	0.5			1.1	0.4			1.4	0.6			1.2	0.4			1.5			0.7			1.2	0.6
Contributed money to support family	1.7	0.8			1.8	0.9			2.0	0.8			1.0	0.0			2.1	0.8			2.0	0.9		

[a] Possible range: 1-3.

Table 4

Support Services Utilized for Sample

	Asian (*n* = 122)		Black (*n* = 28)		Hispanic or Latinx (*n* = 158)		Middle Eastern (*n* = 6)		Native American or Alaska Native (*n* = 44)		Native Hawaiian or Other Pacific Islander (*n* = 24)	
Variable	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	n	%
Student support services												
Yes	55	45.0	8	30.8	59	38.8	3	50.0	19	45.2	9	37.5
No	67	54.9	18	69.2	93	61.2	3	50.0	23	54.8	15	62.5
Academic resource center or other tutoring services												
Yes	66	54.1	15	57.7	76	50.0	6	100.0	23	54.8	13	54.2
No	56	45.9	11	42.3	76	50.0	0	0.0	19	45.2	11	45.8
Disability Resource Center												
Yes	13	10.8	3	12.0	7	7.2	3	50.0	9	21.4	1	4.2
No	108	89.5	22	88.0	141	92.8	3	50.0	33	78.6	23	95.8
Career Services												
Yes	77	63.7	10	40.0	75	49.3	3	50.0	25	58.2	12	50.0
No	44	36.4	15	60.0	77	50.7	3	50.0	35	85.3	17	70.8
Academic Advising												
Yes	90	73.8	21	80.8	113	74.9	3	50.0	35	85.3	17	70.8
No	32	26.2	5	19.2	38	25.2	3	50.0	6	14.6	7	29.2
Access & Diversity Center												
Yes	33	35.5	11	42.3	61	40.4	1	16.7	22	52.4	8	33.3
No	78	64.5	15	57.7	90	59.6	5	83.3	20	47.6	16	66.7

(*table continues*)

	Asian (*n* = 122)		Black (*n* = 28)		Hispanic or Latinx (*n* = 158)		Middle Eastern (*n* = 6)		Native American or Alaska Native (*n* = 44)		Native Hawaiian or Other Pacific Islander (*n* = 24)	
Variable	*n*	%	*n*	%	*n*	%	*n*	%	*n*	%	n	%
Financial Aid Advising												
Yes	49	40.1	13	52.0	84	55.6	2	33.3	32	74.5	17	70.8
No	73	59.8	12	48.0	67	44.4	4	66.7	11	25.6	7	29.2
Campus Recreation												
Yes	89	73.0	17	65.4	99	65.1	5	83.3	29	67.4	17	70.8
No	33	27.0	9	34.6	53	34.9	1	16.7	14	32.6	7	29.2
Student Health & Wellness												
Yes	71	58.2	8	32.0	82	53.9	5	83.3	31	72.1	10	41.7
No	51	41.8	17	68.0	70	46.1	1	16.7	12	27.9	14	58.3
Counseling & Psychological Services												
Yes	38	31.2	7	28.0	26	17.2	2	33.3	16	38.1	4	16.7
No	84	68.9	18	72.0	125	82.8	4	66.7	26	61.9	20	83.3
Attended professors office hours												
Yes	101	83.5	21	80.8	117	77.4	5	83.3	31	72.1	18	76.0
No	20	16.5	5	19.2	34	22.5	1	16.7	12	27.9	6	25.0
Participating in study groups												
Yes	99	82.5	21	80.8	120	79.5	5	83.3	31	72.1	20	83.3
No	21	17.5	5	19.2	31	20.5	1	16.7	12	27.9	4	16.7

Table 5

Academic Outcomes for Sample

	Asian (*n* = 122)				Black (*n* = 28)				Hispanic or Latinx (*n* = 158)				Middle Eastern (*n* = 6)				Native American or Alaska Native (*n* = 44)				Native Hawaiian or Other Pacific Islander (*n* = 24)			
Variable	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%	*M*	*SD*	*N*	%
Sense of school belonging	3.8	0.7			3.8	0.8			3.8	0.8			3.5	1.0			3.9	0.7			4.0	0.8		
GPA[a]																								
1.5 – 1.9			2	1.6			1	3.6			4	2.5			0	0.0			2	4.5			0	0.0
2.0 – 2.4			6	4.9			2	7.1			6	3.8			1	16.7			5	11.4			2	8.3
2.5 – 2.9			9	7.4			3	10.7			28	17.8			0	0.0			8	18.2			3	12.5
3.0 – 3.4			25	20.5			5	17.9			43	27.4			1	16.7			11	25.0			8	33.3
3.5 – 3.9			65	53.3			15	53.6			69	43.9			3	50.0			17	38.6			10	41.7
4.0			15	12.3			2	7.1			7	4.5			1	16.7			1	2.3			1	4.2
Academic aspiration																								
None			1	0.8			0	0.0			3	1.9			1	16.7			4	9.3			0	0.0
Associate			0	0.0			3	10.7			4	2.6			0	0.0			7	16.3			1	4.2
Bachelor			32	26.9			12	42.9			39	25.0			2	33.3			10	23.3			10	41.7
Master			43	36.1			5	17.9			67	42.9			3	50.0			14	32.6			9	37.5
Doctoral, law, or medical degree			43	36.2			8	28.6			43	27.5			0	0.00			8	18.6			4	16.7
Retention in next academic year[b]			*N* = 94				*N* = 22				*N* = 116				*N* = 5				*N* = 37				*N* = 20	
Registered			64	68.1			14	63.6			72	62.1			4	80.0			13	35.1			13	65.0
Not registered			6	6.4			3	13.6			15	12.9			0	0.0			11	19.7			5	25.0
Graduated			24	25.5			5	22.7			29	25.0			1	20.0			13	35.1			2	10.0

[a] Time 1 GPA is represented in this table
[b] Time 2 retention data is represented in this table. 88 students did not supply a student identification number to allow registration information to be matched to their Time 1 data, Possible range for School Belonging: 1 – 5

On average, participants reported high feelings of belonging to USU. The majority of participants reported GPAs in the 3.0-3.9 range and indicated that they would like to earn a Bachelor's Degree or higher. Table 5 also presents proportions of students who had graduated, remained registered at USU, or were no longer registered during the semester following survey completion.

Significant differences among the ethnic minority subgroups emerged for curriculum inclusion, $F(5, 374) = 4.27$, $p = .001$, self-reported GPA, $F(5, 375) = 2.90$, $p = .014$, and academic aspirations, $F(5, 370) = 5.02$, $p < .001$. Native American/Alaska Native students reported significantly more experiences of curriculum inclusion than Asian students (mean difference = .521, $p = .004$). Asian students reported significantly higher GPAs than Native American/Alaska Native students (mean difference = .671, $p = .038$). Asian students reported significantly higher academic aspirations than Native American/Alaska Native students (mean difference = .752, $p = .003$). There were also significant differences in the proportion of students who were retained into the following academic year, X^2 (10, $n = 294$) = 21.91, $p = .016$. Native American/Alaska Native and Native Hawaiian/Pacific Island students were less likely to be either graduated or still enrolled in classes during the fall 2015 semester. Of the 40 ethnic minority students who were not registered for classes during the Fall 2015 semester, 23 had unexplained absences; 5 students left because of financial concerns, and 6 were on a religious mission.

Other significant differences emerged for contributing money to help support family, X^2 (10, $n = 374$) = 25.37, $p = .005$, utilizing the Disability Resource Center, X^2 (10, $n = 370$) = 23.26, $p = .010$, utilizing financial aid advising services, X^2 (10, $n = 371$) =

41.30, $p < .001$, and utilizing Counseling and Psychological Services, X^2 (10, n = 370) = 29.37, p = .001. Asian students were less likely to contribute money to support family, while Native American/Alaska Native students were more likely to contribute. Native American/Alaska Native students were more likely to utilize the Disability Resource Center and Counseling and Psychological Services. Asian students were less likely to utilize financial aid advising, while Native American/Alaska Native and Native Hawaiian/Pacific Island students were more likely to utilize these services.

Primary Analyses

Table 6 presents bivariate correlations among all variables. Because there were a number of demographic and academic outcome variables for which Asian students demonstrated significantly different patterns relative to Native American/Alaska Native students, bivariate correlations were calculated both with and without Asian students. While the magnitude of the correlations differed very slightly when Asian students were excluded, the pattern of significant correlations was identical. Therefore, all results are presented with all ethnic minority subgroups combined.

Positive cross-racial interactions were positively correlated with negative cross-racial interactions. The campus racial climate inversely correlated with negative cross-racial interactions. Cocurricular diversity activities were positively correlated with positive and negative cross-racial interactions and negatively correlated with campus racial climate. Microaggressions were positively correlated with positive and negative cross-racial interactions and cocurricular diversity activities, and negatively

Table 6

Bivariate Correlations Among All Variables

Variables	1	2	3	4	5	6	7	8	9
1. Positive cross-racial interactions	1								
2. Negative cross-racial interactions	.424**	1							
3. Campus racial climate	.052	-.408**	1						
4. Cocurricular diversity activities	.439**	.477**	-.172**	1					
5. Microaggressions	.302**	.660**	-.470**	.518**	1				
6. Curriculum inclusion	.220**	.212**	.051	.332**	.232**	1			
7. Sense of school belonging	.257**	-.071	.463**	.187**	-.159**	.167**	1		
8. Academic aspirations	.094	.099	-.118*	.025	.047	-.030	.036	1	
9. GPA	-.052	-.035	-.025	-.120*	-.091	-.032	.043	.406**	1

* Correlation is significant at the 0.05 level.

** Correlation is significant at the 0.01 level.

correlated with campus racial climate. Curriculum inclusion was positively correlated with positive and negative cross-racial interactions, cocurricular diversity activities, and microaggressions. Sense of school belonging was positively correlated with positive cross-racial interactions, campus racial climate, cocurricular diversity activities, and curriculum inclusion, and negatively correlated with microaggressions. Academic aspirations were negatively correlated with campus racial climate. GPA was positively correlated with academic aspirations and negatively correlated with cocurricular diversity activities.

Multiple regressions were conducted to determine whether demographic and diversity-related variables predicted academic outcomes. Positive cross-racial interactions, campus racial climate, cocurricular diversity activities, and microaggressions predicted school belonging (Table 7). Overall fit of the model was significant ($p < .01$). Only age predicted GPA (Table 8). The R^2 change was non-significant when the diversity-related experiences were added to the model ($p = .96$). Age predicted academic aspirations in the first step of the model (Table 9). Positive cross-racial interactions were significant in the second step of the model, but the R^2 change for the second step was only marginally significant ($p = .05$). Binomial logistic regression was used to determine whether demographic and diversity-related variables predicted graduation/retention vs. not enrolled in the subsequent semester (Table 10). No variables significantly predicted retention. Overall fit of the model was non-significant ($p = .15$). Demographic and diversity-related variables predicted retention with 67% accuracy.

Table 7

Regression Examining Demographic and Diversity-Related Academic Variables as Predictors of School Belonging

Step	Domain	Predictors	R^2 change	*F* change	*p*	*Beta*	*t*	*p*
1			.01	.69	.56			
	Demographic	Age				.00	.06	.96
		Income				-.09	-1.37	.17
		First-generation college status				.01	.08	.93
2			.32	18.52	< .01			
	Demographic	Age				.04	.76	.45
		Income				-.02	-.43	.67
		First-generation college status				-.04	-.72	.47
	Diversity	Positive cross-racial interactions				.14	2.13	.03
		Negative cross-racial interactions				.05	.58	.57
		Campus racial climate				.45	6.87	<.01
		Cocurricular diversity activities				.20	2.91	<.01
		Microaggressions				-.18	-2.19	.03
		Curriculum inclusion				.06	1.06	.29

Table 8

Regression Examining Demographic and Diversity-Related Academic Variables as Predictors of GPA

Step	Domain	Predictors	R^2 change	*F* change	*p*	*Beta*	*t*	*p*
1			.08	6.74	< .01			
	Demographic	Age				.24	3.84	< .01
		Income				.07	1.16	.25
		First-generation college status				-.10	-1.63	.11
2			.01	.24	.96			
	Demographic	Age				.22	3.55	< .01
		Income				.07	1.03	.30
		First-generation college status				-.09	-1.36	.18
	Diversity	Positive cross-racial interactions				.03	.39	.70
		Negative cross-racial interactions				-.01	-.09	.93
		Campus racial climate				-.04	-.46	.65
		Cocurricular diversity activities				-.07	-.80	.43
		Microaggressions				-.03	-.36	.72
		Curriculum inclusion				.01	.13	.90

Table 9

Regression Examining Demographic and Diversity-Related Academic Variables as Predictors of Academic Aspirations

Step	Domain	Predictors	R^2 change	*F* change	*p*	*Beta*	*t*	*p*
1			.08	6.70	< .01			
	Demographic	Age				.26	4.16	< .01
		Income				.00	.06	.95
		First-generation college status				-.10	-1.52	.13
2			.05	2.12	.05			
	Demographic	Age				.27	4.29	< .01
		Income				-.01	-.12	.90
		First-generation college status				-.09	-1.44	.15
	Diversity	Positive cross-racial interactions				.17	2.21	.03
		Negative cross-racial interactions				.02	.26	.80
		Campus racial climate				-.12	-1.59	.11
		Cocurricular diversity activities				-.03	-.39	.70
		Microaggressions				.02	.26	.80
		Curriculum inclusion				-.11	-1.71	.09

Table 10

Logistic Regression Examining Demographic and Diversity-Related Academic Variables as Predictors of Retention

Step	Domain	Predictors	Cox & Snell R^2	Chi-square	*p*	*Beta*	*t*	*p*
1			.02	3.92	.27			
	Demographic	Age				.03	.58	.45
		Income				.03	.04	.84
		First-generation college status				.83	3.13	.08
2			.07	9.52	.15			
	Demographic	Age				.05	1.19	.28
		Income				.11	.53	.47
		First-generation college status				.82	2.67	.10
	Diversity	Positive cross-racial interactions				-.26	1.12	.29
		Negative cross-racial interactions				.30	.59	.44
		Campus racial climate				.52	1.94	.16
		Cocurricular diversity activities				.44	1.33	.25
		Microaggressions				.51	.78	.38
		Curriculum inclusion				.29	.59	.44

CHAPTER V

DISCUSSION

This study sought to understand the links among various diversity-related experiences and academic outcomes of ethnic minority students, in the hope that shedding light on various barriers and supports available to students of color may help illuminate areas where we are helping or failing students who need our support. College completion rates are improving for ethnic minority students (U.S. Department of Education, National Center for Education Statistics, 2012), but they are still particularly vulnerable to college dropout and financial hardships (Hahn & Price, 2008; Museus, 2011). Previous research has shown that diversity-related experiences, including discrimination (Mallett et al., 2011; Nadal et al., 2014), campus diversity initiatives (Densen & Chang, 2009; Maestas et al., 2007), and sense of school belonging (Hausmann et al., 2007, 2009) are related to academic success. This study builds upon previous literature by examining aspects of the campus diversity climate and barriers/supports to academic pursuit as predictors of school belonging, educational aspirations, and academic achievement among students of color.

The current study found evidence that positive cross-racial interactions, campus racial climate, cocurricular diversity activities, and microaggressions predicted school belonging. The other diversity-related variables examined appeared to have little to no ability to predict academic aspirations or academic performance. Racial/ethnic groups in the study reported similar diversity-related experiences overall, with a few significant differences. Asian and Middle Eastern students fared better on certain outcomes (i.e.,

curriculum inclusion, financial difficulty, competing economic obligations, academic performance) compared with other ethnic groups, particularly Native American/Alaska Native students. Previous literature has often referred to Asian students as the "model minority" (Chinn, 2002; Lee, 1994; Pettersen, 1966), indicating numerous instances in which they have better outcomes than other ethnic groups, including Whites (Hsin & Xie, 2014). In our sample, Asian and Middle Eastern students appeared to have been qualitatively different than other ethnic minority students: Asian and Middle Eastern participants were more likely to be international students, Asian participants were more likely to be graduate students, and Middle Eastern participants were less likely to be first-generation college students.

Diversity-Related Experiences

Overall, the sample reported relatively low engagement in curricular and cocurricular diversity activities. Native American/Alaska Native participants reported having more diversity-focused curriculum than other ethnic minority groups; however, there was not much variability between groups. Students reported relatively positive campus racial climate, despite endorsing only slightly more positive cross-racial interactions than negative interactions. Perhaps ethnic minority students in the sample placed more weight on positive cross-racial interactions than negative ones when evaluating the climate of an institution. Surprisingly, the sample reported low instances of microaggressions, contrary to previous literature suggesting that students of color experience microaggressions frequently on college campuses (Blume et al., 2012;

Harwood, Huntt, Mendenhall, & Lewis; 2012; Palmer & Maramba, 2015). One possible explanation is that participants who experienced negative cross-racial interactions did not necessarily interpret the interaction as discrimination or believe it to be racially motivated.

Consistent with prior literature (Hurtado et al., 1999), perceptions of positive campus racial climate were inversely correlated with negative cross-racial interactions and microaggressions. Surprisingly, campus racial climate was negatively correlated with academic aspirations. Contrary to previous literature, which suggested that negative campus climates are associated with academic disengagement (Fisher & Hartmann, 1995), the negative correlation between campus racial climate and academic aspirations in this study seems to suggest that academic aspirations might be the result of internal factors, such as intrinsic motivation or temperament, and resilient to external factors like the atmosphere of the campus. As previous literature would suggest (Hurtado, & Carter, 1997; Locks, Hurtado, Bowman, & Oseguera, 2008; Maestas et al., 2007; Mallett et al., 2011), sense of school belonging was positively correlated with positive cross-racial interactions, positive campus racial climate, cocurricular diversity activities, and curriculum inclusion, and negatively correlated with microaggressions.

Unexpectedly, campus racial climate was negatively correlated with cocurricular diversity activities. This might suggest that students who perceive their campus racial climate negatively actively seek out cocurricular diversity activities in order to fill a void they are experiencing, or that students who engage in more cocurricular diversity activities have a heightened perception of negative campus racial climate due to an

increased awareness and sensitivity to negative diversity-related experiences on campus; some evidence lends support to the latter hypothesis (Case, 2007; Cole, Case, & Curtin, 2011). In addition, cocurricular diversity activities were negatively correlated with GPA. Perhaps extracurricular activities in general might consume some of the time students could otherwise devote to their coursework, resulting in lower grades. Unfortunately, if students of color engage in cocurricular diversity activities to compensate for the negative campus racial climates they perceive on campus, or to get certain multicultural needs met that are not being met otherwise, their grades may suffer.

Positive cross-racial interactions were positively correlated with negative cross-racial interactions, suggesting that higher levels of cross-racial interactions result in both positive and negative experiences. A meta-analysis of more than 500 studies showed that intergroup contact typically reduced prejudices of many types through three mediational pathways: (1) enhancing knowledge about the outgroup, (2) reducing anxiety about the intergroup contact, and (3) increasing empathy and perspective taking (Pettigrew & Tropp, 2008). This places students of color in a bit of a bind. Often cross-racial interactions can be beneficial, particularly for White students, but these interactions have the potential to harm students of color (Chang et al., 2004; Densen & Chang, 2009; Maestas et al., 2007). Similarly, microaggressions were positively correlated with positive and negative cross-racial interactions and cocurricular diversity activities, suggesting that microaggressions occur frequently when crossing racial divides or engaging in conversations related to diversity. Consistent with current findings, previous research suggested that racial microaggressions occur frequently inside the college

classroom (Suárez-Orozco et al., 2015; Sue, Lin, Torino, Capodilupo, & Rivera, 2009), and outside of the classroom (Solórzano et al., 2000).

These findings suggest that students of color who make efforts to engage in diversity activities, including interacting with students who are of a different cultural background, are at an increased risk of experiencing the negative effects associated with microaggressions (e.g., negative impacts on mental health, psychological well-being, self-esteem, and emotional turmoil; Blume et al., 2012; Jones & Galliher, 2015; Minikel-Lacocque, 2013; Nadal et al., 2014; Solorzano et al., 2000). Research has shown that White students benefit from cocurricular diversity activities and cross-racial interactions (Chang et al., 2004; Denson, 2009; Densen & Chang, 2009; Maestas et al., 2007), possibly at the expense of ethnic minority students' safety. Additionally, the link between more participation in cocurricular diversity activities and lower grades for ethnic minority students suggests that the cocurricular diversity activities that benefit White students may come at an academic cost to ethnic minority students.

These findings illuminate an ethical dilemma in which students of color are forced to pay a price to bring diversity to campuses, particularly predominantly White institutions, where cross-racial interactions would be unavoidable for ethnic minority students. Findings from this study provide evidence that contradicts the usual argument that students of color have special needs for diversity initiatives that colleges must provide to help them. Results suggest that White students actually have special needs that ethnic minority students meet, often at high personal cost. It appears that universities owe students of color a great deal for providing this service to White students.

Barriers and Supports to Academic Success

The majority of participants (73%) reported at least some financial difficulty, with the exception of Middle Eastern students (33% reported financial difficulty). Participants reported relatively few competing responsibilities, including missing class due to family responsibilities or employment; however, some ethnic groups (i.e., Native American/ Alaska Native, Native Hawaiian/Pacific Islander, and Latinx students) reported moderate competing economic obligations (i.e., contributing money to support family), with Asian participants reporting significantly less than Native American/Alaska Native participants. Many ethnic minority students come from interdependent backgrounds where financial obligations to help support family are more common (Ivey, Ivey, & Zalaquett, 2014; Zawacki-Maldonado, 2015) due to a complicated conflation of economic disadvantage and interdependent worldview.

Although Asian students might come from an interdependent background, they may not have as much economic responsibility to their families because, on average, Asian Americans have a significantly higher median annual income than any other ethnic group, including Whites (DeNavas-Walt & Proctor, 2015). It makes sense that these students do not need to contribute money to support their family in the same way that less economically fortunate minority students do, like American Indian students (American Indians have a median annual income of about half of that of Asian Americans; U.S. Census Bureau, 2014). Asian students may experience other family-oriented pressures (e.g., pressure to succeed academically in order to represent the family well) that are not economic in nature. Often Asian parents have higher educational expectations for their

children than White parents and these familial pressures to succeed may contribute to the higher academic achievement experienced by many Asian students (Chen, 2001; Kao, 1995).

The majority of participants reported that they had utilized tutoring and career services, academic and financial aid advising, professors' office hours, and study groups. Asian participants were significantly less likely to use financial aid advising than Native American/Alaska Native and Native Hawaiian/Pacific Island participants. The majority of participants indicated that they had never used the campus Access & Diversity Center, except for Native American/Alaska Native students (52% reported having used the Access & Diversity Center). Additionally, most participants reported that they had not utilized student support services, the university counseling center, or campus disability services.

Native American/Alaska Native students were significantly more likely to use the Disability Resource Center and Counseling and Psychological Services than other ethnic groups. This fits with national data concerning the higher prevalence of disability and mental health concerns among this population. According to the American Community Survey (Smith-Kaprosy, Martin, & Whitman, 2012), almost one fourth of the American Indian/Alaska Native population is disabled (23.8%), compared to 15.3% of the total population. Native American/Alaska Natives experience psychological distress and PTSD at much higher rates than the general population (American Psychiatric Association, Office of Minority and National Affairs, 2010). Additionally, this population experiences high prevalence rates of depression, substance use disorders, suicide, and

anxiety. Findings from this study are consistent with prior research which suggests that Native American/Alaska Natives actively seek out psychological services more than the general population (American Psychiatric Association, Office of Minority and National Affairs, 2010).

Academic Outcomes

The majority of participants reported GPAs in the 3.0-3.9 range, indicated that they would like to earn a Bachelor's Degree or higher, and were enrolled or graduated at follow-up. Asian participants reported significantly higher GPAs and academic aspirations than Native American/Alaska Native participants. This is consistent with previous research suggesting that Asian students often have higher GPAs than other ethnic minority students (Fashola, 2012; Reglin & Adams, 1990; Tan, 1994), and the highest educational attainment of any racial/ethnic group, including Whites (Ryan & Bauman, 2016). According to research by the U.S. Department of Education (Musu-Gillette et al., 2016), Native American/Alaska Natives have lower educational attainment than other racial/ethnic groups. Some of the differences in GPA and academic aspirations for our sample may be related to the greater percentage of Asian participants at the graduate level compared to Native American/Alaska Native participants (45% compared to 14%). Native American/Alaska Native and Native Hawaiian/Pacific Island participants were less likely to be graduated or still enrolled in classes at follow-up than participants from other ethnic groups. This is consistent with previous research findings that indicate that Native American/Alaska Native students are more susceptible to college drop-out

than other ethnic groups (Musu-Gillette et al., 2016), as well as research findings that indicate that Native Hawaiian/Pacific Islanders have lower educational attainment than the national average (U.S. Department of Education, 2015).

Other factors not examined in this study may explain some of the differences observed in academic functioning. Previous research has indicated that ethnic/racial identity, self-esteem, academic self-efficacy, sense of community, informal (i.e., family, friends, peers) and formal support (i.e., faculty, mentors, tutors), substance use, and mental health influence college dropout and academic achievement (Antaramian, 2015; Davis, 2009; Glogowska, Young, & Lockyer, 2007; Heath, McLaughlin, & Skok, 1991; Rigali-Oiler & Kurpius, 2013; Suerken et al., 2016; Svanum & Zody, 2001; Turner & Berry, 2000). These factors may have played a role in the retention and academic achievement of participants in this sample, and may be related to some of the educational disparities between ethnic groups evident in this study.

Surprisingly, school belonging was not correlated with GPA or academic aspirations. Perhaps GPA and academic aspirations stem more from cognitive abilities, developmental level, and temperament than external factors. GPA and academic aspirations were correlated, suggesting that students who receive good grades see higher education as a realistic and logical extension of their education. As hypothesized, positive cross-racial interactions, campus racial climate, cocurricular diversity activities, and microaggressions predicted school belonging. These findings add to the wealth of research suggesting that diversity experiences on college campuses play a significant role in making students feel welcome at an institution (Locks et al., 2008; Maestas et al.,

2007; Nuñez, 2009).

Diversity-related experiences had the strongest relationship with sense of belonging, not academic performance. Only age predicted GPA. The inability of the model to predict GPA may be related to restricted range for GPA in this sample. This might be due to actual grade inflation, self-report bias, or self-selection bias. Research has shown that self-reported GPA is often exaggerated, particularly among students with lower academic performance (Caskie, Sutton, & Eckhardt, 2014; Johnson-Greene et al., 1997; J. A. Schwartz & Beaver, 2015; Zimmerman, Caldwell, & Bernat, 2002). It is also possible that students who chose to participate in this survey were higher performing students.

Age and positive cross-racial interactions predicted academic aspirations; however, the model was only marginally significant (p = .05). The range of academic aspirations for the sample was restricted, as well as inflated; the majority of the sample aspired to have advanced degrees, whereas only 10% of the population actually attains advanced degrees (U.S. Census Bureau, 2011). Longitudinal studies that track academic aspirations or degree attainment over time may be a more accurate way to measure the degree potential of students. The link between positive cross-racial interactions and academic aspirations seems to suggest that positive interpersonal experiences increase a students' desire to continue their education, likely due to having had a pleasant experience with peers. Older students may have higher academic aspirations because they are more serious about their academic career, or have had more time to consider their academic future. In addition, older students are more likely to be graduate students than

undergraduates, which means that they are already realizing higher academic potential. Many undergraduate students, especially those just beginning college, may be unsure of their ability to succeed in higher education. It is possible that other variables not accounted for in the model predict academic aspirations, like social support or mentorship.

Results failed to demonstrate a link between diversity-related experiences and retention. No variables significantly predicted retention; overall fit of the model was non-significant (p = .15). This may be related to ceiling effects; most of the sample was enrolled in classes or graduated at follow-up. It is difficult to predict retention with limited variability. Demographic and diversity-related variables predicted retention with 67% accuracy.

Limitations

One limitation of this study was that by trying to be inclusive of participants' multiple racial/ethnic backgrounds we encouraged participants to select multiple racial/ethnic identifiers; however, because we did not also ask participants to select their most salient identity we were forced to categorize participants who selected multiple racial/ethnic identifiers (n = 18) into one racial/ethnic group for comparisons, which may not have corresponded to their most salient identity. Additionally, multiethnic individuals who selected White as one of their identities were categorized into the racial/ethnic minority category they selected (n = 104), which also may not have corresponded to their most salient identity. Furthermore, this study did not take an intersectional approach,

which may have resulted in marginalization based on race/ethnicity and religion to become conflated in the study. Due to this limitation, it may be difficult to distinguish between the different nature of alienation/discrimination participants experienced as the result of different demographic variables.

Another limitation of this study was not asking participants where they attended classes (i.e., predominately online, main campus, branch campus). Students who attend USU can attend classes at a number of branch campuses across the state, which may result in varying academic and multicultural experiences. All USU campuses are predominately White, however, the distribution of ethnicities is different across regional campuses (USU Office of Analysis, Assessment, and Accreditation, 2016). During the semester in which data was collected, the number of ethnic minorities enrolled ranged from 7.8% at the main campus to 29.1% at USU Eastern; other regional and distance education sites had 9.2% ethnic minority enrollment. Latinxs made up the second most prominent ethnicity at main campus (5.0%) and regional and distance education sites (6.0%), except for USU Eastern, where American Indian/Alaska Native students constituted the second most prominent ethnicity (19.3%; USU Office of Analysis, Assessment, and Accreditation, 2016). Due to varying demographics across campuses, it is likely that students attending USU Eastern would have higher instances of cross-racial interactions, among other differences.

An additional limitation of this study was not examining the differences between collectivistic and individualistic worldviews as a potential barrier to academic success for ethnic minority students. According to Triandis and colleagues, individualistic cultures

emphasize values that serve the self by making the self feel good, be distinguished, and be independent, while collectivist cultures emphasize values that serve the ingroup by subordinating personal goals for the sake of preserving ingroup integrity, interdependence of members, and harmonious relationships (S. H. Schwartz, 1990; Triandis et al., 1986; Triandis, Bontempo, Villareal, Asai, & Lucca, 1988). Often higher education can be competitive rather than cooperative and encourage independence over interdependence. U.S. schools encourage students to focus on individual needs, and become independent thinkers and doers (Faitar, 2006). Students from collectivist backgrounds may perform poorly in competition with other students, because they come from a culture where they are encouraged to solve problems in collaboration, rather than isolation. "Their behavior in class is supposed to show speech prominence and individual assertiveness, while at home they are taught a modest way of thinking, which requires resource sharing and cooperation" (Faitar, 2006). Adjusting to a competitive individualistic classroom setting may prove challenging for many students coming from a collectivistic background (Faitar, 2006), and could account for some of the variance in academic outcomes. According to previous research, acculturation also plays a significant role in academic performance (Albeg & Castro-Olivo, 2014) and may also account for some of the variance in outcomes.

Another potential limitation of this study was that it was conducted within a community context that is predominantly LDS. This may present possible limitations concerning the ability of these results to generalize to university contexts that are more secular. Future researchers are encouraged to carefully consider the unique characteristics

of the college community at their institution when making comparisons across campuses.

Conclusion

Overall, diversity-related experiences proved more adept at predicting school belonging than academic performance. Institutions should try to create more positive campus racial climates and diversity initiatives, in order to create learning environments that foster inclusion and dignity for historically marginalized students. Additionally, institutional support for diversity can fluctuate greatly over time so continued assessment of campus climate is crucial to understanding the nature of inclusiveness for disadvantaged students over time. Future research may wish to examine the role of other factors in predicting academic success, such as ethnic identity or mentorship, as well as include psychosocial outcomes (e.g., depression, anxiety, self-esteem, substance use, self-efficacy) in addition to academic outcomes. Academic success is only one small piece of the well-being of a student, and other aspects of student fulfillment need to be examined as well.

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APPENDICES

Appendix A

Recruitment Email

Why am I getting this email?
The Diversity Council at USU would like to invite you to participate in a research study designed to explore the multicultural experiences of students at Utah State University. The Diversity Council was formed to take intentional steps to improve the campus climate for underrepresented individuals. The goal of this research study is to gain a better understanding of the formal and informal opportunities USU students have to learn about people whose cultures and backgrounds are different from their own, as well as about students' experiences of discrimination and harassment, barriers to college success, and academic outcomes.

What would I have to do?
Your participation would involve completing an online survey about your educational and multicultural experiences at USU. This should take you around 20 - 30 minutes. All survey responses will be confidential.

What is in it for me?
You may choose to submit your email address to be placed in a drawing for one of 10 iPad minis. Email addresses for the drawing will be held in a separate database, and survey responses will not be traceable to specific email addresses. In addition, you can choose to receive a summary of the study results by email.

If you have any questions about the research, please do not hesitate to contact us, Nicole Vouvalis at (435) 797-7416 or Nicole.Vouvalis@usu.edu or Renee Galliher at (435) 797-3391 or Renee.Galliher@usu.edu. Thanks!

To participate, please follow the link below:

Appendix B

Letter of Information

Introduction/ Purpose: Nicole Vouvalis and Renee Galliher, representing the Diversity Council at Utah State University are conducting a research study to understand USU students' multicultural experiences, access to university resources, and experiences of discrimination/harassment. You are being asked to participate in this study because you are enrolled in courses at Utah State University. Approximately, 1000 students will participate in the study.

Procedures: If you agree to participate in this study, you will be asked to complete on-line questionnaires about your formal (e.g., coursework) and informal (i.e., free time) activities with people from cultures and backgrounds different from your own. In addition, we are interested in students' experiences and observations of discrimination or harassment at USU. You will also be asked to submit your A# at the end of the survey. We will use your A# to determine whether you are continuing your education at USU in fall 2015 or not.

Risks: There are minimal anticipated risks to this study. The personal nature of some questions may cause discomfort. However, if you feel uncomfortable answering a question, you may skip the question(s) and proceed with the questionnaire. In addition, there is some risk that you will be identified as a research participant through submission of your identifying information. In order to minimize the risk of loss of confidentiality, the research team will maintain all research data files on password protected computers in locked offices of the research team members.

Benefits: There may not be any direct benefits to you from participating in this study; however, we hope you will benefit from the opportunity to reflect on your college going experiences. The researchers will learn about the diversity experiences of USU students, which will help inform the inclusiveness efforts of the Diversity Council, student services, faculty and staff, and administration. In addition, this study will generate generalizable knowledge that will contribute to the larger literature related to college campus climates for diversity.

Explanation & offer to answer questions: If you have any questions, concerns, complaints, or research-related problems, please contact Nicole Vouvalis at (435)797-7416 or by e-mail at Nicole.Vouvalis@usu.edu or Renee Galliher at (435) 797-3391 or by e-mail at Renee.Galliher@usu.edu.

Payment/Compensation: You may choose to enter your email address at the end of the survey to be placed in a drawing for one of 10 iPod minis.

Voluntary nature of participation and right to withdraw without consequence: Participation in research is entirely voluntary. You may refuse to participate or withdraw at any time without consequence.

Confidentiality: Research records will be kept confidential, consistent with federal and

state regulations. Only the investigators will have access to the data, which will be downloaded and stored on a password-protected computer to maintain confidentiality. As soon as incentives are dispersed and follow-up registration is collected, all identifying information will be deleted.

IRB Approval Statement: The Institutional Review Board (IRB) for the protection of human participants at USU has reviewed and approved this research study. If you have any pertinent questions or concerns about your rights or think the research may have harmed you, you may contact the IRB Administrator at (435) 797-0567 or email irb@usu.edu. If you have a concern or complaint about the research and you would like to contact someone other than the research team, you may contact the IRB Administrator to obtain information or to offer input.

Copy of Consent: Please print a copy of this informed consent for your files.

Principal Investigators
Renee V. Galliher, Ph.D., co-Investigator
Nicole Vouvalis, Diversity & Special Projects Coordinator, co-Investigator

Participant Consent: If you have read and understand the above statements, please click on the "CONTINUE" button below. This indicates your consent to participate in this study.

Thank you very much for your participation! Your assistance is truly appreciated.